



# PLATFORM REGULATION

JANUARY 2022



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# TABLE OF CONTENTS

Letter from the Editor	What's Next?	Announcements	Summaries	The EU's Proposal for a Digital Markets Act - an <i>Ex Ante</i> Landmark by Prabhat Agarwal	The Prohibition of Price Parity Clauses and The Digital Markets Act by Martin Peitz
04	05	05	06	09	16

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24

The Birth of  
Platform Neo-  
Regulation in  
the UK

by  
**Martin  
Kretschmer &  
Philip Schlesinger**

30

Regulating  
Digital  
Platforms:  
Business  
Models,  
Technology  
Architectures,  
and  
Governance  
Rules

by  
**Panos  
Constantinides**

36

Interconnection  
Regulation For  
Digital Plat-  
forms: The New  
Challenges and  
Lessons from  
the U.S. Tele-  
communications Industry

by  
**Kun Huang,  
Ziyi Qiu  
& Zhaoning Wang**

46

Platform  
Regulation:  
Taking Stock of  
Lessons from  
the Media  
Sector

by  
**Konstantina  
Bania**

56

Competition,  
Defaults, and  
Antitrust  
Remedies in  
Digital Search

by  
**Francesco Decarolis  
& Muxin Li**

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# LETTER FROM THE EDITOR

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Dear Readers,

Platform regulation is the debate of our times. Just as the rise of the so-called “trusts” in the late 19th Century gave rise to what is now known as “antitrust law,” the rise of the so-called “platforms” is leading to a new wave of regulation.

This regulation overlaps with antitrust law in several respects, but it also introduces novel concepts. What is a “platform”? How does one define a “gatekeeper” role? Once defined, what specific rules should be imposed on “platforms” or “gatekeepers” and why? How should these rules interact with those already in place under existing anti-trust legislation?

Numerous reports commissioned over the past couple of years have identified concerns from certain stakeholders. The fruit borne by these reports takes the form of proposed legislation such as the EU Digital Markets Act, and draft legislation before the UK Parliament and the U.S. Congress.

Change is afoot, and platforms are at the locus of the debate. The pieces in this Chronicle address the proposed regulation of platforms in various jurisdictions in its current state. What are the proposed rules? What are the aims of those rules? How do those rules cohere with existing antitrust and other regulations?

These are the debates that policymakers, practitioners and stakeholders will have to address in short order. The pieces in this volume provide a vital contribution to this ongoing dialogue.

As always, many thanks to our great panel of authors.

Sincerely,  
**CPI Team**

# WHAT'S NEXT

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For February 2022, we will feature a TechREG Chronicle focused on issues related to **Cryptocurrency**.

## ANNOUNCEMENTS

### CPI TechREG CHRONICLES March & April 2022

For March 2022, we will feature a TechREG Chronicle focused on issues related to **Artificial Intelligence**. And in April we will cover **Privacy**.

Contributions to the TechREG Chronicle are about 2,500 - 4,000 words long. They should be lightly cited and not be written as long law-review articles with many in-depth footnotes. As with all CPI publications, articles for the CPI TechREG Chronicle should be written clearly and with the reader always in mind.

Interested authors should send their contributions to Sam Sadden ([ssadden@competitionpolicyinternational.com](mailto:ssadden@competitionpolicyinternational.com)) with the subject line "TechREG Chronicle," a short bio and picture(s) of the author(s).

The CPI Editorial Team will evaluate all submissions and will publish the best papers. Authors can submit papers in any topic related to competition and regulation, however, priority will be given to articles addressing the abovementioned topics. Co-authors are always welcome.

