The application of EU antitrust law to (dominant) online platforms

Mândrescu, D.

6 Designing Remedies for Abuse of Dominance by Online Platforms

6.1 Introduction

The application of the current EU competition law framework to online platforms will entail multiple challenges for competition authorities and courts at both the national and EU level. The identification of such challenges has focused primarily on the various distinguishing characteristics of online platforms and the nature of competition in the digital markets where these are active. It was noted on multiple occasions that the characteristics of online platforms, such as network effects, economies of scope and scale, together with the growing importance of data for competition in such markets, enable platforms to acquire significant degrees of market power at a fast pace.[1] Such settings may create a shift from competition *in* the market to competition *for* the market with a winner-takes-all as a prospect outcome.[2] These insights have channeled most of the debate and research on platforms and competition law to the accumulation of market power and the utilization of such market power by platforms in practice.[3] Such aspects were have also been addressed throughout the previous chapters of this dissertation. This focus is justified by the fact that resolving such matters is instrumental for the application of the current framework to online platforms. Nevertheless, the application process is not limited to the ability to correctly identify and qualify harmful practices with the framework of (EU) competition law. An equally, yet often neglected, aspect of the application process is designing suitable remedies to tackle undesired practices once these are identified. Identifying competitive harms and condemning undesired business practices could do little good if such actions are not followed by an adequate remedy.

---

1 Jaques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, 'European Commission – Competition Policy for the Digital Era (2019), pp. 14-15 < https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf> [hereinafter Expert report] accessed 17 Feb. 2021; Stigler Center for the study of the economy and state, ' Stigler Committee on Digital Platforms (2019), pp. 28-58 < https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf> [hereinafter Stigler report] accessed 17 Feb. 2021.

2 Ibid.

3 See e.g. OECD Round table on two-sided markets [2009] DAF/COMP/WD(2009)69; Bundeskartellamt, Working Paper – The Market Power of Platforms and Networks, Ref. B6-113/15, June 2016; OECD (2018) Rethinking Antitrust Tools for Multi-Sided Platforms, 57.

In the context of online platforms, the matter of remedies often does not get the attention it deserves and commonly constitutes the smallest part of the broader discussions about the competitive concerns of digital markets.[4] When it comes to abuse of dominance cases, it would appear that the topic of remedies is explored mainly when it concerns an actual case where an infringement has been identified and condemned. In such circumstances the discussion on remedies does not concern, however, the possibilities for future remedies but instead it serves as an after-fact critique on the concerned competition authority or court that has already implemented a remedy for such practices. This is best demonstrated by the recent case of *Google Shopping* and previously by the *Microsoft* cases that have been subject to extensive ex-post critique.[5] Such an approach is unfortunate as there is much to be gained from examining potential theories of harm in tandem with the envisaged remedies that would be suitable to offset the potential or actual competitive harm associated with business practices of the concerned dominant undertaking.[6] The parallel exploration of remedies and theories of harm allows constructing more robust cases against the concerned undertaking(s) that are more likely to survive the stage of judicial review and have a meaningful impact in practice. To some extent, it can be even said that the outcome of the parallel study of theories of harm should also be taken into account when it comes to the prioritization, especially when enforcement resources are limited. Pursuing cases which cannot be effectively remedied may reduce the capacity of competition authorities as well as courts to deal with cases that can be effectively resolved, which in turn may lead to an even greater competitive harm.

Against this backdrop, this chapter seeks to address the matter of remedies for abuse of dominance cases by online platforms for current and future cases. By focusing on future design choices while building on the insights of past experiences, this chapter helps prepare the ground for cases where the legal boundaries and objectives of competition law remedies will have to incorporate considerations concerning the multisided nature of platforms.

---

4 See e.g. the discussion on the challenges posed by online platforms on competition policy that is mainly focused of identifying and qualifying market power and competitive harm in Expert report (2019), n. 1; Stigler report (2019) n.1; Monopolkommission, ' Competition policy: the challenge of digital markets' special report no. 68 (2015) http://www.monopolkommission.de/images/PDF/SG/s68_fulltext_eng.pdf accessed 17 Feb. 2021.

5 See e.g. Philip Marsden, ' Google Shopping for the Empress's New Clothes – When a Remedy Isn't a Remedy (and How to Fix it) (2020) 11(10) Journal of Competition Law and Practice, 553; Dan Gore, Ashwin van Rooijen, '*Ex-Post* Assessment of European Competition Policy: The *Microsoft* cases (2021) < https://www.coleurope.eu/system/tdf/uploads/page/gclc_report_draft_-_the_microsoft_cases.pdf?&file=1&type=node&id=5829&force=> accessed 15 Feb 2021.

6 Williem E. Kovacic, 'Designing Antitrust Remedies for Dominant Firm Misconduct' (1999) 31(4) Connecticut Law Review, 1285.

In this regard addressing the topic of remedies in this chapter also allows complementing the previous chapters of this dissertation that is needed in order to complete painting the entire picture of the application process of art. 102 TFEU. Accordingly, the remedy design discussion addressed within the scope of this chapter concerns the price and non-price related abuses that have been thoroughly explored in chapters 4 and 5. The insights derived from these previous chapters and well as this one will then extend to the other price and non-price related abuses not covered by this dissertation that have at their core similar theories of harm.

With these considerations in mind, this final chapter seeks to address the question of how should remedies for abuse of dominance by online platforms be designed in light of their multisided nature. In this regard it should be noted that the term remedies in the context of this chapter covers only public enforcement remedies that directly intervene in the commercial conduct of the concerned undertaking. Accordingly, financial penalties such as fines or periodical payments or private enforcement remedies imposed in the context of civil claims are not addressed. In order to answer this question and to provide guidance for current and future practice in a coherent manner, this chapter is structured as follows. The first section following this introduction will present the current EU legal framework for remedies in abuse of dominance cases. The second section will be divided into three parts. The first part of the section will discuss the specific attributes of platforms that require consideration in the process of remedy design. The second part will address the design of remedies in the specific case of tying and bundling abuses by online platforms in light of these attributes and the legal boundaries of the current legal framework. The third part of the section will address the design of remedies in the case of price related abuses in a similar fashion while focusing specifically on predatory, excessive and discriminatory pricing. The third section will look into the recent proposal of the EU Commission for the Digital Markets Act that regulates many of the business practices of online platforms. This section will discuss the impact of this regulation on the remedy design choices for the abuses discussed in the second and third sections followed by some final remarks and conclusions.

6.2 Aims, means and limitations

6.2.1 Aims

Designing appropriate remedies for abuses of dominance entails a challenging task. Designing legal remedies requires a clear vision of the functions and objectives pursued by their implementation. In the context of competition law, it can be argued that the main objectives of remedies are: terminating the infringement, prevention of re-occurrence and restoring or

re-establishing the state of competition.[7] Adequate remedies are therefore expected to address all these objectives in order to be considered effective, while at the same time they should not be so strict so as to dis-incentivize fierce competition.[8] This challenging recipe, with no clear instructions,[9] has been used with varying success by the Commission and national competition authorities ('NCAs') throughout the years. This is partly due to the fact that the number of abuse of dominance cases remains relatively low and the cases often involve different circumstances, which limits in turn the value of each case as precedent. It is therefore not hard to imagine that implementing remedies in the case of online platforms that operate in new and dynamic markets, and make use of unfamiliar and complex business models and practices will be very challenging. The cumbersome character of this task is clearly displayed by the *Microsoft* cases in the past and the *Google Android* case presently, where the adopted remedies have had varying degrees of success despite the similarities between such cases.[10] Therefore, it is worth shortly revisiting these objectives before moving on to considering how these should translate in the context of online platforms.

Bringing an unlawful practice to an end is the objective that is commonly considered the first step that needs to be taken in each case. Doing so in practice typically entails requiring the concerned undertaking to conduct

7 See e.g. Spencer Weber Weller, 'The past, Present and Future of Monopolization Remedies' (2009) 76(1) Antitrust Law Journal, 11, 12; Giorgio Monti, 'Behavioral Remedies for Antitrust Infringements- Opportunities and Limitations' (2013) European Competition Law Annual, 185, 187; Erling Hjelmeng, ' Competition Law Remedies: Striving for Coherence or Finding New Ways?' (2013) 50(4) Common Market Law Review, 1007-1008; Ioannis Lianos, 'Competition law remedies in Europe' in Handbook on European Competition law (Edward Elgar, 2013), 362, 376. By comparison financial penalties and remedies imposed in the context of private enforcement can be said to pursue additional objectives such as: deterrence, compensation and punishing bad practices. For more see OECD Policy Roundtable – Remedies and sanctions in abuse of dominance cases (2006), at 20-25 < https://www.oecd.org/competition/abuse/38623413.pdf> accessed 23 Feb. 2021; Erling Hjelmeng (2013) *supra* (n 7), at 1027.

8 Thomas E. Sullivan, 'Antitrust Remedies in the U.S and EU: Advancing a Standard of Proportionality (2003) 48(2) Antitrust Bulletin, 377,394.

9 Spencer Weber Weller (2009) *supra* (n 7); OECD Policy Roundtable – Remedies and sanctions in abuse of dominance cases (2006), *supra* (n 7).

10 Both Microsoft cases involved tying practices with respect to OEM's however the remedies implemented took different approaches. In Microsoft I the remedy was offered to OEM's that could choose between a version of Windows OS with WMP and one without. In the case of Microsoft II the remedies were directed at consumers, which were given the option of choosing their default web browser instead of the previously tied Explorer. This second approach in Microsoft seems to have been implemented also in the recent Google Android case. However, despite the similarities, the remedy appears to have created some undesired effects in the web browser market. For more see Michael Ostrovosky, ' Choice Screen Auctions' NBER Working paper Series, WP28091 < https://www.nber.org/papers/w28091> accessed 23 Feb. 2021.

itself in a manner that mirrors the abuse of dominance.[11] Putting an end to the undesired practice may, however, often not be sufficient if the concerned undertaking can resume such practices or similar ones at a later stage. Therefore, terminating the abusive behavior is commonly paired with a mechanism that is intended to prevent the concerned the undertaking from doing exactly that. For example, in *Tetra Pak II* the Commission indicated that Tetra Pak must put to an end all the behaviors the Commission found to be abusive and avoid repeating such actions or actions having a similar effect. To achieve this, the Commission provided a specific list of practices Tetra Pak must implement and/ or avoid together with a reporting obligation for a period of five years after the decision.[12]

The third objective, namely restoring or re-establishing competition, is concerned with eliminating or reducing the harm created by the concerned undertaking, which would otherwise continue to benefit from its abusive actions. If the dominant undertaking, by virtue of its abusive behavior, has accumulated significant market power ordering it to cease its abusive behavior may not be sufficient to restore the state of competition in the short and long term. For example, in the case of predatory pricing or loyalty rebates, if the dominant undertaking managed to put its competitors out of business restoring the pricing to a non-predatory level as well as converting the rebate scheme into a quantitative one would still allow the dominant undertaking to reap the benefits of its abuse. This in turn may even motivate the dominant undertaking to pursue comparable strategies in the future.[13] Therefore, together with preventive orders, additional indications may be provided with the aim of restoring the state of competition to what it was prior to the abuse or at least re-establishing a state of competition that was previously impeded by the concerned undertaking. This can be seen, for example, in the case of *Akzo* where the Commission indicated that Akzo was prohibited from offering the clients of its rivals lower prices than it offered its own customers. This prohibition applied to the customers that Akzo unlawfully took from its competitors, as well as to the existing customers of its rivals.[14] By imposing such measures, the Commission and EU courts allowed the rivals of Akzo to win back the clients they lost to

11 E.g. in the case of Magill which was found ITP, BBC and RTE to abuse their dominant position by refusing to grant access to their weekly program listings, the Commission required these undertakings to provides such information to any party whishing to use such information commercially. See *Magill TV Guide/ ITP, BBC and RTE* (Case IV/31.851) Commission decision of 21 Dec. 1988, art. 2.

12 See *Tetra Pak II* (Case IV/31043) Commission decision of 24 Jul. 1991, art. 1-4.

13 This is particularly so when the benefits of the abuse exceed significantly the potential financial penalties and damage payments that such an undertaking would risk facing in the event of a repeat offence.

14 *ECS/AKZO* (Case IV/30.698) Commission decision of 14 Dec. 11985, art. 3; Case C-62/86 *Akzo Chemie BV v Commission* [1991] ECLI:EU:C:1991:286, paras. 155-156.

Akzo due its predatory practices and so restore the state of competition that was present prior to Akzo's implementation of its abusive practices.[15]

When considered together, it is not hard to see why the tri-fold combination of objectives is a sensible approach for competition law infringement and particularly abuses of dominance. Admittedly, however, the restorative aspect of remedies may at times not appear to be as high of a priority as the other two objectives. In fact the inclusion of restorative measures in the context of abuses of dominance in not often seen in practice despite their evident importance. Nevertheless, in the context of this chapter such object will be treated as being on equal footing with the other two. The reason for this is that, as will be explained further in this chapter, not addressing this objective in the context of online platform will run the risk of market tipping in favor of the dominant platform even after it abandoned its abusive practices. The ability to combine and translate such objectives into concrete remedies in practice depends, however, greatly on the legal framework that facilitates the possibility of imposing remedies following a finding of abuse. The legal framework not only determines the means through which such objectives can be pursued, but also the legal boundaries for using such means. Therefore, just as finding an abuse of dominance in the case of online platforms requires exploring the boundaries of art. 102 TFEU so does the design of remedies for such abuse requires looking into the legal framework that shapes such remedies.

6.2.2 Means and limitations

A. The legal basis of remedies

The legal framework that regulates the imposition of public enforcement remedies for abuse of dominance infringement in the EU is found in Regulation 1/2003.[16] Art. 7 of the Regulation provides for the Commission's power to impose remedies that ideally combine the above-mentioned objectives. The formulation of art. 7 mentions only the ability of the Commission to require the concerned undertakings to bring their practices to an end in the event they are found to infringe art. 101 or 102 TFEU. However, both the decision making practice of the Commission and the case law of the EU Courts have clarified that this provision also enables the Commission to include preventive and restorative aspects within the scope of its remedies, albeit subject to some limitations. The termination of the respective prohibited practices can entail in practice an order to cease a certain form of undesired behavior as well as the imposition of positive duties on the dominant

15 Case C-62/86 *Akzo Chemie BV v Commission* [1991] ECLI:EU:C:1991:286, para. 155.

16 Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (Text with EEA relevance) OJ/L 1.

undertaking that are needed to bring the infringement to an end.[17] The implementation of prevention mechanisms is possible, however, it is limited in terms of scope and concerns only the repetition of the practices that were found to be abusive.[18] Prevention in this regard refers to a situation where future practices would entail *de facto* a continuation of the established infringement and not other practices that may raise some concerns as well.[19]

Although many remedy provisions often include orders for the concerned undertaking not to repeat infringements that have *similar effects*, such orders are considered to have a merely declaratory character.[20] Accordingly, purely preventive orders that encompass more circumstances than the established infringement fall outside the scope of the Commission's powers under art. 7.[21] The manner in which the preventive mechanism or orders take form in each case will of course depend on the nature of the abusive behavior. In the case of an exclusionary practice targeting a competitor in a vertically related market, such as a margin squeeze, preventive measures would concern the future commercial relationship between the dominant undertaking and the harmed competitor(s).[22] In situations where the exclusionary behavior of the dominant undertaking targeted the customers of its competitors, such as predatory pricing, the preventive measure will concern adjusting the commercial relationship between the dominant undertaking and the past, present and sometimes future customers of its competitors.[23] In the case of exploitative practices, such as excessive pricing, the preventive aspect of the remedy would deal with future-proofing the commercial relationship between the dominant undertaking and its own customers.[24]

---

17 Joined cases 6 and 7/73, *Commercial Solvents v Commission* [1974] ECLI:EU:C:1974:18, para. 45; Case T-228/97 *Irish Sugar v Commission* [1999] ECLI:EU:T:1999:246, para. 298.

18 Giorgio Monti (2013) *supra* (n 7), at 189. When such mechanisms have the effect of going beyond such scope this may be allowed only when such measures are the only available means for preventing the initial infringement. This can occur for example in the context of structural remedies, which may have a wider effect than solely preventing a specific kind of abusive behavior.

19 Ibid.

20 Case T-136/94 *Eurofer v. Commission* [1999] ECLI:EU:T:1999:45, para. 226; Case T-34/92 *Fiatagri v Commission* [1994] ECLI:EU:T:1994:258, para. 39.

21 Erling Hjelmeng (2013) supra (n 7) at 1015.

22 E.g. in *Deutsche Telekom AG* (Case COMP/C-1/37.451, 37.578, 37.579) Commission decision of 21 May 2003; *Wanadoo España v. Telefónica* (Case COMP/38.784) Commission decision of 4 Jul. 2007, art. 2. In the latter decision no clear indications were given, however, the finding of infringement was due to a disproportion between wholesale and retail prices. Accordingly, adjusting this would require tackling this disproportion with respect to the customers of the dominant undertaking with whom it also competed.

23 E.g. in *ECS/AKZO* (Case IV/30.698) Commission decision of 14 Dec. 1985, art. 3.

24 This can be read in General Motors where the Court found that no unfair pricing abuse took place as the GM readjusted its prices to a level that was in line with the economic costs it bore for its operation. See Case 26/75 *General Motors v Commission* [1975] ECLI:EU:C:1975:150, para. 22.

Similar considerations apply with regard to restoring or re-establishing the state of competition, where the nature of the abuse determines the competitive relation that needs restoring. In this regard, it is worth noting that while the objectives of preventing repetition and re-establishing competition may be considered separate, this distinction is often not visible in practice as measures that are required to prevent repetition are also required in order to bring the situation to its status *ex-ante*.[25] Similar to preventing repetition, the restoring or re-establishing the state of competition is possible under art. 7, however, this possibility is limited in scope. Accordingly, the restorative aspect of the remedy should be restricted to curing the distortion caused by the infringement and its persisting effects and not extent to measures that create a different market dynamic than the one prior to the abuse. This could have occurred in *Akzo*, for example, if the prohibition to align its prices to those of its competitors was extended to the customers it had prior to its abusive practices.[26] Such an extension would have put the competitors of Akzo that were harmed by its predatory practices in a better position than they had prior to the abuse since it would prevent Akzo from competing with them even with regard to non-predatory price settings.

In addition to the power conferred to the Commission in art. 7 to impose compulsory remedies upon the dominant undertaking following the establishment of abuse, Regulation 1/2003 includes the possibility for the implementation of remedies also in situations where a final finding of abuse has not been made. Accordingly, based on art. 8 the Commission can adopt interim measures in the event of a *prima facie* finding of an abuse where non-intervention risks irreparable damages to competition. In this context a *prima facie* infringement can be said to exist if there is clear evidence indicating that a certain practice is quite likely or probably prohibited under EU competition law rules.[27]This requirement does not go so far as to require the same likelihood as in the case of a final decision establishing an infringement.[28] Nevertheless, it has been argued that such findings would be more suitable in clear-cut cases concerning established theories of harm

25 E.g. setting the conditions for supply of an essential input is required for preventing future abusive refusals as well as restoring competition to the state prior to the refusal of supply.