# SUMMARIES



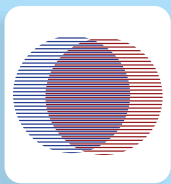
## **The EU's Proposal for a Digital Markets Act – an Ex Ante Landmark** By Prabhat Agarwal

The Digital Markets Act proposal released by the European Commission on December 15, 2020 will likely become a landmark in the regulation of digital markets. Thus far, the public debate has mainly focused on two unique particularities of the DMA: the novelty of its structure and operation on the one hand, and the complementary role that it will play regarding other regulatory tools on the other. But are there any other characteristics that render the DMA a distinctive, novel type of instrument? This article elaborates on this question and provides a deep dive into the DMA and, in particular, it explores three elements: (i) the DMA's ambitious design vis-à-vis other regulatory tools, (ii) the way in which the DMA tackles structural issues typically found in digital markets, and (iii) the DMA's ability to regulate these markets by going beyond precedents.



## **The Prohibition of Price Parity Clauses and The Digital Markets Act** By Martin Peitz

Platforms have imposed price parity clauses on sellers, which restrict how sellers can set retail prices. These clauses have been found to be anti-competitive in a number of recent abuse cases in and outside Europe. In particular, leading hotel booking platforms had to drop these clauses. The proposed Digital Markets Act prohibits the use of such price parity clauses for gatekeeper platforms that are addressees of the Act. I explore the economic rationale of such a prohibition and point to possible responses by gatekeeper platforms. This raises issues, which are of relevance more broadly for competition policy and the regulation of platforms.



## **The Birth of Platform Neo-Regulation in the UK** By Martin Kretschmer & Philip Schlesinger

Brexit – the UK's withdrawal from the European Union – has been a spur to new regulatory developments. In recent months, the British approach to dealing with big tech has become increasingly clear and the country is entering a neo-regulatory phase. This is strongly focused on regulating “online harms” and developing a pro-competition approach that engenders innovation. An Online Safety Bill is due to be imminently tabled in Parliament, following recent scrutiny of a Draft Bill by a Joint Committee of the House of Commons and the House of Lords. On the regulatory front, the need to address the wide-ranging challenges of digital dominance has provoked the creation of the Digital Regulators Cooperation Forum – a novel coalition of regulators that aims to share know-how across diverse fields as it grapples with platform regulation.



## **Regulating Digital Platforms: Business Models, Technology Architectures, and Governance Rules** By Panos Constantinides

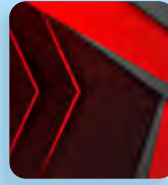
In recent years, digital platforms like Facebook, Apple iOS and the Amazon Marketplace have grown so big that they have attracted a lot of scrutiny by regulators in regards to their market power. The recent European Digital Markets Act focuses exactly on the market power of these digital platforms by defining a set of criteria for qualifying such platforms as so-called “gatekeepers.” For some analysts and commentators such gatekeeping is reminiscent of the gatekeeping exercised by more traditional utility infrastructures and that, we should, therefore apply similar policies to regulate digital platforms. In this short article, I will discuss where earlier regulation applies to, but also where it becomes highly problematic for, digital platforms. I will conclude with some recommendations going forward.



### Interconnection Regulation For Digital Platforms: The New Challenges and Lessons from the U.S. Telecommunications Industry

By Kun Huang, Ziyi Qiu & Zhaoning Wang

In this article, we bring the discussion of potential interconnection regulation for digital platforms. By reviewing the lessons from the U.S. telecommunication industry and the distinctive features of digital platforms, the article explores the new challenges of interconnection regulation for digital platforms. With varying degrees of network effects across platform types and market segments and different levels of interconnection preferred by platforms and consumers, a single threshold of regulatory intervention may not serve the purpose of improving consumer welfare and economic efficiency. Given the more innovative business nature and dynamic competition faced by digital platforms, the costs on innovation incentives and consumers' long-term well-being should be given full consideration when deciding whether and how to establish an interconnection regulation regime for digital platforms.



### Platform Regulation: Taking Stock of Lessons from the Media Sector

By Konstantina Bania

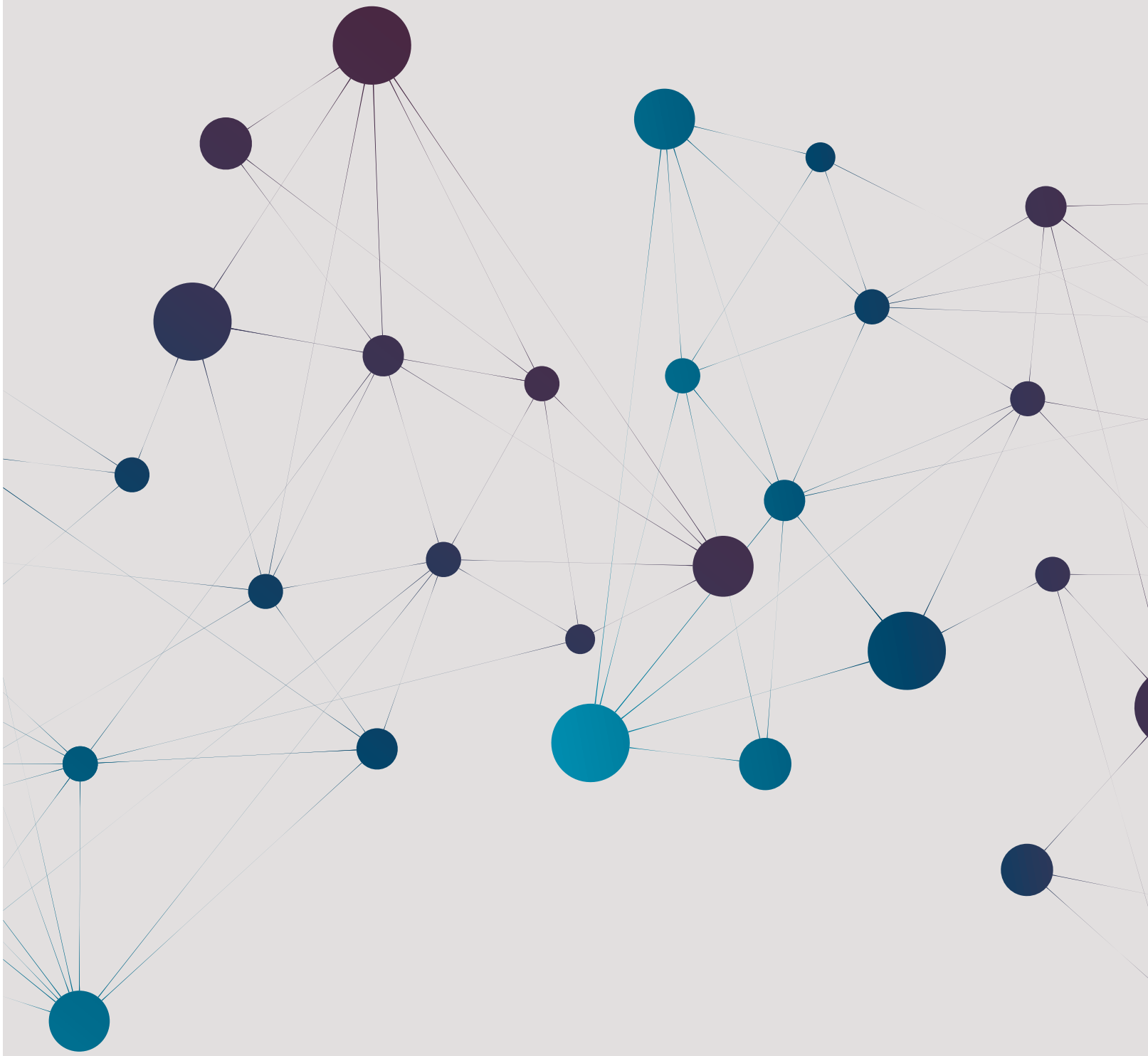
Over the past few years, online platforms have almost monopolized discussions in legal and policy circles. Various initiatives have recently culminated in legislative proposals. This contribution examines those proposals against the backdrop of rules regulating the media sector, which has characteristics similar to those of the platform economy. The paper discusses whether the proposals under consideration have taken stock of lessons learnt from the design and implementation of rules applicable to the media. It does so by focusing on the following four areas where useful analogies can be drawn between platform and media regulation: rules restricting concentration through presumptions of market power; the users' role in controlling market power; mandated access to a valuable input; and merger control rules. Though some provisions indicate that the legislator has made the effort to avoid certain drawbacks arising from the design and enforcement of media regulation (e.g. ownership thresholds), other provisions (e.g. user-centric rules) show that our experience from the media sector is not properly reflected in those proposals.