26 This is precisely what the Court indicated was not the manner in which the Commission's remedies should be interpreted. See Case C-62/86 *Akzo Chemie BV v Commission* [1991] ECLI:EU:C:1991:286, paras. 155-156.

27 There are diverging formulations with regard to the strictness of the standard of proof in such situation. Nevertheless all formulation point in the direction of dealing with a situation that is more likely than not to entail an infringement based on the evidence gathered by the Commission in a given case. See Case T-23/90 *Peugeot v Commission* [1990] ECLI:EU:T:1990:31, paras. 21,63; Case T-44/90 *La Cinq v Commission* [1992] ECLI:EU:T:1992:5, paras. 32, 59-66; *ECS v Akzo: interim measures* Case IV/30.698) Commission decision of 29 Jul. 1983, para. 23.

28 Case T-44/90 *La Cinq v Commission* [1992] ECLI:EU:T:1992:5, para. 61.

compared to cases concerning novel situations,[29] which an interpretation that EU courts also seem to support.[30] The pre-emptive character of interim measures makes this kind of remedy advantageous from the perspective of restoring or re-establishing competition. In this regard interim measure enable the Commission to prevent situations that cannot realistically be restored if intervention is permitted only once the infringement procedure is completed.[31]

The implementation of interim measures in the case of (potential) abuse of dominance cases has been done in a variety of situations including predatory pricing,[32] discriminatory trading conditions and tying. Given the preliminary nature of such measure the remedies adopted in the context of those procedures were concerned only with stopping the potentially prohibited behavior.[33] This use of interim measures predates, however, the implementation of Regulation 1/2003 that specifically regulates this option.[34] In fact, the use of interim measures by the Commission following the implementation of Regulation 1/2003 only occurred once in the recent case of *Broadcom*.[35] The halt in the use of this option can to some extent be explained by the legal changes that occurred with the implementation of Regulation 1/2003.[36] First, the implementation of interim measures was restricted to an *ex officio* initiation by the Commission in contrast to previous practice where potentially harmed parties (competitors or customers) could request the Commission to adopt such measures.[37] Second, the benchmark for urgency in art. 8 concerns situations where *irreparable harm to competi-*

29 Despoina Mantzari, 'Interim Measures in EU competition Cases: Origins, Evolution and Implications for digital Markets' (2020) 11(9) Journal of European Competition Law & Practice 487, 487-489; Alexandre Ruiz Feases, 'Sharpening the European Commission's tools: interim measures' (2020) 16(2-3) European Competition Journal 404, 422.

30 Case T-184/01 R, *IMS Health Inc. v Commission* [2001] EU:T:2001:259, paras. 30-31, 128-131.

31 E.g. in the context of social media where direct and indirect network effects are present once the potentially abusive practices of the concerned undertaking (such as tying) have managed to attract a large amount of consumers it may trigger a snow ball effect that would persist to fuel growth that can hardly be halted or reversed. Restoring competition in such cases would require forcing consumers to unsubscribe from the respective social media channel or switch to their previous channel, which is not administrable.

32 *ECS v Akzo: interim measures* (Case IV/30.698) Commission decision of 29 Jul. 1983.

33 See e.g. *ECS v Akzo: interim measures* (Case IV/30.698) Commission decision of 29 Jul. 1983, art. 1-3. Akzo was prevented to engage in predatory practices, which were assessed based on the figures annexed to the interim measures decision. In the final infringement decision these obligation were further extended with the aim of restoring the state of competition. See

34 Ekaterina Rousseva (ed.) *EU antitrust Procedure* (Oxford University Press, 2020) at 295-296.

35 *Broadcom* (Case AT.40608) Commission decision of 16 Oct. 2019.

36 Supra (n 34) at 295-300.

37 Art. 3 of Regulation No. 17; Despoina Mantzari (2020) *supra* (n 29) at 490-491; Alexandre Ruiz Feases (2020) supra (n 29) at 411-413.

tion would be caused in the absence of interim interventions. This is a higher threshold than its predecessor that could have been met if the risk of irreparable harm could be proven with respect to a specific party affected by the potential infringement.[38] These changes to the legal framework of interim measures have also been said to make it more difficult to implement them in the case of the digital economy,[39] despite the fact that the Commission has explicitly noted it is interested in using interim measures in such specific context. Accordingly, such measures may become a valuable option in situations where restoring or re-establishing the state of competition with remedies under art. 7 will be challenging, as will be discussed further in this chapter.

Finally, art. 9 also provides that the Commission, in situations where it intends to implement an infringement decision establishing the existence of an abuse, can accept commitments offered by the concerned undertaking with the aim of removing the competitive concerns identified by the Commission. Although such commitments inevitably entail making design decisions, such decisions are predominately made by the concerned undertaking(s) in each case whose cooperation in such procedures is a prerequisite for their use.[40] The Commission's main role in such decisions is primarily to adequately describe the competitive concerns it identified and indicate whether the commitments offered are capable of alleviating such concerns so that further pursing the potential infringement in no longer needed.[41] Due to the voluntary character of commitment-based remedies this procedure will not be further addressed within the scope of this paper. Nevertheless, the insights of the following sections concerning the design of remedies in the case of abuse of dominance by online platforms remain relevant for such procedures in the context of the review and approval of commitments by the Commission and EU Courts.[42]

38 Ekaterina Rousseva (2020) *supra* (n 34) at 255-6, 265-278; Alexandre Ruiz Feases (2020) supra (n 29) at 416-420.

39 Alexandre Ruiz Feases (2020) *supra* (n 29); Despoina Mantzari (2020) *supra* (n 29); Peter Alexiadis and Alexandre De Streel, 'Designing an EU Intervention Standard for Digital Platforms' [2020] EUI Working Paper RSCAS 2020/14, at 44–45 <https://ssrn.com/abstract=3544694 > accessed 5 Jan. 2021.

40 Ekaterina Rousseva (2020) *supra* (n 34) at 255-6, 265-278.

41 Recital 13 of Regulation 1/2003.

42 This could help avoid situations like the one in Microsoft where the suggested remedies by Microsoft went further than the final remedy imposed by the Commission which turned out to be rather ineffective. See Spencer Weber Weller (2009) *supra* (n 7) at 28; Gunnar Niels, Helen Jenkins and James Kavanagh, *Economics for Competition Lawyers* (2nd Ed, Oxford press publishing, 2016) at 388-390.

B. Remedy types

Generally speaking, the implementation of remedies in abuse of dominance cases can be said to include two possible types of remedies, namely behavioral and structural remedies.[43] Behavioral remedies concern, as their name implies, measures that seek to regulate the commercial behavior of the dominant undertaking. Such measures can, for example, address the pricing strategies and contractual terms of the dominant undertaking with respect to its customers and/or competitors.[44] When implemented, behavioral remedies can concern both the abusive behavior that needs to be brought to an end as well as further steps that need to be taken in order to prevent the repetition of the respective infringement(s) and restore or re-establish competition to the situation *ex-ante*.[45] Accordingly, in practice behavioral remedies will often impose both negative and positive obligations upon the dominant undertaking.[46] Structural remedies concern interventions in the corporate structure of the concerned undertaking by requiring it to sever the links from certain assets it holds. In practice, this may translate into the divesture of one or more the divisions operated by the dominant undertaking. Structural remedies therefore attempt to change the competitive structure of the market(s) affected by the abusive behavior. Such actions can then achieve all three objectives of remedies with one maneuver. In the case of margin squeeze for example, if the dominant undertaking is required to sell its downstream entity it will no longer have a clear interest of distorting competition on this market,[47] which in turn also allows the re-establishment of competition.

When it comes to the implementation of remedies in practice, both behavioral and structural remedies have their respective advantages and disadvantages. Behavioral remedies that target the conduct of the concerned undertaking entail a very flexible and accurate tool for curbing the undesired practices to fit within the lines of competition policy. By addressing

---

43 Some authors however also refer to remedies concerning access to an input or facility as a third type of remedies that does not fit in squarely within the two categories of behavioral and structural remedies. This is particularly a view takes with in the context of the merger review procedure under the scope of the Regulation Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings OJ L 24/1. See Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 OJ C267/1, para. 17; Thomas E. Sullivan (2003) *supra* (n 8) at 400 onwards.

44 OECD Policy Roundtable (2006) *supra* (n 7) at 38-39.

45 Ibid.

46 The power to impose positive actions in the context of competition law remedies was established in Joined cases 6 and 7/73, *Commercial Solvents v Commission* [1974] ECLI:EU:C:1974:18, para. 45.

47 Admittedly, the dominant undertaking may still have the incentive of exploiting its customers however such competitive harm concerns a different type of (potential) abuse than the ones remedied by such measure.

solely the harmful behavior of the concerned undertaking, behavioral remedies are capable of re-establishing compliance with competition policy with minimal collateral damage for third parties.[48] At the same time, since such measures concern the restriction of conduct they also require continuous monitoring by the respective competition authority or courts. This is due to the fact that constraining an undertaking's behavior does not eliminate necessarily its incentives to continue with its prohibited practices. Therefore, designing behavioral remedies requires taking into account the various manners in which the concerned undertaking may attempt to minimize the extent to which such remedies constrain its commercial practices.[49] This can occur, for example, in cases concerning discrimination, input foreclosure, refusal to grant access to a facility which require very strict and accurate measures to prevent the concerned undertaking from undermining the pursued effects of the remedies.[50] The more complex the abuse, and the greater the scope of harm created by it, the more complex such remedies and their monitoring mechanisms would likely have to be.[51]

Structural remedies, on the other hand, can be said to offer a one-off solution to infringements. Once the divesture of certain assets of the concerned undertaking has been required and the restructure is completed there is little need for further compliance monitoring. This is because such remedies are capable of removing the incentives as well as the ability of the concerned undertaking to continue pursuing its anti-competitive practices. This is turn also reduces the possibilities of minimizing the effect of the remedy by the concerned undertaking. At the same time, the possibility to order a divesture depends greatly on the corporate structure of the concerned undertaking. If such structure is relatively modular, meaning

48 E.g. by requiring the dominant undertakings customers to renegotiate their supply contracts for an input once the entity of the dominant undertaking responsible for such input is sold off in context of a structural remedy.

49 Frank P. Maier-Riagaud, ' Behavioral versus Structural Remedies in EU competition Law' (2016) in Philip Lowe, Mel Marquis and Giorgio Monti (eds.), *European Competition Annual 2013, Effective and Legitimate Enforcement of Competition Law* (Hart Publishing, 2016) at 210.

50 E.g. in the case of discrimination the concerned undertaking can modify the criteria for differentiation in a manner that achieves a similar outcome for itself. In the case of input foreclosure, capacity throttling can be implemented in a manner that undermines vertically related competitors. In the case of refusal to grant access, the terms of access may be set in a way that continues to disfavor vertically related competitors.

51 See e.g. Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289, paras. 1268-1279. In the context of the refusal to supply abuse an external review committee was considered necessary by the Commission to keep a track on the remedies imposed. The General Court however found that the Commission did not have the authority to delegate its monitoring powers in the manner it did, which in turn made it more difficult for the Commission to monitor compliance with the remedy and intervene in the case of non-compliance.

that the various subsidiaries and divisions of the concerned undertaking are spread across separate commercial entities, divesture would be a more realistic than in a case where the concerned undertaking is vertically integrated throughout the entire supply chain. In the latter case, divesture is not only more difficult to administer but there is also a higher risk that the efficiencies gained through integration may be lost, which in turn may diminish incentives to innovate.[52] Furthermore, a successful divesture also requires that the market conditions support such changes. If the market will not support the creation of an additional player that is supposed to arise following the divesture then there is little sense in ordering it. Divestures that lead to the creation of unviable businesses can do little to improve the state of competition in the markets affected by the prohibited practices of the dominant undertaking and are also more likely to produce undesired effects for third parties.[53] This logic can also be seen to some extent in the context of EU merger control where divestures require that the severed entity is a viable business that should be acquired by a buyer capable of turning it into a genuine player on the market where it is active.[54] Finally, since structural remedies primarily entail severing some the ties between the dominant undertaking and its assets relating to presence in different markets, such measures would commonly make more sense in situations with leveraging-type of abuses than single market abuses. Therefore, while structural remedies may tackle infringements in a more sweeping manner than behavioral remedies, they are not the most suitable for implementation in the context of all abuses or market conditions. Consequently, in practice the suitability of each of the two options will depend greatly on the specific circumstance of the case.

In the context of EU competition policy the division between behavioral and structural remedies is provided specifically in art. 7 of Regulation 1/2003, however, these two options are also available to some extent in the context of art. 8 and 9 procedures. The temporal nature of interim measures, as well as their objective to prevent irreparable harm from occurring, makes them less suitable for structural remedies, although from a purely theoretical perspective there is no reason why this would never be possible.[55] In the

52 Williem E. Kovacic (1999) *supra* (n 6) at 1294.

53 E.g. third parties that serve as suppliers of a divested entity may be worse off if post divesture such entity fails to survive alone or under the wings of the new buyer.

54 Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 OJ C267/1, paras, 22-34.

55 The main limitation concerning the strictness of the measure is that it should not entail a remedy that goes beyond what would be allowed under art. 7 following a final infringement decisions. Nevertheless, a structural intervention would have to be easily lifted after a short period of time or if suspended following judicial review; meaning that a traditional divesture of corporate restructuring would not be possible.

case of art. 9 commitment procedures, both options have been implemented in practice and in general it can even be said that structural remedies are more common in such settings than in the case of art. 7.[56] The choice between behavioral and structural remedies as well as between the possible variations of measures within each type of remedy or combination thereof is, however, not entirely subject to the Commission's discretion in practice. The selected remedy must be both effective and proportionate or else it risks being overturned at the stage of judicial review.

C. *Limitations – effectiveness and proportionality*

Article 7 of Regulation 1/2003 indicates that in case of an infringement (of art. 102 TFEU) the Commission has the power to impose on undertakings any behavioral or structural remedy that is proportionate and necessary to bring the infringement effectively to an end. Structural remedies should, however, be implemented only in cases where behavioral remedies are not equally effective or are more burdensome for the concerned undertaking. A similar formulation is also included in Recital 12 of the Regulation, which adds that changes to the structure of the undertaking as it was prior to the infringement are only proportionate in situations where the is a risk of lasting or repeated infringement stemming from the structure of the undertaking. Therefore, it can be said that there is an initial preference for behavioral remedies in practice; however, it is limited to situations where structural and behavioral remedies are equally effective.[57]

When designing a remedy, the Commission must make sure that it is *proportionate* with respect to the infringement and is necessary to bring it *effectively* to an end. Effectiveness in this context should be read as the ability to stop the abusive behavior, the repetition thereof and re-establish competition.[58] The wording of Regulation 1/2003 together with the fact that structural remedies When it comes to the matter of proportionality, EU law indicates that EU measures are considered to be proportionate when they do not exceed what is appropriate and necessary in order to achieve the objective pursued.[59] When there is a choice between several possible measures the

56 In the case of merger control the situation is even more pronounced and remedies often tend to be structural rather than behavioral. See data on both trends in Benjamin Loertscher and Frank Maier-Rigaud, ' On the Consistency of the European Commission's Remedies Practice' (2020) in Damian Gerard and Assimakis Komninos (eds.) *Remedies in EU Competition Law- Substance, Process and Policy* (Wolters Kluwer, 2020) at 67-70.

57 See e.g. Frank P. Maier-Riagaud, ' Behavioral versus Structural Remedies in EU competition Law' (2016) in Philip Lowe, Mel Marquis and Giorgio Monti (eds.), *European Competition Annual 2013, Effective and Legitimate Enforcement of Competition Law* (Hart Publishing, 2016); Ioannis Lianos (2013) *supra* (n 7) at 406.

58 Frank P. Maier-Riagaud (2016) supra (n 57) at 216.

59 Case T-65/98 *Van den Bergh Foods v Commission* [2003] ECLI:EU:T:2003:281, para. 201.

least burdensome should be selected and the disadvantages must not be disproportionate to the aims pursued. In cases concerning compulsory remedies under art. 7 of Regulation 1/2003 or under the older art. 3 of Regulation 17/63 similar definitions for this principle were provided.[60] Although not specifically addressed in the context interim measures under art. 8, these remain of course EU measures and are thus inherently subject to this threshold as well. Nevertheless, since art. 7 and 8 pursue different objectives the application of the proportionality principle in the context of both procedures will look different.[61]

In order for remedies to be proportionate it is important that these correspond with the nature as well as the scope of harm caused by the abuse of dominance. The remedy selected must be linked to the theory of harm identified in each case so as to be considered appropriate and necessary.[62] The importance of this link has been observed in practice in cases where the remedy imposed by the Commission was annulled for going beyond the scope of the infringement and the theory of harm behind it.[63] At the same time, this correlation should not be interpreted to mean that the Commission must impose identical remedies in all cases that deal with the same type of abuse. Such a requirement would negate the circumstantial differences that can occur across various cases. Nor should the link between the remedy and theory of harm be considered to determine the legal test of abuse that needs to be applied in the first place. According the the GC in *Google Shopping* the remedy selected by the Commission does not dictate which test of abuse should be applied to the practice at hand.[64] Therefore it is only in cases where a significant discrepancy between the theory of

60 Case T-260/94 *Air Inter v Commission* [1994] ECLI:EU:T:1994:265 para. 141; Case T-65/98 *Van den Bergh Foods v Commission* [2003] ECLI:EU:T:2003:281, para. 201; Case T-7/93 *Langnese-Iglo v Commission* [1995] ECLI:EU:T:1995:98 para. 209; A slightly different formulation can be found in Joined cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECLI:EU:C:1995:98, para. 93. In the case of commitments decisions under art. 9 of Regulation 1/2003 this same principle was interpreted in a manner that leaves more discretion to the Commission when approving offered commitments which are considered proportionate once these are suitable for removing all the competitive concerns identified by the Commission.

61 The objective of interim measures under art. 8 is to prevent irreparable harm to occur due to practices that appear to constitute a prima facie infringement that could not be restored at the stage of a final decision. See Case C 792/79R *Camera Care v Commission* [1980] ECLI:EU:C:1980:18, paras. 14-15 and Case T-44/90 *La Cinq v Commission* [1992] ECLI:EU:T:1992:5, para. 28. Accordingly, interim measures are primarily concerned with bringing the potentially prohibited practice to a halt.

62 See e.g. Damien Gerard and Assimakis Kominos (eds), *Remedies in EU Competition law: Substance, Process and Policy* (Wolters Kluwer, 2020).

63 E.g. Case T-310/94 *Gruber + Weber v Commission* [1998] ECLI:EU:T:1998:92, paras. 177-179.

64 See Case T-612/17 *Google and Alphabet v Commission* [2021] ECLI:EU:T:2021:763, paras. 244-245.

harm and the imposed remedy can be identified that such remedy can be questioned with regard to its suitability. This is for example one of the main critiques expressed in the context of the *Google Shopping* case.[65] Deviations from previous practice, as such, should, however, not be sufficient to consider a remedy inappropriate and thus disproportionate as long as the circumstances of the case are also different. This would follow the Commission's practice for the past few decades where the same kinds of abuses were subject to different remedies that attempted to address the specificities of each case.[66]

In the case of online platforms, allowing for deviations from previous practice while at the same time insisting on a close fit between the theory of harm and the designed remedy is imperative for the correct application of EU competition law to these actors. Online platforms and their respective commercial practices entail significantly different circumstances from the conventional market setting from where the majority of the Commission's practice originates. Addressing the competitive concerns and harm that may arise in the context of such circumstances will therefore almost inevitably require deviating from previous practice in order to avoid economically unsound outcomes. Such deviations should, nevertheless, always maintain the consistency between the remedy and identified theory of harm in each case. In order to do so, it is imperative that The multi sided nature of online platforms and the particular dynamics of competition in the markets in which they operate are accounted for.

Although this task may sound straightforward, the Commissions' experience in the *Microsoft* cases as well as recently in the *Google Android* case show that performing it in practice is far from easy.[67] The next sections will therefore cover some of the main considerations that need to be addressed for when designing remedies for abuses of dominance by online platforms, as well as the manner in which they could be incorporated into practice.

65 See e.g. Pinar Akman, 'The Theory of Abuse in Google Search: A Positive and Normative Assessment Under EU Competition Law' (2017) 1(2) Journal of Law, Technology and Policy 301; Philip Marsden, ' Google Shopping for the Empress's New Clothes- When a Remedy isn't a Remedy (and how to fix it)' (2020) 11(10) Journal of Competition Law & Practice 553.

66 See e.g. Ioannis Lianos (2013) *supra* (n 7) at 407.

67 All three cases dealt with tying in the context of platform markets, the remedies used in each case were different and resulted in different outcomes. In the case of Microsoft the remedies adopted through commitment decision proved to be more effective that the imposed remedy following the infringement decision. At the same time the remedy adopted in Google Android resembles the remedy in Microsoft (tying) very much however has led to some initial unexpected undesired outcomes.

6.3 Remedy design in context

6.3.1 Platform considerations

In the context of competition law policy, online platforms are commonly discussed in relation to their multisided market character, which places them in different commercial reality compared to non-platform undertakings.[68] Such reality requires that both the methods of assessing competitive harm as well as the means to mend it be adjusted in a manner that accounts for the differences between platform and non-platform market settings.[69] Broadly speaking, the different commercial reality stems from the fact that platforms create value by successfully facilitating a matchmaking interaction between two or more separate customer groups.[70] Consequently, the success of platforms depends on their ability to bring the right customer groups 'on board' and co-ordinate the interaction between such groups in a profitable manner.[71] Therefore, when competing with other (platform) undertakings, platforms compete on attracting the customers members they wish to get on board in optimal proportions depending on their business model.[72] An online marketplace platform, for example, competes with other comparable marketplaces with respect to both consumers as well as sellers since not having one of the two customer groups 'on board' means it cannot deliver the value it seeks to create, namely facilitate transactions between these two groups.

---

68 Bertin Martens, 'An Economic Policy Perspective on Online Platforms', Institute for Prospective Technological Studies Digital Economy working paper 2016/05, pp. 12. https://ec.europa.eu/jrc/sites/jrcsh/files/JRC101501.pdf (accessed 9 Jun 2020).

69 This is to a great extent the main theme discussed in expert reports concerning the application of competition policy to online platforms see e.g. Export Report, n. 1; Stigler Report n.1; OECD (2018) Rethinking Antitrust Tools for Multi-Sided Platforms; Digital Competition Expert Panel, ' Unlocking digital competition, (2019) < https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> accessed 8 Mar. 2021 [hereinafter Furman Report].

70 Jean-Chalres Rochet and Jean Tirole, 'Two-sided markets: a progress report' (2006) 37(3) The RAND Journal of Economics 645.

71 Bernard Caillaud and Bruno Jullien, 'Chicken & Egg: Competition among Intermediation Service Providers' (2003) 34(2) The RAND Journal of Economics 309.

72 E.g. an online booking platform for restaurant reservation would want to keep a specific balance between consumers looking to make a restaurant reservations and the number of restaurants available on the platform for this option. Such a balance may be different for example when compared to a hotel room booking platform or an online marketplace.

In practice, successfully getting members from different separate groups on board can and has been achieved through the use of various strategies.[73] Generally speaking, because each customer group may often have a different degree of demand for the matchmaking service offered by the platform, the platform often has to make different value propositions for such customer groups to join the platform.[74] This commercial reality manifests in the adoption of a skewed pricing structure where (at least) one customer group of the platform (the subsidizing group) pays more for participating on the platform than another group (the subsidized group).[75] Such skewed pricing structures can be implemented through all the monetization possibilities that platforms have in order to make a profit on the matchmaking interaction they facilitate, such as pay-per-click, membership and transaction fees as well as combination thereof. Similar to the pricing structure, the monetization mechanism is also important for enabling different kinds of customer groups to get on board.[76] Once members of two or more separate customer groups join the platform, the (positive) indirect network effects at play between such customer groups is said to enable the growth of the platform to viability (also referred to as critical mass) and in the long run even help secure a monopoly position.[77]

Going back to the example of the online marketplace, once some consumers and sellers are attracted to the platform, growth will proceed due to a positive feedback loop; the more consumers it attracts, the more attractive it becomes for sellers and vice versa. In order to manage such growth

73 E.g. some platforms started off as non-platform entities. YouTube first created its own content in order to attract viewer before opening up to third parties. Similarly Apple initially exclusively developed its iOS compatible apps before creating third party developer tools for app developers to use for free in order to create apps for iOS. Tripadvisor started off as a review site for consumer's experience of hotels, restaurants and attractions and transformed at a later stage into a booking platform for these experiences. By contrast Booking.com started of as platform that allowed consumers to make hotel room reservations online.

74 Marc Rysman, 'The Economics of Two-sided Markets', (2009) 23(3) Journal of Economic Perspectives 125, 129-131.

75 Bernard Caillaud and Bruno Jullien (2003) supra (n 71).

76 E.g. in the case of app stores, by expanding the monetization possibilities of the app stores both Apple and Google enabled the emergence of new kinds of apps such as subscription based apps (e.g. news, music and movie streaming). In the absence of such monetization tools such apps would perhaps not exists as the neither company would be interested to invest extensively in their app store tools in the absence of prospect profits from such activities.

77 David S. Evans and Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses* in Roger Blair and Daniel Sokol, (eds.), *Oxford Handbook on International Antitrust Economics* (Oxford University Press 2014); D.S. Evans and R. Schmalensee, 'Failure to Launch: Critical Mass in Platform Businesses' (2010) <https://ssrn.com/abstract=1353502 > accessed 3 Jul 2017; Geoffrey G. Parker, Marshall W. Van Alstyne and Sangeet Paul Choudary, *Platform Revolution* (W.W. Norton & Compnay, 2016) at123-127.

patterns, platforms will implement governance rules that are aimed at reinforcing such indirect network effects, as well as preventing undesired practices on the platform that may diminish or reverse such effects. In the case of the marketplace, the platform owner can choose to accept more payment methods, which may attract more consumers and merchants as well as remove merchants that sell counterfeit goods since they may cause consumers to stop using the marketplace, which in turn will also cause 'good' sellers to leave thus triggering a downward spiral to failure.[78] Accordingly, when it comes to nurturing the growth of the platforms and thus their (relative) market power, platform undertakings will focus their efforts on price and non-price commercial practices that amplify the positive (direct and) indirect network effects at play on their platform as well as their ability to internalize and capitalize such effects. This in turn would mean that the anti-competitive behavior pursued by platform undertakings will seek to achieve this same goal while consisting of means that do not entail *competition on the merits*.[79] Therefore, when seeking to address the harm created by such practices, the remedy should seek to bring to a halt the self-reinforcing positive feedback loop generated by such network effects. Failing to do so would entail in practice that the concerned platform may continue to grow and gain market power at the cost of its competitors (and at times customers) even if the anti-competitive practice is abandoned. In this regard its worth noting, however, that the remedy should not aim at setting the network effects in reverse as this may drive the concerned undertaking to a state that was worse off prior to the abuse and even to market exit, which would be considered disproportionate.

In addition to amplifying the network effects at play, platform entities can seek to obtain more market power through curbing the participation of their customer groups into a pattern that provides them with the greatest degree of (relative) market power. In the context of platforms such participation patterns are referred to as single or multi-homing patterns,[80] and are considered to be one of the main criteria for establishing the existence of market power.[81] Single-homing occurs when a platform customer group

78 Ibid; Sangeet Paul Choudary, *Platform Scale: How an Emerging Business Model Helps Start-Ups Build Large Empires with Minimum Investment* (1st ed. Platform Thinking Labs Publishing 2015).

79 Competition on the merits refers to competition on parameters such as price, choice, quality or innovation rather than a through means that are only made possible due to significant market power. See further discussion in OECD 'Competition on the merits' (2006) DAF/COMP(2005)27.

80 Amrit Tiwana, *Platform Ecosystems* (Elsevier, 2014) at 36.

81 Bundeskartellamt, 'The Market Power of Platforms and Networks', Working Paper Ref. B6-113/15, June 2016; OECD (2018) Rethinking Antitrust Tools for Multi-Sided Platforms, at 87-100.

uses a single platform to fulfill one of its specific demands for a product or service. This would be the case, for example, if consumers would use only Booking.com to make their online hotel reservations. Multi-homing occurs in the opposite scenario where a platform customer group uses multiple platforms to fulfill the demand for the same service or product offered by the platform. This occurs for example when consumers use multiple online marketplaces to purchase retail goods. As platforms inherently cater to two or more customer groups such participation patterns can be observed with respect to each of these groups. Generally speaking, the settings that can then be observed are: (i) multisided single-homing;[82] (ii) multisided multi-homing;[83] and (iii) single-homing on one side and multi-homing on another side of the platform,[84] also referred to as a (competitive) bottleneck scenario. From a market power perspective, the platform owner would commonly have the incentive to ensure that at least one of its customer groups is single homing as this provides the platform with a monopoly power with respect to the other platform customer groups that are interested in interacting with such single homing group. If consumers, for example, would only (or primarily) turn to Booking.com for reserving their hotel room, then Booking.com would have significant power over hotel owners that want to reach consumers. This in turn would allow Booking.com to charge higher fees from such hotels in return for getting access to the platform. Where single-homing is achieved on all sides of the platform, such market power would be even greater as it would apply, in principle, to all groups simultaneously.[85]

By contrast, in a multisided multi-homing scenario the market power of the platform with respect to its customer groups and competitors is constrained by the ability and willingness of such customer groups to make use of alternative solutions. Getting one or more customer group to single home through practices that entail competition on the merits requires, however, prevailing under the very intense competitive conditions associated with single homing tendencies.[86] Achieving this would require consistently

82 This occurs for example in the case of the Apple App Store, where both consumers and app developers use solely the App Store to buy and sell iOS compatible apps.

83 This occurs for example in the case of hotel room booking platforms where both consumers and hotel owners utilize multiple platforms to make reservations possible.

84 This occurs for example in the case of payment card where consumers usually opt for one credit card while merchants accept multiple kinds.

85 This occurs for example in the case of the Apple App Store which technically ensures the single-homing of both consumers and app developers, meaning the both have to comply with Apple's App Store policy and prices as long as they wish to make use of the iOS ecosystem.

86 See e.g. R. Poolsombat and G. Vernasca, 'Partial Multihoming in Two-sided Markets' (2006) Discussion Papers, Department of Economics, University of York,< https://EconPapers.repec.org/RePEc:yor:yorken:06/10 >accessed 20 December 2020.

providing customers with the most innovative service with the best quality at the (relative) lowest price. In the absence of high switching and /or multi-homing costs, there is in principle nothing preventing customers from using competing services simultaneously.[87] Given the decisive role played by the single or multi-homing patterns of platform customers for in the accumulation and preservation of market power by platforms, it is sensible to assume that the competitive and anti-competitive behavior of such of dominant platforms will aim at curbing such patterns in their favor through price and non-price practices. Accordingly, anti-competitive practices by online platforms will likely aim at getting at least one of their customer groups to single-home and/or reducing the potential impact of multi-homing on their respective market power.[88] Therefore, when seeking to address harm (potentially) created by abusive practices of dominant platforms targeted at influencing the single and multi-homing patterns of platform customers, the envisaged remedy should aim at preventing such patterns from steadily shifting in favor of the concerned undertaking and restoring them to their previous setting prior to the abuse.

At this point, it should be noted that the above-mentioned insights on network effects and platform customer homing patterns concern settings in which the competitive harm is of an exclusionary nature. In situations where the competitive harm has an exploitative character the network effects at play on the platform as well as the platform customer participation patterns would play a different role and thus may require a different approach when considering remedies. In such a context, the manner in which network effects manifest allows the platform owner to know which of its customer groups is more likely to generate higher rents as network effects have been identified as one of the main determines of platform pricing.[89] In situations where the dominant platform undertaking seeks to exploit the customer group it considers most susceptible to such practices, the remedy may not have to aim at addressing the network effects. In such cases the remedy could aim at preventing the concerned platform from making use of an opportunity that its would not be able to obtain in a competitive market *vis-a-vie* the respective customer group.[90] By doing so,

87 In such cases direct network effects, as in the cases of social media, may prevent multi-homing but in the case platforms that display primarily indirect network effects there would be little reason for consumers not to multi-home.

88 E.g. the use of broad MFN clauses in the context of hotel booking platforms can be said to limit the impact of multi-homing by hotel owners since it reduces the possibility that better offers will be made on separate platform which in turn also reduces the chances that consumers will switch between platforms due to price differences.

89 See Feriha Zinngal and Frauke Becker, 'Drivers of optimal prices in two-sided markets: the state of the art' (2013) 63(12) Journal für Betriebswirtsch 87.

90 Case 27/76, *United Brands Company v. Commission* [1978] ECLI:EU:C:1978:22, para. 249.

even cases where the exploitative practice assists the platform in amplifying the (indirect) network effects on the platform may be resolved as removing the exploitative element from such practices essentially takes away (some of) the fuel needed to sustain such undeserved advantages.[91]

In such cases, as noted above, the remedy should not aim as reversing the positive feedback loop(s) amplified by the concerned platform through its abuse since such actions may lead to disproportionate outcomes. Similarly, the participation patterns of platform customers will determine to a great extent which customer group is likely to generate the highest participation fees. Generally speaking, single homing customers are considered more valuable than multi-homing customer groups, and thus the latter are more likely to be subject to higher participation fees.[92] In the case of abusive practices with an exploitative character, the remedy would in principle not have recalibrate the participation patterns of platform customers but instead target the exploitative practice. This is, however, conditional on the fact that the exploitative practice did not also assist the platform in shifting the participation patterns of its customer groups in its favor. This could occur, for example, were the unfair pricing and/ or trading conditions also rise the switching and/or multi-homing costs of the harmed customer group or helped the concerned platform to secure single homing by other customer groups. In such a case, the remedy may also need to aim at enabling such participation patterns to return to their pre-abuse state. Doing so would in essence require intervening with the practices that accompanied the implementation of excessive prices and caused such patterns to shift. For example, if the additional rents extracted from one customer group were used to finance a lock-in mechanism intended to secure the single homing of a different customer group the envisaged remedy should tackle both aspects. This would entail intervening in the price setting of the concerned dominant platform as well as dismantling the lock-in mechanisms financed by such abuse that would allow for multi homing to resume. Not addressing such participation patterns may otherwise lead to a situation

91 For example, if Booking.com would be charging hotel owners excessive commission fees that it would then partly use in order to attract more consumers to the platform, then the hotel owners could end up getting stuck in a fee rising spiral. The higher the fees charged from hotel owners the more offers can be made to attract consumers. The more consumers eventually use the platform the higher the fees may become in order to support the additional costs of the growth and further stimulate additional growth. By imposing a remedy which limits such fees, the funds needed for sustaining such growth will no longer be available thus diminishing the possibility of the platform to further pursue such growth strategy that was previously financed by the hotel owners. Determining, however, when such a spiral must be halted and which fees charges from the hotel owners would be considered abusive will be an extremely difficult task that is likely to deter competition authorities from engaging with such cases.

92 See Feriha Zinngal and Frauke Becker (2013) *supra* (n 89).

where the harmed customer group will continue to be subject to relatively higher participation costs even once the exploitative practice was brought to a halt.

In light of the above, it is therefore important that at the phase of remedies not only the immediate harm to competition is observed and addressed but also the future implications of the anti-competitive behavior for the competitive process. In this regard, addressing the impact of the anti-competitive practices of the concerned dominant platform on the network effects at play in each case, as well as on the participation patterns of platform customers will also prevent market conditions from *tipping* in its favor. Market tipping refers to the situation where a platform succeeds in securing an (impassable) advantage over its competitors that persists until such platform becomes a (quasi) monopoly.[93] The tendency of market tipping in the context of platforms has been identified as one of the main challenges of competition policy currently and objectives for improving it, as the current framework may not always posses the tools to prevent its occurrence.[94] This is particularly so in situations where tipping is a result of legitimate competition.[95] In such cases the changes in the network effects on the respective platform as well as the homing patterns of its customer groups may occur following well-planned legitimate business practices. Consequently, despite the undesirable outcome of such practice the result of tipping, as such, will not justify legal intervention under art. 102 TFEU even when it involves a dominant platform.

When, however, the tipping effect or tendency is amplified through anti-competitive practices adopted by a dominant platform, the grounds for intervening are present and tackling such an undesired outcome can be done at the remedy phase. The manner in which this will have to take place in practice will differ from case to case based on its specific circumstances. Nevertheless, this objective is unlikely to be attained without addressing the effects of the anticompetitive behavior on the network effects at play in each

93 Michael L. Katz and Carl Shapiro, 'System Competition and Network Effects' (1994) 8(2) Journal of Economic Perspectives 93, 106; Jean-Pierre Dubé, Günter J. Hitsch and Pradeep Chintagunta, ' Tipping and Concentration in Markets with Indirect Network Effects' (2008) (Chicago GSB, Research paper No.08-08), 1-5 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1085909> accessed 14 Mar. 2021.

94 This has been communicated by Executive Vice–President of the Commission, Margrethe Vestager, see European Commission Press Release of 2 Jun. 2020 < https://ec.europa.eu/commission/presscorner/detail/en/IP_20_977> accessed 5 Jan. 2021.