### Competition, Defaults, and Antitrust Remedies in Digital Search

By Francesco Decarolis & Muxin Li

The rapid growth in digital platforms and information technology are greatly affecting how consumers discover and purchase products, making online markets the most attractive advertising media for firms. The business model of most digital platforms where online ad is sold is that of a two-sided market, where one group has preferences regarding the number of users in the other group. This positive cross-side network effect endows dominant platforms with huge comparative advantages and this "winner takes all" tendency raises antitrust concerns. To present supplemental thoughts on how to enhance competition in digital markets, we study the recent changes involving search advertising related to the EU Commission *Google Android* case.





# THE EU'S PROPOSAL FOR A DIGITAL MARKETS ACT – AN *EX ANTE* LANDMARK



BY  
**PRABHATH AGARWAL**

Head of Unit F.2 (Digital Services and Platforms), DG CNECT, European Commission. All views expressed in this article are strictly personal and should not be seen as reflecting the opinion of the European Commission. The author would like to thank Menno Cox, Michael Koenig, Juliette Orogas, Alexandre Ruiz Feases and Denis Sparas for their valuable contributions to this article. The Digital Markets Act is a joint project between DG CNECT and DG COMP at the European Commission.

## 01 INTRODUCTION

The release on December 15, 2020 of the European Commission's proposal for a Digital Markets Act ("DMA"),<sup>1</sup> forming the "Digital Services package" together with its sister the proposal for a Digital Services Act ("DSA"), has caused a great stir in the competition and regulatory community. Containing a targeted, clearly defined, and circumscribed list of prohibitions and obligations addressed to online platforms that hold gatekeeping positions, the DMA will constitute an *ex ante* landmark. Its objective is to tackle practices that are unfair and that undermine the contestability of digital markets.

The uniqueness of the DMA stems from several of its characteristics. One of them is the inherent novelty of its structure and operation: companies subject to the DMA ("gatekeepers") must comply with a number of self-executing obligations that already embed the principle of a remedy. A clear illustration is the ban on the combination of personal data by gatekeepers across different services under Article 5(a) of the DMA. Absent end user consent, this provision prevents gatekeepers from taking unfair advantage of the great amount of personal data that they accumulated at the expense of other market players across their different services. The fact that remedies are already incorporated in specific rules will make a swift and key change to the functioning of digital markets.

At the same time, the self-executing mechanism is coupled with a designation system that recognizes the vast extent at which online

<sup>1</sup> 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.

platforms operate. This allows the Commission to identify those platforms that play a crucial role in digital markets and designate them as gatekeepers. This is done according to quantitative criteria, including the value of market capitalization and the number of active business users and end users, but can also be done according to qualitative criteria, including network effects and user lock-in. Such designation, moreover, is linked to a list of core platform services, such as online intermediation services, operating systems, social networks, or cloud computing services,<sup>2</sup> that are of systemic relevance for the functioning of digital markets.

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**“At the same time, the self-executing mechanism is coupled with a designation system that recognizes the vast extent at which online platforms operate**

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Another important feature of the DMA that has sparked the interest of the public debate is the complementary role it will play in keeping digital markets in good health together with other legal tools that are currently at the disposal of the Commission and the Member States’ national authorities. A common example is competition law, where the activity of the Commission concerning digital markets has been in media headlines for the past years.