95 In such scenario's intervening in the process of tipping is problematic because it would in essence means that competition policy must prevent the accumulation of market power as such. Such interventions would go against the premise and case law of EU Courts indicating that possessing a position of dominance is not as such prohibited thus such a fact alone would not justify legal intervention on competition policy grounds.

case and the homing patters of platform customers. This is due to the fact that these two aspects constitute perhaps the two most important factors for assessing the facilitating and mitigating circumstances for the occurrence of tipping, which are applicable to all platforms regardless of the sector in which they operate.[96] As previously mentioned, the network effects at play on a platform can ignite a positive feedback loop provided that the correct customers are brought 'on board' and managed adequately. This positive feedback loop allows the platforms to grow quickly. Once an initial market share advantage is secured this same feedback loop, if managed properly, will sustain and gradually enlarge such advantage to the point where the initial frontrunner prevails as the undisputed winner.[97]

This outlook is particularly relevant in market settings where (at least) one of the platform customer groups is prone to single homing. In such a scenario, if the market tips on the single homing side of the platform in favor of one player, it essentially means such player becomes the gatekeeper for the entire single homing market. For example, if consumers would generally use only one platform to make their hotel room reservations, then hotel owners would have to make sure to list their properties on that same platform if they want to reach consumers. By doing so, the hotel owners would reinforce the tendency of consumers to stick to the respective platform as it will have all or the most offers compared to other platforms. In the long run this can also reduce the incentive for hotel owners to list properties on other platforms, leading to a situation of single homing on both sides of the platform, which provides the platform with a near monopoly position with regard to both customer groups.[98]

Therefore, by addressing these factors in each platform related case, the envisaged remedies will be better able to obtain their common tri-fold objective as well as address the rather new challenge of market tipping which has been identified a major concern in the greater context of digital markets.

6.3.2 Remedies in tying and bundling cases

Tying and bundling practices in the case of multi sided platforms entail several variables that need to be considered for the purpose of remedy design. Firstly, as discussed in chapter 4, when it comes to the manner in which tying practices are most likely to manifest two options exist, namely

96 See e.g. Özlem Bedre-Defolie and Rainer Nitsche, ' When do markets tip? An overview of some insights for policy' (2020) 11(10) Journal of Competition law and Practice 610; Jean-Pierre Dubé, Günter J. Hitsch and Pradeep Chintagunta (2008) *supra* (n 93).

97 Ibid.

98 Such monopoly power depends however, also the existence of additional barriers to entry other than the presence of (significant) indirect network effects and a lack of competition with other non-platform entities.

on-platform tying or *cross-platform* tying.[99] On-platform tying refers to situations where the matchmaking functionalities offered on a platform are tied to one another.[100] Cross-platform tying, by contrast, refers to situations where (at least) two separate platforms are tied to each other.[101] Secondly, the multisided nature of platforms means that the tying practices can be implemented with respect to more than one customer group. For example, Amazon could in theory tie the Amazon Pay platform with regard to both consumers and merchants using the Amazon Marketplace. Thirdly, the intermediary role played by platforms can cause the tying with respect to one customer group to extend across the platform to other customer groups. This occurred, for example, in *Microsoft* and *Google Android* where the tying practices that were applied to OEMs also resulted to tying in the case of consumers.[102] Accordingly, when dealing with abusive tying practices of a platform, the remedies need to take into account these variables as they might impact the scope of competitive harm caused and thus also the kind or remedies required for tackling it. In order to address this in a comprehensive manner *on-platform* tying or *cross-platform* tying will be discussed separately.

A. On-platform tying

On-platform tying, involving two or more matchmaking functionalities of a platform, will most likely concern only the consumer side of the respective platform. This is because the various matchmaking functionalities on a platform involve bringing together consumers and one or more commercial customer groups. So while consumers could perhaps be required to utilize more than one match-making functionality the same is often not possible

---

99 D. Mandrescu, 'Tying and bundling by online platforms- Distinguishing between lawful expansion strategies and anti-competitive practices' (2021) Computer Law and Security Review, 1. While platforms can also chose to tie single-sided product or services in either type of tying, such a strategy would not provide such platform with the monetary and strategic advantages that tying of can achieve. This is because the tying of single-sided products or services to a multisided platform would not help amplify the network effects on such platform but rather serve as an additional source of revenue. On the strategic importance of multisided tying or leveraging strategies see also Thomas Eisenmann, Geoffrey Parker and Marshall van Alstyne, 'Platform Envelopment' (2011) 32(12) Strategic management Journal 1270.

100 This would occur for example if consumers would only be able to make a hotel room reservation on Booking.com if they also have to book their means of transport for such destination through it as well.

101 For example, in order use an Oculus VR device, consumers must login to this console type of device with their Facebook account. See the terms of use of Oculus on this matter online at < https://www.oculus.com/blog/facebook-accounts-on-oculus/> accessed 10 Jan. 2021.

102 *Google Android* (Case AT.40099) Commission decision of 17 Jul. 2018, paras.754-834, 877-915; *Microsoft* (Case COMP/C-3/37.792) Commission decision of 24 Mar. 2004 paras. 792- 834.

with regard to the commercial customers of the platform since it would essentially mean that these would have to offer more than one service to consumers. For example, Booking.com could tie its match making functionalities with respect to consumers and thus require them to make use of the hotel reservation service when reserving an airline ticket on the platform. Since consumers would commonly need both when going on vacation or a business trip, such a requirement would not be unrealistic from a commercial perspective. Applying the same strategy with respect to the commercial customers of the platform would, however, be unrealistic since it would entail requiring airlines to also offer hotel rooms on Booking.com. Consequently, this type of tying is also unlikely to extend to other customer groups.

When dealing with abusive on-platform tying the competitive harm that needs prevented will commonly concern the markets of the tying and tied matchmaking interactions and potentially also the emersion of a new market.[103] In order to prevent harm to occur in such markets, the tying obligation of the platform must be removed. When such an obligation is contractual and thus forms part of the terms and conditions of the concerned platform, the remedy should firstly require its removal as was done in the case of *Tetra Pak* and more recently in the case of *Google Android*.[104] When the tying of matchmaking interactions is facilitated through technical means,[105] such technical elements should be removed so that the usage of one matchmaking functionality does not automatically trigger or depend on the usage of a second functionality. Such requirements would in principle put an end to the practice that directly harms competition in markets of the tying and tied matchmaking functionalities. In the absence of the tie, competitors of the concerned platform in either market could resume competing for consumers on a stand-alone basis. However, if such practice helped the platform fuel the positive feedback loop on the platform, meaning it has attracted a larger consumer and commercial customers base, removing the tying vehicle may not suffice to remove harm

103 See by analogy with the concerns identified in non-platform settings e.g. Ward S. Jr. Bowman, 'Tying Arrangements and the Leverage Problem' (1957) 67(19) Yale Law Journal 19; Dennis W. Carlton and Micheal Waldman,' The strategic use of tying to preserve and create market power in evolving industries' (2002) 33(2) The RAND Journal of Economics 194; Jay P Choi and Christodoulos Stefanidis, 'Tying, Investment and the Dynamic Leverage Theory' (2001) 32 (1) The RAND Journal of Economics 52. The extent to which such competitive concerns translate into practice depends, however, on the circumstances of each case and the market conditions present for this see For the difference see Robert H. Bork, *The Antitrust Paradox*, (New York, Basic Books, 1978) at 378-379 and Michael D. Whinston, 'Tying, Foreclosure and Exclusion' (1990) 80(4) The American Economic Review 837.

104 *Tetra Pak II* (Case IV/31043) Commission decision of 24 Jul. 1991, art. 1-4; *Google Android* (Case AT.40099) Commission decision of 17 Jul. 2018, art. 1-3.

105 For example though an automatic launch of a flight search functionality on Booking.com once consumers are in the process of making a hotel room reservation via the platform.

created by it. This is because the (indirect) network effects at play may still make it difficult for competitors to compete for consumers. If Booking.com manages to get more consumers, airlines and hotel owners on board by tying their hotel room reservation and airline ticket search functionalities with respect to consumers, removing this tie does not necessarily mean consumers will quickly consider switching to competitors in the markets of either functionality. Therefore the positive feedback loop accelerated by the tying practice may proceed even after the tie is removed.[106]

The perseverance of the positive feedback loop would be most evident in cases where the tying practices lead to the formation of a consumer bias in favor of the concerned platform with respect to the (previously) tying and tied matchmaking functionalities.[107] Consumer bias in this regard refers to a situation where the consumers internalize the choices previously imposed by the tying practices as their default choice. Once such a bias is created, the positive feedback loop will not only continue to fuel the growth of the platform as such, but may also gradually drive the participation patterns of the customer groups previously involved in the tie towards single-homing and market tipping. Such an outcome may give the concerned platform more market power with respect to both its competitors and customers. Breaking through such a self-reinforcing consumer bias can be, however, very challenging, as it requires making consumers re-consider their default choices.[108] In order to do so a remedy would have, in addition to removing the tie, also prevent the concerned platform from engaging in practices that re-enforce such bias. This could occur for example, if the tying of two matchmaking functionalities is replaced by constant nudging strategies that aim to preserve the same consumer behavior previously imposed by the tie.

Going back to the example of Booking.com, this would occur if Booking.com would stop tying its hotel room reservation and airline ticket search functionalities and display instead constant reminders to consumers to use such functionalities in tandem, and perhaps even link such use to some promotional fee. Furthermore, actions that are targeted at making multi-homing by consumers as well as by the commercial customers of the platform more difficult should also be prohibited as these may have a similar effect of preserving the bias and driving platform participation towards single-homing. This would occur, for example, if hotel owners that add their property listing to other platforms would receive a less favorable ranking

106 The positive feedback loop in the example of Booking.com refers to a situation where the more consumers are remaining or join the platform after the tie is removed the more hotel owners and airlines will remain or join the platform and vice versa.

107 On the types of bias the can arise see Amalia Fletcher and David Hanse, 'Chapter 2: The Role of Demand Side Remedies in Resolving Competition Concerns' in Damien Gerard and Assimakis Kominos (eds), *Remedies in EU Competition law: Substance, Process and Policy* (Wolters Kluwer, 2020) at 22-24.

108 Ibid, at 20-21.

on Booking.com. If such actions are however not sufficient to halt or at least slow down the positive feedback loop ignited by the tying practices, there is little room for resolving such a situation with a behavioral remedy. The last resort in such a scenario would be to reduce the visibility of the tied functionality on the platform when consumers are using the tying functionality and vice versa, so as to really nudge consumers into reconsidering their default choices actively. Although, such a measure may raise some of the search and transaction costs experienced by consumers temporarily,[109] the benefit of healthy competition may outweigh such considerations in the long run. Of course as with any behavioral measures, constant monitoring of compliance with such requirements would be needed and given their subtle and complex nature would likely be costly.

Furthermore, minimization by the concerned platform can be expected, as it would have an incentive to look for other means to keep reinforcing the consumer bias it managed to create. If, despite these measures, the consumer bias remains persistent and the positive feedback loop is not halted or slowed down there is little that can be achieved through other behavioral measures. Consequently the last resort option would be to require the two functionalities to be split across two separate platforms. Such a structural separation does not need to go as far as to request the divesture of the commercial division behind a certain functionality. In fact, a genuine divesture in such a case would likely be disproportionate as a change of ownership would not be necessary for influencing consumer behavior. The structural separation would only concern the manner in which the functionalities are offered to consumers, namely on two standalone platforms instead of one platform covering both functionalities. Such an approach would certainly have the potential of impacting consumer behavior and be suitable for dealing with consumer's bias scenarios, however, it could only be considered to be proportionate in the most severe cases involving on-platform tying where the prospect of market tipping is almost imminent. This is because the previously mentioned behavioral measures may, at times also suffice while being less cumbersome for the concerned undertaking, and impose fewer additional costs on consumers. This could occur, for example, in cases where the network effects on the platform are moderate and multi-homing by the platforms customer groups persists despite the tying practices. Such circumstances mitigate the possibility of the concerned platform to aggregate market power and its ability to make the affected markets tip in its favor.[110]

109 The raise in costs is in this regard not monetary, however, consumers would likely take more time to utilize the previously tied functionalities than in a situation where such functionalities are displayed clearly on the platform.

110 David S. Evans and Richard Schmalensee, 'The Industrial Organization of Markets Based on Two-Sided Platforms' (2007) 3(1) Competition Policy International 151, 163-166; Özlem Bedre-Defolie and Rainer Nitsche (2020) supra (n 96) at 610.

The ability to assess whether the suggested behavioral remedies will be effective is, however, very limited in practice. Although platform participation patterns can be studied with relative ease, correctly assessing the nature of the network effects at play on each platform and measuring their intensity is far more complex. Despite the extensive literature on network effects, there is currently no consensus on the manner in which such effects should be measured and evaluated in the context of competition policy. Similarly, there are very limited tools for predicting and assessing the tipping tendency of platform markets.[111] In the absence of legal tools that can convincingly show that a respective case displays the most alarming anti-competitive character, it is hard to see how the structural remedy such as the one previously mentioned could be considered a proportionate first pick solution. Recital 12 of Regulation 1/2003 indicates that changes to the structure of the undertaking would be proportionate when the anti-competitive risk from its structure as such. However, such a conclusion would be hard to reach in the absence of legal tools capable to assessing the nature and intensity of the network effects at play and the market-tipping tendency in a given case. Consequently, although structural remedies may be needed to prevent the anti-competitive harm caused by on-platform tying to progress after such behavior is brought to an end, the current legal framework makes it very cumbersome to adopt such measures under art. 7 of Regulation 1/2003. Developing new legal tools for assessing network effects and market tipping tendencies is therefore certainly desired, however, it is not the only way of resolving this impasse.

The implementation of suitable behavioral and structural remedies in the case of on-platform tying can be achieved presently through a more strategic use of interim measures. Accordingly, when practices that may qualify as abusive on-platform tying are identified, an interim measure consisting of the above-mentioned behavioral remedies can be imposed. The period from the implementation of the interim measure to the point where a final decision on the existence of abuse can be made would then serve as a trial period for the remedy. If, during such time, the remedy fails to achieve its desired effect, a structural remedy requiring the separation of the previously tied functionalities across two stand-alone platforms could be considered more seriously. Following such an approach would make the eventual implementation of structural remedies more likely to be proportionate as the trial period following the interim measure would serve as evidence that behavioral remedies are not effective for tackling the competitive harm caused by the tying practices as required by art. 7

111 E.g. Özlem Bedre-Defolie and Rainer Nitsche (2020) *supra* (n 95); Gautam Gowrisankaran, Marc Rysman and Minsoo Park, ' Measuring Network Effects in a Dynamic Environment' (May 1, 2010). NET Institute Working Paper No. 10-03 < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1647037> accessed 3 Feb. 2021.

of Regulation 1/2003. If, however, the behavioral remedy imposed in the context of the interim measure appears to deliver the desired effect, it can be kept or slightly tweaked when the final decision on abuse is delivered under art. 7. Such an approach would be in line with previous Commission practice where final decisions in abuse of dominance cases were preceded by interim measures.[112] Using interim measures under art. 8 of Regulation requires, however, showing the risk of *irreparable harm to competition* and a *prima facie* finding of abuse. Although proving the existence of *irreparable harm* to competition would normally be quite cumbersome, one could argue that tendency of platform markets to result in winner-takes-all outcomes where the market tips in favor of one platform entails such a risk.[113]

If a prohibited practice is indeed capable of causing the market to tip in favor of the concerned undertaking not intervening at an early phase in such a process may result in the elimination of competition in at least one market.[114] If that occurs, even a structural separation of the concerned platform at the stage of a final decision under art. 7 may not suffice re-establish a state of competition.[115] This is because new entrants to markets that have tipped would face significant barriers to entry due to the network effects that remain in place even after the structural separation.[116] The seriousness of this outcome can be said to be acknowledged by the GC in *Microsoft* where the Court indicated that reversing the anticompetitive effects of competition law infringements in markets characterized by network effects is extremely difficult.[117] The likelihood and urgency concerning the manifestation of such harm, which would justify intervention prior to a final decision, would depend on the effects on the investigated tying practices on the platforms growth pattern following their implementation. If the introduction of the tying practices results in a clear surge in the volume of both consumers and commercial customers on the platform compared to the situation prior to the tying, it could be argued that the manifestation of (irreparable) anti-competitive harm is sufficiently foreseeable.[118] This is particularly so if such changes are observed in combination with a shift in

112 Ekaterina Rousseva (2020) *supra* (n 34) at 291-295.

113 Alexandre Ruiz Feases (2020) *supra* (n 29); Despoina Mantzari (2020) *supra* (n 29); Peter Alexiadis and Alexandre De Streel (2020) *supra* (n 39).

114 Case T-184/01 R *IMS Health v Commission* [2001] EU:T:2001:259, para. 121.

115 Case C 792/79R *Camera Care v Commission* [1980] ECLI:EU:C:1980:18, paras. 14-15 and Case T-44/90 *La Cinq v Commission* [1992] ECLI:EU:T:1992:5, para. 80.

116 Evidence concerning barriers to entry should show that the post abuse market conditions would make it almost impossible for competitors to penetrate such markets see by analogy Case C-471/00 P(R) *Commission v Cambridge Health Care* [2001] ECLI:EU:C:2001:218, para. 111.

117 Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289, para. 192.

118 Case C-149/95 P(R) *Commission v Atlantic Container* [1995] ECLI:EU:C:1995:257, para. 38; Case C-471/00 P(R) *Commission v Cambridge Health Care* [2001] ECLI:EU:C:2001:218, para. 108; Case T-184/01 R *IMS Health v Commission* [2001] EU:T:2001:259, para. 116.

the homing patterns of these actors.[119] The finding of a *prima facie* infringement in such a context would require that the investigated practice at least appears to fulfill the criteria for which the Commission carries the burden of proof in tying cases.[120]

Seeing as the theories of harm in the context of abusive tying practices have been extensively studied in academic literature and covered on several occasions in practice by both the Commission and EU Courts, they can hardly be considered novel. Accordingly, finding a *prima facie* infringement in such a context should be less likely to be struck down as the stage of judicial review in a similar fashion to what happened in *IMS Health*.[121] The availability of such evidence will, however, depend on the specific circumstances of each case. Utilizing interim measures in tandem with infringement decisions in this fashion when dealing with platforms will help transform structural remedies into a feasible and effective solution in the most extreme cases of abuse of dominance cases. This will not only be valuable to platform cases, but to the enforcement of competition policy as such, as it would help revive the interim measure procedure and the use of structural remedies which are currently considered as theoretical rather than practical options. Putting such theoretical options, even if desirable, into practice will be, however, far from easy. Admittedly it is quite possible that such an approach will remain a theoretical one for the near future. This is not only because of the legal limitations mentioned with respect to art. 8 but also because it would require the Commission to use interim measures for a related yet different purpose than these were intended to serve. Accordingly, utilizing this option of remedy implantation strategy would likely first require that the Commission re-evaluates the purpose and approach it indents to adopt with regard to interim measures in the context of digital markets in general and online platforms in particular.

Luckily, however, an alternative solution that could achieve a similar result has already been discussed and to some extent applied in the context of EU merger control in the form of so called 'flexible remedies'. Such remedies entail in practice a more extensive menu of measures consisting of multiple intervention layers that are triggered depending on the manner in which market conditions evolve after the moment when the remedy was

119 If platform growth spikes and homing patterns shift towards single homing two of the main indicators of market power aggregation and market tipping can be said to manifest. See e.g. Özlem Bedre-Defolie and Rainer Nitsche (2020) *supra* (n 96).

120 Apart from establishing dominance, these criteria are (i) the tying of two *separate products;* (ii) coercion, and (iii) *foreclosure* in either the tying or the tied market. See Case T-30/89 *Hilti v Commission* [1991] EU:T:1991:70 and Case C-333/94 P *Tetra Pak v Commission* [1996] EU:C:1996:436; Case T-201/04 *Microsoft v Commission* [2007] ECLI:EU:T:2007:289.

121 Case T-184/01 R, *IMS Health Inc. v Commission* [2001] EU:T:2001:259, paras. 30-31, 128-131; On the importance of have non-novel theories of harm for the purpose of interim remedies see Despoina Mantzari (2020) *supra* (n 29).

imposed.[122] By introducing remedies, which consist of measures that apply only if and when certain competitive concerns materialize or at least become clearer, the Commission (or NCAs) would be better able to deal with the dynamic nature of competition in the context of online platforms. Accordingly, following an abuse of dominance the Commission could impose a remedy that has a behavioral measure as a starting point. In the event that the concerned abuse triggered amplification of network effects and caused changes in the homing patterns of the platforms' customer groups, which do not appear to be affected by the respective measure a more intrusive measure may be triggered at a later point in time. Such a mechanism can proceed to introduce more intrusive measures in correspondence with the growing tendency of the affected market to tip in favor of the concerned dominant platform as a result of its abusive behavior. Such an intensifying scale going from the least intrusive measure to the most intrusive one could include both behavioral and structural measures which are triggered based on the developments in the affected markets over time.

Therefore, from a theoretical perspective the structural and most radical forms of intervention would only be imposed at the moment where market conditions justify their use, namely where market tipping appears imminent. Implementing such kind of mixed flexible measures, although certainly unconventional, could be accommodated within the existing framework of art. 7 of Regulation 1/2003. Firstly, the provision itself is not formulated in a way that would prevent the implementation of such a mixed remedy nor would such remedies be entirely exceptional. In the context of EU merger control commitments made in order to enable a transaction to go through commonly include both behavioral and structural measures. Secondly, such a mix would also be more compatible with the principals of effectiveness and proportionality than a rigid measure as it would allow for a more customized approach to the harm created by the abuse until it is removed. Accordingly, it would also increase the chances of such remedies to achieve their tri-folded objective. Furthermore, the innovation related concerns often voiced with regard to competition law interventions in the case of platforms as well as digital markets in general, would be mitigated as such intervention would only be reserved to the cases where it is necessary and its scope limited correspondingly.

The theoretical potential of such measures does not mean, however, that these can easily be implemented in practice. Designing remedies with multiple layers that apply depending on different market considering or developments entails inevitable predefining an exhaustive set of circumstances that would be attached to each of the respective layers. This in turn

122 OECD, 'Merger Control in Dynamic Markets' (2020) at 32 < http://www.oecd.org/daf/competition/merger-control-in-dynamic-markets.htm>.

requires that the Commission must have a clear view on the potential future concerns it whishes to tackle but is unsure whether these will materialize. Otherwise, if such scenarios are vaguely described and defined legal certainty concerns may arise with respected to the concerned dominant platform, as it would not be able to assess when additional, more intrusive, measures may be triggered. Furthermore, to the extent that such scenarios can be predefined corresponding effective and proportionate remedy layers must be designed. In this regard, it is also important that the remedy should also be flexible enough to deal with unforeseen developments, which may make the initial remedy inapt. This could be done by introducing a review clause that would allow reviewing the impact of the imposed remedy layer(s) together with the market conditions at the time of review. This would avoid situations where the predefined measures are undermined by market changes not foreseen at the time when the remedy was defined as occurred in the case of *EDF/Segebel*,[123] where the alternative options included in the remedy were de facto diminished by unforeseen market developments.[124] Despite such difficulties and the inevitable challenge involved in ongoing monitoring comparable measures, the added value of utilizing flexible remedies in the context of online platforms (and even beyond) would be significant.

When comparing this alternative solution to that of a strategic use of interim measures as previously mentioned, it can be argued that flexible remedies would offer a more suitable enforcement tool that is more likely to achieve the tri-fold objective of competition law remedies. Nevertheless, the lack of precautionary intervention as done with interim measures may mean that the harm that must be addressed in such context may end up being relatively greater. In this regard, perhaps the best approach would be to utilize both means in tandem. Interim measures would then be used, as intended, to prevent market conditions for significantly deteriorating and the flexible remedies introduced at the stage of the final decision on abuse would strive to bring the infringement to an end, prevent its repetition and restore or reestablish the state of competition.

123 *EDF/Segebel* (Case COMP/M.5549) Commission decision of 12 Nov. 2009. In this case the concerned parties were allowed to choose between divesting certain assets or increase investment in them so as to make them viable.

124 F. Bure and L. Bary, 'Disruptive Innovation and Merger Remedies: How to Predict the Unpredictable?' (2017) 3 Concurrences 1, 6-7. When the point in time came when for the parties to make their choice the market conditions did not allow the concerned undertaking to divest their assets and were thus required to make the additional investments they did not intend or wish to make in accordance to the commitments.

B. *Cross-platform tying*

Cross-platform tying, where two or more stand-alone platforms are tied with respect to one platform customer group that is using both platforms will, similarly to on-platform tying, primarily occur with respect to consumers. This is because cross-platform tying with respect to the commercial customer groups of the platform would normally mean in practice that such parties would be required to offers consumers at least two different services on the tied platforms. However, if the matchmaking functionalities offered by the tied platforms concern complementary services from the perspective of both consumers and the commercial customers of the platform, tying could be possible with respect to both such parties. For example, Amazon may be able to tie its digital payment platform, Amazon Pay, to its marketplace platform with respect to either or both merchants and consumers. This is because such a payment platform is a very suitable complement for enhancing the services provided on a marketplace platform. By contrast, trying to achieve the opposite is highly unlikely to succeed, as a marketplace cannot be considered an important complement of a digital payment platform. Accordingly, cross-platform tying can at times occur with regard more that one platform customer group. In such situations, the tying of two or more platforms with respect to one customer group may extend to another customer group. As previously mentioned, if Amazon Pay would be tied to the Amazon marketplace for consumers, merchants would likely accept such a payment method as well. Such an outcome can be expected even in the case where the tie does not require consumers to use Amazon Pay as their exclusive payment method. Therefore, when considering remedies, the variations in the manner in which cross-platform tying can manifest should be taken into account, as they may require slightly different types of interventions.

The competitive harm that can be expected in the case of cross-platform tying would commonly concern the exclusion and deterrence of competition in the markets of the stand-alone tying and tied platforms. Where cross-platform tying is applied with respect to consumers and does not extend to other platform customer groups, a behavioral remedy that removes the tie would go a long way toward bringing such an infringement to an end, preventing its repetition and allowing for the state of competition to return to its pre-abuse status in principle. The removal of the tie should of course be complemented by the prohibition to adopt other means aimed at preserving and reinforcing the joint use of the previously tied platforms by consumers. Such actions could include some form of preferential treatment between the previously tied platforms such as providing monetary incentives, undermining interoperability with third parties and nudging notices constantly pulling consumers back to their previous behavior. Although tying two platforms can certainly contribute to reinforcing the positive feedback loops of each platform, removing the tie in such a situation would

remove a great deal of such effects across platforms. Accordingly, once the tie is removed, the network effects on each platform may perhaps continue to fuel platform growth on each platform separately, however, the two platforms would not continue to feed off each others success as in the case of on-platform tying. Going back to the example of Amazon, if Amazon Pay would no longer be tied to Amazon Marketplace, an increase in use of Amazon Pay by both consumers and merchants would not necessarily translate to a similar effect on Amazon Marketplace and vice versa.

Nevertheless, the persistence of the positive feedback loop on each separate platform can still lead to changes in homing patterns and eventually even in the tipping of markets in favor of each separate platform. This is particularly so if after the removal of the tie, the customer group that was subject to the tie continues to make use of the previously tied platforms in parallel. Where the tie and its effects can extend across more than one customer group due to the complementary relationship between the previously tied platforms, tackling such an outcome is even more challenging since it requires changing the behavior of multiple customer groups simultaneously. For example, in the early days of EBay following its acquisition of PayPal, the use of PayPal was tied to the use of EBay for both consumers and merchants. Recently this obligation has been modified into an optional choice for both, meaning that the tie has been removed. However, getting consumers and merchants on EBay to switch from PayPal, requires overcoming the indirect network effects present on PayPal and igniting such effects on a separate payment platform. This can prove to be very difficult in practice. If consumers choose to continue using PayPal on EBay there is no reason for merchants to stop accepting it, which in turn further reinforces the preference of consumers to stick to PayPal and vice versa. Such a lingering effect would be particularly strong where the tying practices created a consumers bias concerning the joint use of the previously tied platforms. This reality has been clearly understood by EBay, which voluntarily started actively phasing out PayPal from EBay a few years after the platforms split into two separate public companies.[125] Accordingly, instead of letting consumers and merchants switch to other payment platforms, EBay chose to actively exclude the possibility that PayPal would remain the default choice for such parties as was previously intended by EBay's tying practices.

The previous practice of the Commission in the Microsoft (WMP) and Google Android cases can be said to have dealt with similar circumstances although the remedies implemented in these cases were far less intrusive than the steps taken by EBay. The remedies in these cases, equally attempted

125 See Jason Del Rey, ' After 15 years, eBay plans to cut off PayPal as its main payment processor' (Vox, 31, Jan. 2018) https://www.vox.com/2018/1/31/16957212/ebay-adyen-paypal-payments-agreement> accessed 10 Jan. 2021.

to remove the tie imposed by the dominant undertaking and prevent the preservation of the effect of the tie on the platform customer groups after its removal, albeit not always successfully. In *Microsoft* the remedy requiring Microsoft to allow OEMs to choose between a version of Windows OS with Windows Media Player (WMP) and a version without it, did not bear any success since both versions priced identically. Accordingly, OEMs had little incentives to choose the version without WMP, which in turn meant that consumers also continued to receive (and expect) their PC's to come with WMP. Consequently, the remedy failed to reset the status quo created by the tying practices as it failed to remove the effects created by the tie on OEMs and ignored the potential role that could have been played by consumers for this purpose.[126] Ironically, the remedy offered by Microsoft itself in the course of the proceeding would have likely been far more efficient. Microsoft offered removing WMP from Windows OS and providing consumers with a CD containing multiple media players they could choose to install.[127] Such a remedy would have removed the tie with respect to OEMs and at the same time allow consumers to reconsider their previously imposed default choice of having WMP thereby potentially breaking free form their bias.[128] In Microsoft (tying) it would appear that the Commission was more aware of the interdependencies between consumers and OEMs and their impact on the effectiveness of the remedy. In this second case, concluded via a commitment procedure, the remedy implemented required Microsoft to present consumers with a multiple choice screen that would require them to choose the internet browser they wanted to have installed on their PC once they turn it on for the first time.[129] This remedy tackled the consumer bias created by the pre-installation of Internet Explorer on every Windows OS run PC, which proved to be quite effective, particularly in the point in time where multiple alternatives for Internet Explorer were introduced. Nevertheless, the implementation of this remedy did not always go smoothly as Microsoft was later accused for minimizing its implementation for which it was also fined.[130]

The relative success of these measures seems to have led the Commission to accept a similar remedy in *Google Android* where consumers are presented with a comparable multiple choice screen in order for them to choose their default internet browser.[131] By introducing this additional choice moment to

126 Gunnar Niels, Helen Jenkins and James Kavanagh (2016) *supra* (n 42) at 387-390.

127 See Spencer Weber Weller (2009) supra (n 7) at 28; Gunnar Niels, Helen Jenkins and James Kavanagh (2016) *supra* (n 42) at 388-390.

128 Ibid.

129 *Microsoft (tying)* (Case COMP/C-3/39.530) Commission decision of 16 Dec. 2009, paras. 7-18 of the commitments.

130 See *Microsoft (tying)* (Case COMP/C-3/39.530) Commission decision of 6 Mar. 2013, paras. 21-25, 38-46.

131 See how this implemented on Google's website at < https://www.android.com/choice screen/> accessed 10 Jan. 2021.

consumers the remedy helps eliminate advantage Google would normally have as the default choice on Android devices due to its tying practices with respect to OEMs.[132] While the same choice could have been posed with respect to OEMs, they may be less likely to switch to avoid the risk of consumer dissatisfaction. Pursuing similar remedies in the case of online platforms will require, however, adjusting such solutions to their different technical and commercial characteristics.

In cases concerning tying across platforms, the tie can take several forms. The tie can be technical in the sense that the use of one platform requires signing in with another platform. This would occur for example when using Instagram would require signing in with a Facebook account. In such a case removing the tie would require creating other sign-in possibilities for Instagram for users to choose from, including through platforms competing with Facebook. Another form of tying would entail the data generated on the tying and tied platforms. This would occur if using Instagram would require agreeing with the sharing of data generated on Instagram to be shared with Facebook.[133] In such a case removing the tie would require allowing users to choose whether they wish to do so actively, thus without a pre-programed opt-in or out of such an option. A third way of tying would combine the previous two by requiring user to create a profile account that automatically creates additional profiles on a separate platform and enables the sharing of data across such platforms to feed the profiles made on both platforms. In such a case, removing the tie would require giving users the possibility to refuse this cross-platform creation of profiles and data sharing across platforms when joining one of the platform as well as allow such users to change their choice in this regard at any point in time.

Finally, the fourth option for implementing a tie between two separate platforms in requiring using two (complementary) platforms in tandem, as was the case with EBay and PayPal. In such a case removing the tie would entail requiring that other platforms that provide the complementary service as the tied platform be accepted for integration and /or use with the tying platform. In the case of EBay and PayPal this would mean requiring EBay to accept other payment solution and that this choice can be made during every separate transaction. In the case of this last type of tie, where the tie also extends to other customer groups, it is important that the remedy does so as well. Accordingly, in the example of tying a payment platform

132 In practice, however, this new opportunity for consumers to make another choice does not always result in the most desirable outcome. See Natasha Lomas, ' Europe's Android 'choice' screen keeps burying better options' (Techcrunch, 8 Mar. 2021) <https://techcrunch.com/2021/03/08/europes-android-choice-screen-keeps-burying-better-options/> accessed 10 Jan 2021.

133 Currently, this possibility is only made optional in practice, as consumers are able to limit the data sharing between the two platforms. For more see Instagram's Data Policy Portal < https://www.facebook.com/help/instagram/519522125107875> accessed 12 Jan. 2021.

to an online marketplace, allowing either consumers or sellers to use other payment platforms needs to occur simultaneously. Implementing such remedies in the case of cross-platform tying would entail translating the remedies accepted by the Commission in Microsoft (tying) and in Google Android to the context of online platforms. Although this increases the chances that such remedies will also be considered to be proportionate in future cases,[134] it does not mean these will always be equally effective. This is particularly so in situation where the markets of the tying and tied platforms have tipped in favor of the dominant undertaking due to its tying practices.

In cases where tipping has occurred or is at the verge of occurring, solely removing the tie and presenting the platform customer groups with the possibility to make different choices actively, may not bring much change in practice. If, by virtue of the tie, the concerned undertaking has become the undisputed leading platform in the product market of either the tying and tied platforms, presenting its customers with alternatives may not have much value. In such a scenario more far-reaching solutions may be required. These solutions can be either a full divesture of the tied platform to a third party or temporarily ceasing interoperability between the previously tied platforms. A divesture solution would prevent the concerned undertaking from continuing to profit from the positive feedback loops it managed to fuel through its tying practices. Once the previously tied platform is sold to a third party the positive feedback loop between the two platforms will no longer provide the dominant undertaking with the strategic competitive advantage its previous tying practices would.[135] In the example of Amazon Marketplace, this would mean requiring Amazon to divest Amazon Pay to a third party and thereby prevent it from leveraging its market power from the retail market to the digital payment solutions market. Imposing a comparable measure would evidently require the Commission to take a step it has almost never taken until today,[136] which may cast doubt on the possibility that such measure would be considered proportionate under art. 7 of Regulation 1/2003.

Nevertheless, in cases where tipping has occurred and the effects of the abuse persist even after the tie between the platforms has been removed, one may argue that the structure of the undertaking itself prevents effective enforcement thus justifying a structural intervention. In cases where

134 Although both remedies were not prescribed under art. 7 of Regulation 1/2003 the fact the both undertakings offered similar solutions indicates that both perceived such solutions to be reasonable from both a commercial and technical perspective. Thus having the Commission require a comparable solution in future cases would not appear overly intrusive or disproportionate.

135 Thomas Eisenmann, Geoffrey Parker and Marshall van Alstyne (2011) supra (n 99).

136 David Bailey and Laura Elizabeth John (eds.), *Bellamy and Child: European Union Law of Competition*, 8th edn (OUP, 2018) at 1207.

such structural separations are considered too burdensome or too risky for the Commission to attempt, a technical separation would entail a less permanent form of intervention that may potentially achieve similar results. Such a measure would entail requiring the dominant platform to switch off the interoperability between the previously tied platforms for a specific, reviewable, period of time. Accordingly, in the case of a mutual sign-in system this would require not only allowing the usage of other sign-in option but also removing the possibility to sign-in on the tying platform with an account linked to the tied platform. In the previous example of Instagram, this would mean enabling users to sign-in with their email account, for example, but *not* with their Facebook account. Similarly, where platforms provide complementary services the tying platform should be open to be used together with other complementary platforms but not with the tied platform. In the example of Amazon Marketplace this would mean requiring Amazon Marketplace to accept various payment systems but not Amazon Pay.