Starting with the three cases against Google,<sup>3</sup> one of which was recently decided in favor of the Commission by the General Court,<sup>4</sup> through the opening of investigations against Apple<sup>5</sup> and Amazon,<sup>6</sup> the Commission has shown fierce determination to tackle anticompetitive behavior of online platforms that enjoy a dominant position and therefore have a special responsibility not to harm the competitive process.<sup>7</sup> With its upfront remedies, and with a focus and scope that is genuinely different from competition law,

the DMA will mark a step-change to making digital markets a fairer, more open and more contestable environment for conducting business, and for consumers to benefit from a wider choice of innovative solutions in the single market.

To better understand the unique significance of the DMA, this paper aims to dive deeper and reply to the following question: is it just its architecture, or is there something else that makes the DMA a distinctive regulatory instrument? This article goes beyond commonplace considerations and explores three distinct elements of the DMA by putting the proposal into a wider regulatory context. It builds on a number of academic papers and other research that have already discussed the DMA and its novelty and aims to add to this literature by providing the perspective of some of those involved in its design.<sup>8</sup> The remainder of the article will explore the design of the DMA *vis-à-vis* some other regulatory regimes (without trying to be exhaustive), the distinct features of digital markets and how the DMA approaches these, and how the DMA is much more than a mere codification of (antitrust) precedents.

## 02

### THE DMA’S DESIGN vs. OTHER REGULATORY REGIMES

One of the first elements to highlight about the DMA is its ambitious design: it does not merely set general fairness principles or identify “problematic” behavior for a concrete subset of online platforms that enjoy gatekeeper power, but it tackles up-front problems that typically arise in digital markets. While this system benefits from enforcement experience, it is

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2 DMA proposal, art. 2(2).

3 Case AT.39740 *Google Search (Shopping)*, Decision of June 27, 2017; Case AT.40099 *Google Android*, Decision July 18, 2018; Case AT.40411 *Google Search (AdSense)*, Decision of March 20, 2019.

4 Case T-612/17, *Google and Alphabet v. Commission (Google Shopping)*, EU:T:2021:763.

5 Case AT.40452 *Apple (Mobile payments – Apple Pay)*; Case AT. 40437 *Apple—App Store Practices (music streaming)*; and Case AT.40652 *Apple—App Store Practices (e-books/audiobooks)*.

6 Case AT.40703 *Amazon—Buy Box*.

7 In this sense, see European Commission, Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions “A Competition Policy Fit for New Challenges” (November 18, 2021) available at <https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=COM:2021:713:FIN>, page 15.

8 Without aiming to be exhaustive, such academic papers and research include for example (i) *the Proposed Digital Markets Act (DMA): A Legal and Policy Review* by Nicolas Petit (<https://doi.org/10.1093/jeclap/lpab062>), (ii) *the European Digital Markets Act: A Revolution Grounded on Traditions* by Pierre Larouche & Alexandre de Streel (<https://doi.org/10.1093/jeclap/lpab066>), (iii) *the Draft Digital Markets Act: A Legal and Institutional Analysis* by Pablo Ibáñez Colomo ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3790276](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3790276)) and (iv) *the European proposal for a Digital Markets Act: A first assessment by CERRE* (<https://cerre.eu/publications/the-european-proposal-for-a-digital-markets-act-a-first-assessment/>).

by no means static: the DMA allows for addressing practices by newly emerging gatekeepers and it sets up a mechanism via market investigations to update the DMA with new practices or new core platform services (see section IV. below).

It is for this reason that the DMA, by design, identifies eight core platform services that represent important cornerstones for the functioning of digital markets: a) online intermediation services; b) online search engines; c) online social networking services; d) video-sharing platform services; e) number-independent interpersonal communication services; f) operating systems; g) cloud computing services; and h) advertising services. By tackling the digital sector from all these sides, the DMA adopts a holistic approach and seeks to bring fairness and market contestability where this is crucial for EU business users and consumers in their daily activities. This ranges from using marketplaces to sell or buy goods, running a search on an online search engine of their choice, communicating through a social network or a messenger service, to displaying and benefiting from online ads.

Obviously, the DMA is not the first EU proposal aiming at regulating the digital world and making it fairer. Therefore, the DMA should be seen as another unique piece in a range of regulatory tools that aim to ensure well-functioning digital markets.

To illustrate this point, one should place the DMA in a wider context by looking at some preceding regulations. An important tool for digital markets is the Open Internet Regulation.<sup>9</sup> The need for this regulation dates to the public debate that arose with the exponential growth of the domestic use of the Internet since the mid-1990s, where some voices raised concerns about the gateway position of providers of Internet services. Imagine, for instance, that an Internet service provider impedes users from accessing the services offered by a content application provider (e.g. a video or music streaming app) to promote its own competing service or to favor a third content application provider.

Disabling access to a particular service, or engaging in other traffic management practices, such as access tier-

ing or throttling,<sup>10</sup> can be particularly harmful for innovation. The Open Internet Regulation, thus, came in to ensure that the connection to all the end-points of the Internet (i.e. for business users at one end and consumers at the other end) is provided by Internet service providers fairly and without discrimination.<sup>11</sup>

Another related piece of legislation that precedes the DMA is the Geo-blocking Regulation.<sup>12</sup> Enshrined in Article 20(2) of the Services Directive<sup>13</sup> which bans discriminatory treatment when accessing services, the Geo-blocking Regulation seeks to remove barriers to cross-border transactions (i.e. geo-blocking practices), which are particularly “observable” in an online environment where products and services are easily accessible and visible. Such practices, implemented by traders, have a clear impact on the internal market by hindering cross-border online transactions. A textbook case of a geo-blocking practice is a marketplace designing its online interfaces in such a way that impedes customers located in other Member States from conducting any operation; for example, by rerouting techniques or by blocking access. In sum, the Geo-blocking Regulation prohibits discriminatory treatment against customers across the EU by requiring traders to treat them equally regardless of their nationality or place of residence.

A more recent regulatory instrument is the Platform-to-Business (“P2B”) Regulation,<sup>14</sup> which counterbalances the bargaining power that online intermediation services have *vis-à-vis* business users, and particularly SMEs. Online market places, application stores, or online social media services, are platforms that have become essential actors in the relationship between businesses and consumers by facilitating transactions between these two distinct user groups.<sup>15</sup> However, evidence showed that almost half of business users had had problems with online platforms due to the practices of the latter, including changes in terms and conditions without prior notice, delisting of products or suspension of accounts without clear reasons, or lack of transparency in rankings of offers and products.<sup>16</sup>

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9 European Parliament and the Council, Regulation (EU) 2015/2120 (Open Internet Regulation) O.J. (L 310) 1.

10 Open Internet Regulation, art. 3.

11 For completeness, the Open Internet Regulation also eliminates retail roaming surcharges. See Article 7 of the regulation.

12 European Parliament and the Council, Regulation (EU) 2018/302 (Geo-blocking Regulation) O.J. (L 60) I/1.

13 European Parliament and the Council, Directive 2006/123/EC (Services Directive) O.J. (L 376) 36.

14 European Parliament and the Council, Regulation (EU) 2019/1150 (P2B Regulation) O.J. (L 186) 57.

15 It is worth emphasizing the fact that the importance of online platforms as intermediaries in online transactions has increased due to the COVID-19 pandemic. See Lucie Lechardoy, Alena Sokolyanskaya & Francisco Lupiañez-Villanueva, *Analytical Paper on the structure of the online platform economy post COVID-19 outbreak* (Study on Support to the Observatory for the Online Platform Economy, Analytical Paper no 6, January 2021).

16 For more detail, see European Commission, Staff Working Document Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council on promoting fairness and transparency for business users of online intermediation services, SWD(2018) 138 final, Part 1/2, 9-21.

To address these issues, the P2B Regulation requires providers of online intermediation services to comply with a number of obligations involving clarity and availability of terms and conditions, the communication regarding suspension or restriction of the intermediation services provided by the platform, or transparency about the ranking parameters, among others.<sup>17</sup> In addition, it is worth referring to the redress mechanism that this regulation creates with requirements for online platforms such as the handling of complaints of business users.<sup>18</sup> The P2B Regulation, thus, was conceived as a first step to establish a fair and transparent business environment around online platforms by imposing horizontal standards for all providers of online intermediation services, of which the Commission estimates there are well over 10 000 in the EU alone.