Although, quite radical, such a remedy would effectively prevent the concerned undertaking from continuing to profit from the positive feedback loops it managed to fuel through its tying practices, without intervening in its corporate structure. By imposing a technical separation of the two platforms the positive feedback loops present on such platforms can no longer feed off each other. Furthermore, by obligating the concerned undertaking to link the tying platform to competitors of the tied platform, the market power of the concerned undertaking in the tying market can be used to leverage the position of existing small players or new entrants in the product market of the tied platform. Furthermore, similar to the situation post divesture, this option also allows existing and potential competitors to compete with the tying platform without necessarily having to enter the market of the tied platform as well.[137] By doing so, a comparable remedy would possibly bring changes to the homing pattern of the platform customers, which in turn may make the tipped markets contestable once more. This can occur particularly when consumers opted for the tied platform solely because they wanted to make use of the tying one. In the absence of the link between the previously tied platforms such customers can be expected to abandon the tied platform. This is turn will also likely reduce the adoption the tied platform by other customer groups that opted for the tied platform only in order to reach such consumers.

137 These risk are considered to represent the main competitive harms in the case of tying. See e.g. Dennis W. Carlton and Micheal Waldman,' The strategic use of tying to preserve and create market power in evolving industries' (2002) 33(2) The RAND Journal of Economics 194; Jay P Choi and Christodoulos Stefanidis, 'Tying, Investment and the Dynamic Leverage Theory' (2001) 32(1) The RAND Journal of Economics 52.

Consequently, such a separation may contribute greatly to reducing (at least some of) the undeserved growth achieved by the dominant undertaking on both platforms. It is worth noting, however, that despite the intrusiveness of this remedy, a technical separation does not mean it would put the tied platform out of business. EBay's permanent separation from PayPal does not appear to stand in its way to further growth following the announcement that EBay will no longer support it.[138] Therefore, a similar measure, which is only temporary, is less likely to be disproportionately detrimental to the commercial state of the dominant platform. The period for which such a remedy should apply would differ for case-to-case depending on the nature of competition in the affected markets, and should preferably include review possibilities where the Commission can withdraw the measure.

Imposing a remedy that requires the dominant undertaking to divest one of its platforms or remove the interoperability between two of its platforms goes admittedly very far. However, such a solution would be reserved and suggested only for the most extreme cases where the removal of the tie and preventing actions that aim at preserving its function is not sufficient to end the effects of the abusive tying, which appear to tip the market in favor of the concerned platform. Consequently, implementing such a measure should be attempted also in a gradual fashion as in the case of on-platform tying, namely through the strategic use of interim measures or the implementation of flexible remedies. Accordingly, the removal of the tie together with a prohibition to take actions that seek to preserve the effect of the tie would best implemented thought an interim measure under art. 8. If such actions do not bear fruit until the stage of the final decision on the matter of abuse, the finding of abuse can then be followed by a remedy requesting a divestment or a removal of interoperability between the previously tied platforms under art. 7. By contrast, when the interim measures appear to deliver the desired effects, such measures can be then also prescribed at the stage of the final decision. However, where the evidence available in a respective case does not suffice to show an immediate, urgent concern of irreparable harm to competition such a combination of remedies is not possible. This in turn would likely entail that remedies at the stage of a final decision under art. 7 will not go so far as to require a divestment or the suspension of interoperability between the previously tied platforms if not done as part of a flexible remedy which starts off with the behavioral measure that would otherwise be implement in the scope of interim measures. Otherwise seeking to impose such a far reaching obligations as a first pick would potentially be qualified as disproportionate given the possibility that other, less intrusive measures may also lead to the desired

138 It would appear that PayPal's revenues have continued to rise in the past few years following the announcement. See David Curry, PayPal revenue and usage statistics 2021' (Business of Apps, 18 Mar. 2021) < https://www.businessofapps.com/data/paypal-statistics/> accessed 25 Mar. 2021.

effects. Therefore, in such cases it is not likely that the final remedies would go beyond what is required to translate the remedies implemented in *Microsoft (tying)* and *Google Android* to the setting of online platforms. This can unfortunately be a problematic outcome, since, as provided above, some cases may require more far reaching interventions. Fortunately, however, some of these cases may be caught by the newly proposed Digital Markets Act (DMA),[139] as will be discussed later in this chapter.

6.3.3 Remedies for price related abuses

Abuse of dominance cases concerning prohibited pricing strategies can be said to deal with the clearest manifestation of undesired use of market power. The ability of an undertaking to price its products and services irrespective of its competitors, customers and consumers in a manner that may even be detrimental to them exhibits the exact type of market dynamics competition policy aims to prevent. The use of predatory pricing, where the prices set by the dominant undertaking are too low to cover its costs for the respective service or product, is capable of leading to the market exit of competitors as well as the deterrence of new market entrance.[140] Similarly, discriminatory pricing strategies can undermine the ability of third parties to compete with the dominant undertaking as well as distort competition among such third parties.[141] Finally, the implementation of excessive pricing allows the dominant undertaking to extract rents it would normally not be able to under competitive market conditions to the detriment of its consumers.[142] In some instances such prices can even be used to eliminate competition and deter market entrance.[143] In order to address the remedy design considerations for these abuses in a comprehensive manner these abuses will be discussed separately.

A. Predatory pricing

The implementation of remedies in cases concerning these price-related abuses has generally been quite straightforward in the sense that the remedies primarily mirrored the abusive behavior. In the case of predatory pricing the dominant undertaking found guilty of abuse, was commonly

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

140 P. Bolton, J. F. Brodley and M. H. Riordam, ' Predatory Pricing: Strategic Theory and Legal Policy' (2000) 88(8) Georgetown Law Journal 2239.

141 Robert O'Donghue and Jorge Padilla, *The law and Economics of Article 102 TFEU* (3rd Edition, Hart Publishing, 2020) at 856-866.

142 Ibid, at 893-894.

143 E.g. this occurs in the case of margin squeeze where or standard essential patents where the competitors of the dominant undertaking depend on their commercial relationship with the dominant undertaking and therefore the prices imposed by it.

required to raise its prices above predatory levels, i.e. to a non-exclusionary level. Such an approach can be seen in *Tetra Pak*,[144] *Akzo*,[145] *Wanadoo*,[146] and the most recent case of *Qualcomm*.[147] Although the level of detail of the imposed remedies in this respect varies across these cases quite significantly, the scope of the abuse analysis in all cases provided the concerned undertakings with quite a clear view about the manner in which the Commission viewed the predatory nature of the implemented prices. Such analysis, in turn, could have also guided the concerned undertakings with regard to the steps they need to take to avoid repetition. Furthermore, in some of these cases the Commission imposed additional obligations to make remedy compliance monitoring easier and prevent the minimization by the concerned undertaking.[148]

When applied to the context of online platforms, similar strategies could also be pursued provided that these account for their multisided nature. Accordingly, when requiring a dominant platform to raise its prices above exclusionary levels it is important that the adjustment in price means that the dominant platform does not offer its matchmaking functionality at a loss. In cases concerning platforms that offer a single functionality, like Uber, this should not be any different than non-platform cases, as what matters in such a case is whether the revenue generated by the platform is sufficient for the platform to operate profitably. Where multiple matchmaking functionalities are offered, as in the case of Expedia, requiring such an adjustment to prices could result in a requirement that the entire price level of the platform as well as the individual price level of each functionality are to be set at a non-exclusionary level. Such an extensive requirement could be required to make sure that the dominant platform does not allocate costs across its various matchmaking functionalities in a manner that allows it to operate bellow cost with respect to one or more of its functionalities. This in turn would require a monitoring mechanism similar to the one implemented in *Wanadoo* where the Commission required Wanadoo to provide it with yearly revenue accounts for each of its different services.[149]

144 *Tetra Pak II* (Case IV/31043) Commission decision of 24 Jul. 1991, art. 1-4.
145 *ECS/AKZO* (Case IV/30.698) Commission decision of 14 Dec. 1985, art. 3.
146 *Wanadoo Interactive* (Case COMP/38.233) Commission decision on 16 Jul. 2003.
147 *Qualcomm (predation)* (Case AT.39711) Commission decision of 18 Jul. 2019, art. 1-3.
148 In *Wanadoo* the Commission required yearly reporting on its revenue accounts for the various ADSL services it provided; In *Akzo* the Commission required yearly pricing reports for the period of five years following the prohibition decision; In Tetra Pak a bi-annual reporting obligation was imposed for a period of five years following the prohibition decision. Interestingly, in Qualcomm such a monitoring and reporting scheme was not required at the remedy stage.
149 *Wanadoo Interactive* (Case COMP/38.233) Commission decision on 16 Jul. 2003, art. 3.

In the most extreme situations where the concerned platform has a complex structure that would make such monitoring and reporting too difficult due to too many overlapping common costs, a structural solution could be considered. Such a structural intervention would require the dominant undertaking to split the different divisions responsible for the various matchmaking functionalities into separate legal entities. A comparable remedy was implemented in *Deutsche Post* where the letter mailing business was separated from the parcel mailing service following an investigation on predatory practices.[150] Such a solution would allow platforms to keep their multisided character in the sense that they can continue to provide all their functionalities on the same platform, while at establishing a legal structure that allows for separate accounting for each of the functionalities. In cases concerning multisided platforms, implementing such a structural solution can be very effective for bringing the infringement to an end at it tackles the constant incentive of such undertaking to cross-subsidize their functionalities as was the case in *Deutsche Post*. While such a separation would not eliminate the incentive of taking such actions, as a divesture would, it does restrict the *ability* of the concerned platform to do so for the duration of the (monitoring) remedy. In this sense, such a solution would be more effective than allowing a multisided platform to provide an accounting report of all its functionalities that could allow it to shift costs in ways that may support artificially low prices. By doing so, a comparable measure is better capable of terminating the abuse, preventing its repetition and reestablishing the state of competition to the situation before the abuse. Despite its structural approach it's worth noting that since such a separation does not require a true divesture of assets to third parties, it can be argued that it would constitute a proportionate measure in situations involving platforms with significant common costs.

In other cases, however, involving relatively transparent cost structures and a limited number of functionalities, as in the case of Uber, a behavioral measure would likely suffice. In such cases, the structure of the undertaking constitutes less of a hurdle to ensuring compliance with EU competition law policy thus not likely requiring or justifying the use of structural remedies even in the less intrusive form as previously mentioned.[151] Finally, in the case of either the behavioral or structural remedies suggested above, the selected remedy could ideally be supplemented by a requirement not to match the prices of competitors for a given period of time.[152] This strategy that was implemented in *Akzo*, would allow competitors to regain the

150 *Deutsche Post Ag*, OJ 2001 L 125/27, art. 2-4.

151 Recital 12 of Regulation 1/2003.

152 Such an obligation would commonly concern the prices of the platform with respect to the commercial customers of the respective platforms, as consumers are often able to make use of the matchmaking functionalities of platform without charge.

costumers they lost to the dominant platform and to some extent bring to a halt the positive feedback loop that may have been created by the predatory pricing strategy. This in turn will help restore the state of competition to what it was prior to the abuse and thus inevitably also reduce the chance of market tipping to occur and become permanent. The parties with respect to whom such an obligation would apply will likely have to be broader than in the case of Akzo and cover potentially all the customers that joined the dominant platform following the implementation of the predatory pricing. This is due to the chain reaction that can be caused by (indirect) network effects that are at play on platforms.

For example, if Expedia, assuming it has a dominant position, were to charge predatory commission fees from hotels it can be assumed that the (most) price sensitive hotels will switch to it from other platforms, which in turn will likely attract more consumers due to the indirect network effects between these two platform customer groups. The attraction of new consumers to Expedia may then also cause less price sensitive hotels to switch, as now Expedia's offer for them is not only low commission fees but also a wider scope of potential clients. Such switching can start off as multi-homing by hotels and consumers and gradually move towards single homing on both sides. By extending the price matching limitation to all the customers that joined post abuse, the remedy would allow competitors to reverse the impact of the abusive practices and restore the state of competition to the situation prior the abuse. In this respect, such a limitation should also be complemented by a prohibition to take actions that would prevent or discourage multi-homing as switching back of platform customers may start with multi-homing rather than a genuine switch. Furthermore, even if the competitors of the dominant undertaking are not able to fully regain their customers, illegally taken by the dominant undertaking, getting such parties to multi-home would significantly reduce the market power gained by its abusive practices and reduce the possibility of market tipping. Nevertheless, it should be noted that the suggested price matching limitation should be temporary. This is because such a measure may, in theory, create in the long run a negative feedback loop on the dominant platform as more customers choose to switch back or over to competitors. If pursued for too long, such a measure could run the risk of driving the dominant undertaking out of the market, which would evidently be disproportionate.

B. Excessive pricing

The adoption of excessive prices in the case of online platforms entails a situation where one or more platform customer groups pay a price for the matchmaking functionality provided by the platform that does not correspond to economic value of such functionality. In practice this situation is most likely to occur with respect to the commercial customer groups of the

platform (commonly the subsidizing customer group) that are often subject to some type of fee rules.[153] Nevertheless, in special circumstances where single homing is enforced by the dominant undertaking and/ or where the pricing structure of the platform and its commercial customer group is not transparent, such supra competitive prices can be transferred in full or in part to consumers as well.[154] The test for establishing such an abuse, introduced in *United Brands*, requires that (i) the price charged by the dominant undertaking (significantly) exceeds the costs relating to the production of the product sold by it or the provision of the services offered by it; and (ii) that such price is either unfair in itself or in comparison to the prices of competitors.[155] Consequently, in practice, remedying such practice would commonly entail requiring the dominant undertaking to reduce (some of) the excess of its prices, as this would prevent future pricing practices from fulfilling both steps of the test. Such a requirement can then target the specific level of the fees charged and/or the calculation method used by the dominant undertaking that resulted in excessive fees with respect to certain customers.[156] Unlike in the case of predatory pricing where removing the abusive element essentially requires that the dominant undertaking does not engage in loss-making pricing, indicating what a non-excessive price would be is far more complex.

Coming up with such an indication would essentially require that the Commission (or NCA) comes up with a hypothetical price that would have been charged in a certain markets if such markets were competitive, which would be a herculean task. Therefore, when the level of the price charged by the dominant undertaking from its customer is at the heart of the abuse, the remedy will not likely indicate a specific indication as to how such prices should be adjusted. Instead, it would appear that the remedy in such scenarios commonly involves an instruction to abandon the unfair prices

153 E.g. pay-per-click advertisements, transaction fees, membership fees and various combinations hereof.

154 E.g. in the case of meal order platforms it is quite common that the platform commission fee is added on top of the meal price and charge in full from consumers as comparing meal prices outside such platforms is not feasible. In the case of Apple's App Store, which requires single homing with respect to both consumers and app developers, the App Store commission fee is often passed on to consumers.

155 Case 27/76, *United Brands Company v. Commission* [1978] ECLI:EU:C:1978:22, paras. 251-2.

156 See e.g. Case C-372/19, *Belgische Vereniging van Auteurs, Componisten en Uitgevers CVBA (SABAM) v Weareone.World BVBA and Wecandance NV* [2020] ECLI:EU:C:2020:959 where the Court indicated that prices can be considered as unfair when the methodology for their calculation bares no account to the economic value provided to the respective customers of the dominant undertaking. See also *DSD* (Case COMP D3/34493-DSD) Commission decision of 20 Apr. 2001, art. 3 where DSD was prevented from charging fess for services not fully provided.

identified in the course of investigation together with a reporting obligation for the dominant undertaking to communicate its price adjustment for a specific period of time after the final decision on abuse.[157]

In the context of online platforms, similar approaches to excessive pricing remedies would be suitable and in fact quite important to follow given the central role played by the platform price structure and level for the viable existence of the platform.[158] As previously mentioned, the price scheme of online platforms is principal to their ability to attract multiple separate customer groups to the platform and solve the chicken-and-egg problem also platform face at their launch as well as keeping such customers on board at later stages of the platforms' lifetime.[159] Accordingly, the platform price level and price structure determine to a great extent the volume of members of each of its customer groups. Therefore, any interventions that directly concern requirements to adjust these elements will very likely have an impact on the level of participation on the platform. Consequently, imposing a specific price level or price structure on the dominant undertaking will likely have a much more significant impact on its commercial viability in the context of platforms than in non-platform settings. In turn, this entails that the consequences of enforcement errors are greater and thus the role of the competition authority as price regulator should be even more limited.

In situations where the excessive pricing concerns relate to a pricing structure or calculation method that yields undesired results with respect to one or more platform customer groups, which are chosen as the subsidizing customer group(s), the remedy should be limited to a requirement to adjust such structure or method. The manner in which such adjustments are to be made should be left to the concerned platform, as it is best placed to choose the least detrimental change for its commercial viability. Of course, such adjustments must take into account the considerations of the Commission (or NCA), which led to the conclusion that the platform prices are excessive. For example, in the case of the Apple App Store approx. 16% of app developers cover the costs of the App Store for both consumers and

157 See e.g. *Chiquita* (Case IV/26699) Commission decision of 17 Dec. 1975, art. 1-3; In the UK a similar approach was taken in Case CE/9742-13 Phenytoin, 7 Dec. 2016, Annex B.

158 Price level refers to the total remuneration charged by the platform and price structure refers to the division of remuneration across the platforms' customer groups.

159 Andrei Hagiu, 'Multi-sided platforms: From microfoundations to design and expansion strategies' (2007) Harvard Business School Strategy Unit Working Paper (09-115) <https://ssrn.com/abstract=955584> accessed 22 Feb. 2021; Andrei, 'Pricing and Commitment by Two-Sided Platforms' (2006) 37(3) The RAND Journal of Economics 720; Thomas Eisenmann, Geoffrey Parker and Marshall van Alstyn, 'Strategies for two-sided platforms' (2006) 84(10) Harvard Business Law Review, at 3-6.

other (non-paying) app developers.[160] While it can be expected that such parties are willing to carry the financial burden of serving the App Store service to consumers, it may not be so with respect to other developers. If the Commission were to find this pricing structure of the App Store abusive because it leads to excessive prices for the paying developers, the remedy should not go further than requiring an adjustment to the structure in a manner that better corresponds with the economic value provided by the App Store to all the customer groups using it. Such a requirement would then be coupled with a monitoring mechanism that would require Apple to communicate its structure adjustments periodically. During such periodical reporting moments it would be up to the Commission to make sure that the adjusted pricing structure corresponds with the economic value provided by the platform to its customer groups. This in turn also requires that the Commission looks at whether such adjusted structure and the level of fees charged from each customer group takes better account of the network effects at play on the platform and the homing patterns of the platforms' customers groups which would commonly affect the platform pricing scheme.[161]

While the platform would commonly take into account these factors due to the role of price schemes in the context of platforms, the outcome in practice can nevertheless be less desirable when the market conditions in a case support supra competitive prices. This could occur in scenarios where homing patterns display a bottleneck setting or multisided single homing with (significant) barriers to multi-homing. In such situations the dominant platform would have significant degree of market power over one or more of its customer groups allowing it to achieve relatively higher prices than in situations of multisided multi-homing.[162] Consequently, in certain market conditions prices may remain supra competitive even when adjustments to the price structures are made. For example, in the case of Apple App Store if the fee charged from paying app developers would be redistributed differently across all app developers the total level of such prices would still remain relatively higher than in a situation where both consumers and app developers could use third party app stores (i.e. multi-home); something which is not possible at the moment as Apple (technically and contractually) prevents it.

160 This is according to Apple's own data, see < https://www.apple.com/ie/ios/app-store/principles-practices/> accessed 2 Feb. 2021.

161 These settings are considered to have a significant impact on the pricing scheme of the platform see e.g. Feriha Zinngal and Frauke Becker (2013) *supra* (n 88); Evans and Schemalensee (2014) *supra* (n 77).

162 Ibid.

Accordingly, in cases where adjustments are required, these should also be coupled with a prohibition to take actions that will drive the platform customers into homing patterns that are characterized by (relatively) higher prices. Where such patterns existed at the time of the abuse, the remedy should require that the dominant platform also cease to take actions that encourage and solidify such patterns. This would occur, for example, if Apple would give a poorer ranking to apps that are also available in other app stores.[163] While such an obligation would attempt to bring the market to a different setting than the one prior to the abuse, which may be considered as going too far, it may be nonetheless required in order to prevent repetition. In the absence of changing homing patterns the (structural) market problem in such cases will continue to enable the concerned platform to extract supra competitive prices from its customers. Furthermore, where the supra competitive prices are used to increase participation on the platform through more significant cross-subsidization such an abuse may help fuel the positive feedback loop on the platform and lead in the long run to market tipping with respect to one or more of the platform customer groups. For example, if Uber Eats, assuming it has a dominant position, would start charging excessive transaction fees from restaurants in order to finance more generous promotions for consumers this is likely to attract more consumers which in turn will attract more restaurants, despite the higher fees of Uber Eats, and so on. Nevertheless the higher fees of Uber Eats in such a case may, in the long run, also prevent restaurants from multi-homing that inevitably will involve extra costs, possibly resulting in single homing and market tipping on both sides of the platform. Accordingly, in such situations solely requiring the dominant platform to reduce its fees may not be sufficient to eliminate the competitive harm created by such practices if multisided multi-homing is undermined by the concerned platform following its pricing adjustments.

In extreme cases, for example where consumer biases are formed,[164] the homing patterns achieved by the dominant platform may persist even after its price adjustments, indicating that the market has tipped or is in the process of tipping in its favor. These situations could require turning to the remaining last resort option of imposing a structural remedy. In such

163 A similar strategy was adopted by Expedia in Australia with respect to hotels that wanted to have a listing on multiple hotel reservation platforms. See Natalia Drozdiak, ' Hotel site accuses Booking, Expedia of EU Antitrust breaches' (Bloomberg, 11 Jun. 2019) < https://www.bloomberg.com/news/articles/2019-06-11/hotel-site-accuses-booking-expedia-of-breaking-eu-antitrust-law> accessed 10 Jan. 2021.

164 E.g. in the case of Uber Eats this could occur when consumers keep using the platform since they got used to, even when they no longer receive very generous offers as they did in the past when the excessive fees charged from restaurants financed such offers. This in turn will also keep restaurants on Uber Eats, particularly once fees are lowered post the finding of abuse.

cases the structural remedy would need essentially to strip away the illegitimate competitive advantages gained by dominant undertaking, which in practice may translate to vertical or horizontal divestures depending on the business model(s) of the concerned undertaking. For example, in the case of platforms that operate on a stand-alone basis such as Amazon marketplace, Uber, Uber Eats, Booking.com and others, a horizontal divesture into several (competing) entities separated across several national markets would dilute the competitive advantage gained by the abusive actions and prevent repetition in the future. In the case of app stores, which form part of a vertical construction typically owned by a single undertaking, a vertical divesture where the app store is sold to a third party would remove the competitive advantage gained by dominant undertaking and eliminate its ability and incentive to repeat such actions in the future.

Admittedly, however, such measures would go very far and should be reserved for scenarios where clear evidence of market tipping is available. Moreover, such outcome should not be susceptible for challenges by the behavioral remedies described above due to the indirect network effects at play and the potential consumers bias created through the abusive practices of the platform. Furthermore, such evidence should be complemented by evidence that the market conditions make it (highly) unlikely that the prices imposed by the dominant platform could self-correct.[165] Accordingly, the respective market should display high and lasting barriers to entry, significant market power and absence of sector regulations.[166] Finally, if such far-reaching measures are considered in the process of investigations, it is best that these are implemented following the strategy of mixing interim measures and flexible remedies following a final decision as previously described in the context of tying. This is not only so as to avoid imposing disproportionate remedy as such, but also in order to prevent the undesirable effect that (over-) enforcement may have on investments in innova-

165 Although excessive prices are commonly believed to self-correct, it has be argued that such an outcome may not alywas take place. See e.g. Ariel Ezrachi and David Gilo, Are Excessive Pricing Really Self-Correcting?' (2009) 5(2) Journal of Competition law and Economics 249.

166 These criteria has been considered to be the necessary filter for intervention in excessive pricing scenarios, which are meant to prevent over-enforcement and the undesirable effects thereof. See e.g. David S. Evans and A. Jorge Padilla, 'Excessive Prices: Using economics to Define Administrable Legal Rules' (2005) 1(1) Journal of Competition Law and Economics, 97; L.H Roller, 'Exploitative Abuses' in Claus-Dieter Ehkermann and Isabela Atanasiu (eds), *European Competition Law Annual 2007: A reformed approach to Article 82 EC* (Oxford, Hart Publishing, 2008), 525; E. Paulis, 'Article 82 and Exploitative Conduct' in Claus-Dieter Ehkermann and Isabela Atanasiu (eds), *European Competition Law Annual 2007: A reformed approach to Article 82 EC* (Oxford, Hart Publishing, 2008), 515; M. Motta and A. de Streel, 'Excessive Pricing in Competition Law: Never Say Never?' in Swedish Competition Authority (ed.), *The Pros and Cons of High Prices* (Stockholm, Konkurrensverkt, 2007).

tion.[167] In the absence of prospect high (and even excessive) returns the incentives of undertaking to invest in innovation will be diminished.[168] While this concern is not always convincing or a legitimate reason to avoid intervention in the pricing practices of dominant undertakings in the case of traditional markets,[169] its validity in digital markets should not be dismissed with too much ease. After all digital markets are characterized by high risks, intense innovation and high (expected) returns.[170] Intervening in the price settings of such undertakings will undoubtedly reduce the attractiveness of entering and competing in such markets, and even more so if such intervention would go as far as to sever the business structure of the concerned undertaking once it reaches its peek commercial success.

C. Discriminatory pricing

Discriminatory pricing practices commonly entail situations where an undertaking is offering identical goods or services to different customers for dissimilar prices for reasons unrelated to costs.[171] Generally, such practices can manifest in three forms: competitor discrimination, customer discrimination and consumer discrimination. The first two forms of discriminations are covered by competition law policy and concern situations where the pricing practices of the dominant undertaking either distorts competition between its customers in a market where it is not active or distorts competition in a vertically related market where it is active (via subsidiary).[172] The legal test for establishing such an abuse as covered by art. 102 (c) prohibits the dominant undertaking from applying (i) dissimilar conditions to (ii) equivalent transactions and thereby putting some of its trading parties at (iii) competitive disadvantage.[173] In the case of platforms discriminatory price settings will occur where the pricing structure and/or fee calculation method of the platform manifests in different prices applied the various customer groups of the platform whose members may compete with each

167 Ibid.

168 Ibid; In the US the prospect of monopoly prices was even considered to be a driver of competition rather than a manifestation of its failieure. See Verizon Communication Inc v Law Offices of Curtis V Trinko, LLP 540 US, 398, 407 (2004); Pasific Bell Telephone Co v LinkLine Communication, Inc 555 US__ (2009).

169 See e.g. Ariel Ezrachi and David Gilo, 'Excessive Pricing, Entry, and Investment: Lessons from the Mittal Litigation' (2010) 76(3) Antitrust Law Journal 873, 894-896.

170 See e.g. Ebru Gökçe, ' Restoring competition in 'winner-take-all' digital platform markets' (2019) UNCTAD Research Paper No. 40 < https://unctad.org/system/files/official-document/ser-rp-2019d12_en.pdf> accessed 5 Feb. 2021.

171 See e.g. OECD Roundtable on Price Discrimination – Background note from the Secretariat DAF/COMP(2016)15, at 6-7 < https://one.oecd.org/document/DAF/COMP(2016)15/en/pdf> accessed 10 Dec 2020.

172 Robert O'Donghue and Jorge Padilla (2014) *supra* (n 141) at 524-529.

173 Case C-525/16 *MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* ECLI:EU:C:2018:270, para. 24-25.

other. For example, such a situation could arise if the commission charged from owners listing their property on platforms like Booking.com differs based on the type of property listed (e.g. hotel, hostel or private villa). When such property owners are in practice competitors, the differences in fees charged by Booking.com may put some at a competitive disadvantage. Such a situation would entail a form of customer discrimination, as Booking.com is not active of the same market as the property owners that list their offers on the platform.

Competitor discrimination could occur, for example, in the cases of the Apple App Store, when apple charges significant commission fees from app developers that offer apps on the App Store which compete with those of Apple or its subsidiaries, which are not subject to such commission fees. In some cases concerning platforms, both types of discrimination can occur simultaneously. In the example of Apple, this would occur if Apple's App Store price structure, which is based on business model type, also results in charging different prices from competing apps offered in the App Store.

In the context of EU competition policy, cases concerning discrimination were commonly resolved by requiring the removal of the discriminatory trading condition of the dominant undertaking.[174] In the case of pricing, such a requirement would lead the dominant undertaking to offer the disadvantaged parties similar prices (and terms) to those offered to the previously favored parties. Such adjustments do not necessarily require a lowering of the prices for the harmed parties as art. 102 (c) is not concerned with the level of prices but rather with the effects of price discrepancy.[175] Furthermore, the adjustment to the prices of the dominant undertaking, when considering the test for this abuse, would also not appear to require the dominant undertaking to offer identical prices to all its trading parties.[176] The decisive aspect concerning the discrepancy in prices is whether such discrepancy is capable of creating a competitive disadvantage.[177] Since not every difference in price may translate into a competitive disadvantage,[178] it would also not be required for the dominant undertaking to apply identical prices to its trading parties once an abuse is established. The remedy in such cases should focus primarily on ensuring that the competitive disadvantage can no longer be caused by the concerned undertaking's pricing. In this

174 Robert O'Donghue and Jorge Padilla, *The law and Economics of Article 102 TFEU* (3rd Edition, Hart Publishing, 2020) at 1184-5.

175 Case C-525/16 *MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* [2018] ECLI:EU:C:2018:270, para. 24-25.

176 David Bailey and Laura Elizabeth John (2018) *supra* (n 136) at 917.

177 Jonathan Faull & Ali Nikpay (eds) *The EU Law of Competition* (3d ed., OUP 2014) pp. 536.

178 See Case C-525/16 *MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* [2018] ECLI:EU:C:2018:270, para. 26.

regard a remedy requiring identical prices *per se* would go beyond what is needed to bring practices of the concerned undertaking in line with EU competition law policy,[179] making such a requirement disproportionate.

When dealing with discriminatory pricing by online platforms a cautionary approach to price adjustments should be taken due to the previously mentioned role played by platform pricing. Accordingly, instructions as to how price levels and/ or structures should be adjusted are best kept at a general level where the concerned platform is required to adjust its price levels and/or structures to settings which do not create a competitive disadvantage to some of its trading parties (i.e. commercial customers). In order to do so, a remedy should also require a detailed explanation by the dominant platform on its pricing mechanisms and a simulation of such mechanisms for its various customer groups. When reviewing such information, the competition authority should firstly check whether the pricing mechanism of the platform works along the lines of competition with respect the platform customer groups. This entails assessing if the price mechanism of the platform is based on criteria that effectively divide the (commercial) customers of the platforms into non-competing groups of customers. This occurs, to some extent, in the case of the Amazon Marketplace, where the commission fee charged by Amazon, per transaction, from sellers depends on the type of products they sell.[180]

Consequently, sellers that offer similar goods will be subject to similar fees while sellers that offer different categories of products will be subject to different fees. To the extent that there is no competition between the product categories defined by Amazon, the price differences experienced by sellers should not impact competition between sellers on the platform. When the platform adjusts its price mechanisms in a manner that effectively works along the lines of competition, meaning the mechanism criteria prevent a situation where competing customers are subject to different fee rules, any price discrepancies between the platform customers will no longer fall under art. 102 (c) TFEU. A remedy that leads to such an adjustment would effectively bring the infringement to an end, prevent its repetition and re-establish a healthy sate of competition between the trading parties on the platform.[181] This outcome could also hold when the abuse also concerned

179 Such a requirement would imply that the wording of art. 102(c) with regard to competitive disadvantage can be disregarded, as it would equate discrimination with the presence of competitive disadvantage contrary to what the current formulation and interpretation by the CJEU would indicate.

180 For Amazon's pricing scheme see <https://sell.amazon.com/pricing.html> accessed 12 Feb. 2021.

181 Prevention in this regard is limited to situations where the adjustment is done in a future proof manner that takes into account the evolution of the business models of the platforms' commercial customers.

an element of competitor discrimination as long as the concerned platform does indeed apply (at least to a certain extent) the fee rules also to its own entity active in the vertically related market of one of the platform customer groups. Of course like in the case of most pricing abuses, a monitoring element that obliges the concerned platform to provide the competition authorities with periodical updates concerning its pricing rules should be included in the remedy.[182]

Although a comparable adjustment to the pricing rules of the platform would be desirable, imposing such a specific adjustment at the remedy stage may not be possible as it essentially requires that the concerned platform charges identical fees from its competing trading parties (i.e. commercial customers), which in turn goes beyond what is required by art. 102 (c) TFEU.[183] Accordingly, in practice, the concerned platform will have a choice between making such comprehensive adjustments and more pin pointed adjustments that address solely the specific factors of its fee rules that lead to a detrimental price discrepancy between its competing commercial customers. In the latter cases, it is imperative that the monitoring mechanism of the remedy enables the competition authority to accurately examine all the factors impacting the platform fees and evaluate the impact of the changes made to these factors by the platform. This is particularly important in cases where the adjustment concerns multiple factors, which may not entirely overlap with the factors examined by the competition in the phase of establishing that abuse.[184] Such examination would require simulations of the new fee factors with respect to all platform customers,[185] as well as detailed reporting of their effect in practice with respect to the commercial customers of the platform previously harmed by the abusive platform pricing. Such monitoring mechanisms should run for a period of time that reasonably correlates with the nature of competition between the commercial customers of the platform. For example, if competition between the commercial customers of the platform concerns yearlong contracts,[186] the monitoring obligations should run for several years in order to be enable the Commission to assess whether the changes made by the platform were sufficient.

---

182 See *supra* (n 148).

183 On this see Case C-525/16 *MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* ECLI:EU:C:2018:270, para. 23-28. Nevertheless, achieving such an outcome in could be possible if the Commission (or NCA) would indicate that such a solution would constitute the preferred option for such cases, which in turn may stir platform towards implementing such adjustments.

184 This can occur for example when the concerned platform introduces a new factor to its fee rules that previously did not exist.

185 In order to avoid having such changes distort competition among other commercial customer than the ones identified at the stage of abuse.

186 E.g. this can occur on a platform where mobile phone operators can offer consumers to sign-up to their call and data plans which commonly concern one or two year contracts.

In cases concerning customer discrimination, where the dominant platform is not active on the market where its prices distort competition, there will not likely be a need to go beyond the mentioned behavioral remedies. In such cases the incentive and interest of the dominant undertaking to continue with its abusive pricing practice and/or to repeat such practices in the future are limited.[187] This is particularly so in the case of platforms, which commonly seek to increase the number of customers they aim to get on board as this in turn increases the chances that more profitable matchmaking interactions take place on the platform.[188] Distorting competition between customers in such circumstances would therefore risk undermining the ability of the platform to get and keep the desired kind of commercial customers on board.

In situations where competitor discrimination takes place, however, the situation may be different as the interest of the platform to get and keep certain customers on board may conflict with its own interests in a vertically related market. Under such circumstances, the dominant platform may continue to have the ability and incentive to pursue its abusive pricing practices even after having a behavioral remedy imposed on it. This is turn will allow the dominant undertaking to leverage its power from the market of the platform to the vertically related market where it competes with some of the platform's commercial customers. Consequently, in comparable cases structural remedies may be required in addition to a requirement to adjust the price settings of the platform. Structural remedies in such context do not necessarily need to entail full-fledged vertical divestures. A corporate separation between the platform and the division that competes with the platforms' commercial customers in a vertically related market may suffice. Such a separation will create more transparency in the accountancy of the platform and allow the competition authority to monitor compliance with the requirement imposed on it to bring its pricing in line with art. 102(c) TFEU. A comparable combination of behavioral and structural elements would likely effectively bring the abuse to an end, (help) prevent its repetition and reestablish a state of competition on the platform as existed prior to the abuse. To some extent one may even argue that such a combination will be the most effective remedy, and thus likely to be considered proportionate given that behavioral measures alone are not likely to achieve the same result when the platform and its vertically related entity are fully integrated.

187 Robert O'Donghue and Jorge Padilla (2020) supra (n 174) at 953-958; Both the AG and the CJEU seemed to have doubts with regard to such anti-competitive incentive in the case of MEO because of the commercially unsound consequences of such practices. See Case C-525/16 *MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* [2018] ECLI:EU:C:2018:270 , para. 35 and Case C-525/*16 MEO — Serviços de Comunicações e Multimédia SA v. Autoridade da Concorrência* [2018] ECLI:EU:C:2017:1020 Opinion of AG Wahl, para. 80.

188 E.g. more clicks on ads, more sales of goods or content, more service memberships, more reservations, etc.

In cases where a corporate separation already exists between the platform and its vertically related entity a full-fledged vertical divesture may constitute the next stage. However, such a radical remedy should be reserved to situations where the previously mentioned solutions are undermined by the concerned platform and/or repetition of abusive competitor discrimination is established.

When it comes to the manner in which the above mentioned remedies are best applied, using interim measures before reaching the final decision of abuse would help reaching the most effective, proportionate, remedy as previously discussed with respect to other abuses. This is particularly important in cases where structural remedies are considered as these will be hard to defend as a first choice remedy given that the suggested behavioral remedies may also suffice. Admittedly, however, meeting the threshold of *irreparable harm to competition* as required by art. 8 of regulation 1/2003 would be quite challenging in situations concerning price discrimination on a specific platform as it would imply that competition on the affected market occurs only or primarily on the concerned platform. Accordingly, when it comes to structural remedies, it may entail that such measures will likely only be possible as part of the more advanced stages of a flexible remedy. Otherwise, in the context of current practice, structural remedies could be expected to be implemented as a first choice pick only in cases where repeated abuses have been established. In other scenarios it could always be argued that behavioral remedies are capable of achieving the same or similar results, thus making structural remedies often disproportionate as a first choice.

6.4 Remedy design and the Digital Markets Act

On the 15th of December 2020, the Commission published its long awaited proposal for a regulatory framework for the digital sector, referred to as the Digital Markets Act (DMA).[189] According to the Commission the aim of the DMA is to complement competition policy and help create fair and contestable markets in the digital sector, which at times may be undermined by the business practices of providers of platform services that posses a high degree of market power.[190] For this reason, the DMA is also designed to apply solely to actors which have control over the gateways to the digital sector. Accordingly, the application scope of the DMA is limited to providers of a *core platform service* that have reached the status of *gatekeeper*. The term *core platform service* does not cover all platforms as such, nor is it limited

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

190 Ibid, recitals 1- 10.

solely to services that meet the criteria of multisided markets as defined by economic literature.[191] Instead, the term *core platform service*, defined in art. 2 of the DMA, refers to a non-exhaustive list of commercial services that are commonly provided by multisided platforms. A provider of a *core platform service* may qualify as a gatekeeper when it (i) has a significant impact on the internal market, (ii) serves as an important gateway for both consumers and business users to reach each other, and (iii) enjoys an entrenched and durable position in its operations or it is foreseeable that it may reach such a position in the near future.[192]

These criteria require in essence reaching similar findings as those required for establishing dominance under art. 102 TFEU. However, unlike a finding of dominance, the threshold of *gatekeeper* does not require defining the relevant market, which is problematic in the case of platforms because of their multisided nature.[193] Instead, the DMA relies on predefined quantitative criteria that are assumed to capture significant degrees of market power. Accordingly, the criteria defining *gatekeepers* are presumed to be met when (i) the undertaking providing the core platform service has an EEA annual turnover of EUR 6.5 billion or a market value of at least EUR 65 billion, and provides its core service in at least three member states, (ii) has more that 45 million monthly active end users and more that 10,000 yearly active business users, and (iii) fulfills the previous two points for the past three financial years.

Once it is established that the concerned undertaking meets both jurisdictional thresholds, it will become bound to the obligations set out in art. 5 and 6 of the DMA. Both articles cover far-reaching obligations that limit the commercial (and technical) freedom of *gatekeeper* platforms significantly. A great deal of such obligations concerns the prohibition of various forms of cross-platform tying.[194] Such provisions, while far-reaching, are, however, limited to scenarios that can arise with respect to the specific commercial services covered by the DMA for the pursue of defining the meaning of the term *core platform service*. Nevertheless, such obligations can be complemented by new ones as both the list of *core platform services* and art. 5 and 6 of the DMA can be updated at a later stage.[195] By contrast, on-platform tying issues do not appear to be addressed at all. The obligations selected

191 E.g. art. 2(h) refers to cloud computing services as a core platform service, however, such services are not necessarily multisided. Cloud computing services may at time simply entail renting out computing capacity for customers that are unable to have such capacity in-house. In such situations there is the platform does not serve two of more separate customer groups, nor are there any network effects at play as is commonly required in order for a service to be considered multisided.

192 Art. 3(1) of the DMA.

193 Supra note (n. 4).

194 Cross-platform tying is covered in art. 5 (a), (e) and (f), and art. 6 (b), (c).

195 Art. 10 of the DMA.

with regard to tying, entail situations that can only take place in relations across platforms. This can be explained to some extent by the fact that the formulation of the DMA seems to imply that each platform provides a single *core platform service* with the exception of advertisement services, which may be combined with another *core platform service*.[196] Therefore, a multisided platform like LinkedIn would be considered to provide at best two services, namely advertising and online social networking services.[197] Such an approach inevitably reduces the possibility of observing on-platform tying as is limits such scenarios to situations were of a *core platform service* of an undertaking is tied with its advertisement service offered on the same platform. Consequently, it also means that such on-platform tying would occur solely with respect to the commercial customers of the platform as consumers do not acquire such services from platforms. If this indeed proves to be the approach taken in the context of the DMA this will be a difficult situation to adjust as the possibility to update the DMA concerns primarily the obligations in art. 5 and 6 which are bound by the term *core platform service*.[198]

If a platform cannot be considered to provide more than one of such services, other than advertising, then updating art. 5 and 6 can change little with respect to *on-platform* tying situations. If, however, it would be possible to read the DMA in a manner that allows to finding that a platform can provide more than one *core platform service*, on-platform tying could be included at a later stage in the context of an eventual update. In such a situation, it would be quite reasonable that obligations concerning on-platform tying were not included as the DMA indicates specifically that the obligations for gatekeepers are based on past legal and economic experience on such practices.[199] This can indeed be argued in the case of cross-platform tying as this occurred in *Microsoft* and *Google Android*. On-platform tying, however, has not been subject to previous competition law scrutiny, and thus would not fulfill this experience criterion of the DMA.

When it comes to platform pricing, a similar picture is painted. Accordingly, the current DMA proposal appears to tackle very few potential pricing problems that could arise in the context of platforms. The most prominent pricing related practice concerns the prohibition to use wide price parity clauses,[200] which has been the subject of many procedures in the EU in the context of hotel room booking platforms and the investigation of the

196 Art. 2 (2)(h) of the DMA.
197 Art. 2 (2)(c) and (h) of the DMA. This would off course be at odds with the market definition for LinkedIn that was previously explored when it was acquired by Microsoft. See *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016
198 Art. 10 of the DMA.
199 Recital 33 of the DMA.
200 Art. 5(b) of the DMA.

Commission on this matter in the case of Amazon.[201] Beyond this, the matter of pricing primarily concerns access to the data generated by and/ on the platform providing the *core platform service*.[202] Such matters can be said to relate to the Commission's past experience in previous merger cases where the respective concentrations gave raise to potential concerns with regard to the data possessed by the concerned undertakings.[203] Obligations that would simulate more 'traditional' price related abuses under art. 102 TFEU are, however, not included. Similar to situations of on-platform tying, such cases have not been part of the Commission's experience arsenal in the context of platforms and could therefore not be included without resistance at this stage. Accordingly, such aspects can be expected to be included once the respective abuse of dominance cases in the case of platforms have been covered by the Commission.

Under the circumstances described above, it can be argued that the DMA may indeed play a role when it comes to the design of remedies in the context of art. 102 TFEU procedures. However, due to the high jurisdictional thresholds and specific scope of application of the DMA this role will likely be limited in practice. Firstly, the threshold of *gatekeeper* used by the DMA entails that the DMA will only be relevant for abuse of dominance cases and/ or investigations where the dominant platform fulfills this criterion as well. In practice, this means that the DMA will be irrelevant for platforms, which do not provide a *core platform service* as defined by the DMA. Furthermore, even when the dominant platform provides such a service it would need to meet the quantitative thresholds of the DMA described above. Having a dominant market position under art. 102 TFEU does not require, however, meeting such (significant) thresholds. Dominance is established based on the *relative* market power of the concerned undertaking in relation to its direct and potential competitors.[204] Accordingly, in practice, where the markets in which the dominant platform is active are relatively narrow or evolving, it may not meet the threshold of *gatekeeper* thus falling outside

201 See e.g. Bundeskartellamt Prohibition decision 20 Dec. 2013 in the case of HRS, B9-66/10; Bundeskartellamt Prohibition decision, 22 Dec. 2015, in the case of Booking.com B.V, B9-121/13; Decision of the Competition and Markets Authority, Price comparison website: use of most favoured nation clauses Case 50505, 19 Nov. 2020; Competition Commission COMCO prohibition decision, 19 Oct. 2015, Online-booking Platforms for Hotels; *E-book MFNs and related matters (Amazon)* (Case AT.40153) Commission decision of 4 May 2017.

202 Art. 5(g) and art. 6 (g), (i) and (j) of the DMA.

203 See e.g. *Microsoft/LinkedIn* (Case COMP/M.8124) Commission decision of 6 Dec. 2016; *Facebook/ WhatsApp* (Case COMP/M.7217) Commission decision of 3 Oct. 2010; *Google/ Double Click* (Case COMP/M.4731) Commission decision of 11 Mar. 2008; *Sanofi/ Google/ DMI* (Case COMP/M.7813) Commission decision of 23 Feb. 2016; *Apple/ Shazam* (Case COMP/M.8788) Decision of 6 Sep. 2018.

204 This communicated to a great degree by the CJEU's interpretation of the term dominance, see Case 27/76, *United Brands Company v. Commission* [1978] ECLI:EU:C:1978:22, para. 65; Case C-85/76 *Hoffmann-La Roche v Commission* [1979] ECLI:EU:C:1979:36, para. 38.

the scope of the DMA. Where markets are very large, the opposite may be true, meaning that platforms that fulfill the threshold of *gatekeeper* may not be considered dominant for the purpose of art. 102 TFEU investigations. With these considerations in mind, the relationship between the DMA and art. 102 TFEU can be divided into three possible scenarios: (i) the dominant platform is also a gatekeeper, (ii) the dominant platform is not a gatekeeper (yet), and (iii) the gatekeeper platform is not dominant.

In the first scenario, the DMA will be the most relevant in terms of remedy design. In such situations the DMA will introduce specific obligations that may complement the obligations that have been imposed following an abuse of dominance or otherwise contribute to the design of remedies that need to be imposed once an investigation of abuse reaches the final stage. Accordingly, if an abuse of dominance is caused by a platform that is also a *gatekeeper*, the remedy imposed for such an abuse is found will have to take into account the obligations that already apply to it under the DMA. The competition law remedy could then complement the DMA's (general) obligations by more tailor made measures directed, for example, at the consumer bias that may have been created by the abusive practice. This may allow an overall more comprehensive package of measures, which would otherwise perhaps not be possible as a competition law remedy under art.7 of Regulation 1/2003. Where the abuse of dominance concerns a practice that was meant to be covered by the DMA, such as a specific form of cross-platform tying, the competition remedy for such an abuse may take the eventual shortcomings of the DMA into account. This in turn may increase the likelihood that structural remedies will be considered proportionate in the context of art.7 of Regulation 1/2003. If a dominant platform abused its position despite the behavioral obligations it faced under that DMA, it would be harder to argue that similar behavioral remedies in the context of competition law proceedings would be effective, consequently making a stronger case for the implementation of structural remedies.

In the second scenario where the dominant undertaking is not (yet) a *gatekeeper*, the DMA may serve as a safety net or reinforcement for the competition law remedies, in the long run. Accordingly, the behavioral or structural remedies implemented following a final decision of abuse may be reinforced or reintroduced at a later stage under the DMA.[205] Of course, such a development may not always be a positive outcome since it implies that in some situations the already dominant platform has continued to grow, following its abusive practices and corresponding remedies, to the point it

205 E.g. if behavioral remedies concerning cross-platform tying are adopted only for a given period of time these may be reintroduced by the DMA once the dominant undertaking also qualifies as a gatekeeper.

also became a *gatekeeper* under the DMA.[206] Nevertheless, if the dominant platform qualifies as a gatekeeper because the service matchmaking functionality it offers counts a (new) core platform service under art. 2 of the DMA, this transition may not necessary imply a worsening of competition in the market(s) where the concerned platform is active. Accordingly, when such a specific evolvement takes place the obligations in the DMA may complement the effectiveness to the competition law remedies to the extent these are not the same.

In the third scenario, where the *gatekeeper* platform is not dominant for the purpose of an art. 102 TFEU investigation, the DMA will not directly be relevant for remedy design, as in the absence of dominance no legal intervention is possible under this provision.[207] The prospective value of the DMA in such cases would be potentially two-fold. First, the obligations imposed on gatekeeper platforms may prevent such platforms from abusing their market power even when these become dominant as the DMA preemptively prohibits practices that could constitute abuses of dominance. Second, the effects of the DMA's obligations can be used as material for the purpose of imposing remedies on the gatekeeper platform in the event that it also becomes dominant and its business practices breach art. 102 TFEU. In this regard, if the DMA's obligations for the dominant platform, which applied due to its earlier *gatekeeper* status, did not prevent it from abusing its market dominance at a later stage, it could be argued that a more intrusive and perhaps structural remedy under art. 7 of Regulation 1/2003 may be easier to justify. In this regard, the period of application of the DMA's obligation on the *gatekeeper* platform can be seen as a test period to the effectiveness of similar (behavioral) remedies that could be imposed in the event an abuse once the *gatekeeper* platform becomes dominant. Consequently, such cases will require less experimentation with interim measures in order to find the most effective remedy at the stage of a final decision.

Finally, it should be noted that the above-mentioned implications of the DMA for remedy design, concerning abuse of dominance cases, are currently primarily relevant for cross-platform tying practices. Such implications may, nevertheless, gradually extent to other potentially abusive practices following future updates of the DMA in terms of its application scope and arsenal of obligations for gatekeeper platforms. However, such expansions would firstly require the Commission to have experience with

206 This would occur if the dominant platform did not fulfill the art. 3(2) thresholds of the DMA at the time of the abuse.

207 Only dominant undertakings have a 'special responsibility' under art. 102 TFEU. See Case 322/81 *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECLI:EU:C:1983:313, para. 57; Case T-65/98 *Van den Bergh Foods v Commission* [2003] ECLI:EU:T:2003:281, para.159; David Bailey and Laura Elizabeth John (2018) *supra* (n 132) at 896-897.

such additional abuses in the context of multisided platforms. In practice this may take a significant amount of time as such experience requires not only reaching the stage of a final decision on abuse by the Commission but also that such a decision survives the stage of judicial review by EU courts.

6.5 Conclusion and final remarks

Similar to the finding of infringements, the design of effective and proportionate remedies in the case of online platforms is a complex matter. Although the nature of the competitive concerns that can arise from the abusive behavior of dominant platforms is similar to traditional market settings, the manner in which such concerns manifest in practice is quite different. Accordingly, the competitive harm that needs to be addressed in such cases will commonly extend to more than one market due to the multisided nature of platforms. Furthermore, the indirect network effects that are commonly at play on every multisided platform may at times amplify and prolong the competitive harm caused by the abusive practices of platform undertakings. This will occur in situations where the abusive practice triggers or further fuels the positive feedback loop such network effects create between the customer groups of the platform. Amplifying this feedback loop may mean that the dominant platform could continue to grow even after abandoning its abusive practices. In the most extreme cases, such persisting growth may even lead to a change to the participation patterns of platform customers, which will confer the already dominant platform even more market power. Such circumstances, if left unaddressed, may lead to the markets in which the dominant platform is active to tip in its favor. Once that occurs, competing platform (and non-platform) undertakings will no longer be able to successfully compete with the dominant platform even when the latter does not resort to other strategies than competition on the merits. Consequently, in order for competition law remedies to be effective they need to be able to tackle the anti-competitive harm caused across multiple markets and prevent any of them from tipping in favor of the dominant platform.

The current legal framework of EU competition policy does, in theory, provide the Commission with tools it requires in order to design effective remedies in the case of platforms, despite the challenges posed by such actors. However, the manner in which this framework has evolved and has been used in practice can make the implementation of effective remedies in the case of platforms very challenging, particularly when structural remedies would be required. As abuses of dominance by platforms will often involve competitive harm across multiple related or interrelated markets, preventing such harm from persisting to the benefit of the dominant platform will at times require structural separations. The adoption of such measures is, however, limited to situations where behavioral remedies

cannot attain similar results, and of course subject to the principle of proportionality that requires that such measures be necessary and not overlay burdensome in relation to the aim pursed. This combination of requirements makes the implementation of structural remedies as a first choice solution highly unlikely, even in the case of platforms. This is confirmed by the Commission's past practice, which shows little to no traces of structural interventions in the case of abuses of dominance, in stark contradiction to its practices in the case of EU merger control. Consequently, to the extent that the competitive harm caused by platform would require a structural intervention, it is quite unlikely that such a step would indeed be taken in practice, as it is difficult to argue upfront that behavioral remedies will not be (as) effective. This is particularly so when considering that almost the entire practice of the Commission consists of behavioral measures, even when dealing with multi-sided markets in the cases of *Microsoft* and *Google Android*.

Proving that structural measures are indeed better suited to deal with a specific case would require more experimentation by the Commission with regard to interim measures. The use of interim measures could serve as a preliminary stage before the final finding of abuse during which the effectiveness of behavioral remedies could be tested. Behavioral measures that appear to deliver the desired effects could be kept or slightly modified at the stage of the final decision on abuse. However, in cases where such behavioral measures have little effect on the competitive harm caused by the dominant undertaking, such outcome could serve as evidence in favor of implementing structural remedies at the phase of the final decision on abuse. Although, this approach to remedies is theoretically possible, the current practice of the Commission and EU courts on interim measures makes such use of interim measures quite unlikely. The implementation of interim measures, requires namely evidence of a *prima facie* infringement and a risk of (potential) *irreparable harm to competition*, which are high thresholds for a Commission to meet as evidenced by the fact the it only used interim measures once in the past twenty years.

Although finding a prima facie infringement is not as difficult as establishing an abuse, meeting this threshold is only likely to be possible in the case of established theories of harm, which may not always be the case with regard to platforms. Furthermore, while it can be argued the risk of market tipping in the case of platforms entails a genuine example of irreparable harm to competition, it is unclear whether EU courts are willing to interpret this criterion in a comparable fashion. Therefore, despite the theoretical potential of the current EU policy framework to deal with platforms it would appear that the choices made by previous practice do not allow the Commission to utilize this potential to its fullest extent. In this regard opting for the option of flexible remedies, which incorporate a trial-and-error mechanism through an intensifying scale of behavioral and

structural measures triggered in accordance with market developments, may constitute a more feasible solution. Of course such an option brings along a different set of challenges concerning associated with predefining the specific conditions and market developments that would trigger the respective layers of a flexible remedy. Nevertheless, from a formal legal perspective such a solution appears to face fewer challenges associated with previous practice provided that it is pursued in a manner that also account for the legal certainty concerns such dynamic remedies may create for the concerned undertakings in each case.

Given the challenging dynamics of the current legal framework, it can be said that the arrival of the DMA would entail a welcome addition. The DMA could complement the remedies that the Commission would impose following a finding of abuse by a dominant platform and at times even prevent such platforms from implementing abusive behavior. As it would be an entirely new tool, its application in practice may be less restrained than the current competition law framework, which would allow for a more strategic use of the two frameworks in order to deal with challenging cases involving platforms. The complementary nature of the DMA will, however, be often limited in scope due to its jurisdictional thresholds, which concern the supply very specific commercial services by extremely large players, and the substantive obligations imposed by it, which are limited in their scope to a handful of competitive concerns. Nevertheless, such complementary relation between the DMA and competition practice may evolve overtime as the DMA can be periodically updated. Accordingly, the adoption of the DMA may help increase the effectiveness of competition law remedies that currently appears to be restrained by choices made in the past.