Having said that, the recent experience also showed that the existing regulatory framework at EU level does not yet comprehensively address particular issues deriving from the concentration of economic power and unfair business practices of a limited number of online platforms enjoying gatekeeper power. Coming back to the Open Internet Regulation, for example, the focus is placed more on national operators and physical Internet infrastructures, and it specifically addresses management practices by Internet service providers that affect Internet traffic.

The Geo-blocking Regulation as a sector-specific tool scales up the degree of intervention – it does not apply to areas that are already excluded from the Services Directive,<sup>19</sup> such as financial services or banking, audiovisual services, or healthcare – by looking at concrete discriminatory practices that cannot be justified.<sup>20</sup> The P2B Regulation is the most horizontal tool of the three examples used, as it captures the width of the business model of all online platforms to tackle all those unfair practices that harm the way in which business users conduct transactions through them<sup>21</sup> – that is to say, from contractual terms and conditions, to ranking and data access.

However, while the regulatory environment described above provides for a very solid regulatory baseline, it does not effectively address the specific market failures prevalent in digital markets (further described in the next section). This

regulatory context allows us to see that the DMA takes a step further than other legal tools in covering issues and services that business users and consumers encounter in digital markets when engaging specifically with the online platforms that hold gatekeeper power.

## 03

### THE DISTINCT FEATURES OF DIGITAL MARKETS

The above leads us to discuss a second element of the DMA that is closely linked to its goals and overall design: it aims to address some of the most important issues of the structure of digital markets, such as network effects and economies of scale.

In this sense, several reports and studies released in the past years<sup>22</sup> have shown that digital markets present several economic features that, albeit not novel, tend to favor the emergence of winner-takes-all ecosystems. This phenomenon, in turn, has allowed digital platforms to become gatekeepers in relation to the core platform services that they offer, leading to a lock-in of business users and end users in the short term and to a reduction of contestability of digital markets in the long term.

More concretely, these features are the following: a) strong network effects, which refer to the idea that the more people use a product or service, the more appealing it becomes for other users; b) large economies of scale and scope, so that the cost of producing more or of expanding in or to other digital markets decreases with the company's size; c) high infrastructure costs, combined with very low or even zero marginal costs, which means that the cost of servicing another consumer is very affordable for incumbents and therefore leads to large economies of scale; d) high and increasing returns to the use of data that allows online platforms to improve their products as they control a growing

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17 P2B Regulation, arts. 3 to 5.

18 On redress possibilities, see P2B Regulation, arts. 11 to 14.

19 Geo-blocking Regulation, art. 1(2) in conjunction with Services Directive, art. 2(2).

20 Geo-blocking Regulation, art. 1(1).

21 For this argument, see Menno Cox, *Activating EU Private Law in the Online Platform Economy*, in *New Directions In European Private Law 147* (Mateja Durovic and Takis Tridimas, Hart Publishing 2021).

22 *Inter alia*, Jacques Crémer, Yves'Alexandre de Montjoye & Heike Schweitzer, *Competition policy for the digital era* (Special Advisers Report to Commission Vice President Vestager, 2019), Furman et al. *Unlocking digital competition* (Report of the Digital Competition Expert Panel, March 2019); and Stigler Committee on Digital Platforms, *Stigler Center Final Report* (2019).



amount of data; and e) low distribution costs, allowing for global reach.<sup>23</sup>

It is important to highlight that the combination of these features of digital markets raises two issues in particular: The first issue is that these markets become prone to tipping. That is to say, markets will naturally lean towards a single or a very limited number of market operators, giving rise to the so-called winner-takes-all phenomenon. The second issue is that, as shown by the recent Commission's antitrust enforcement experience in digital markets, these features serve as high barriers for newcomers that seek to enter the market and to challenge the position of incumbent online platforms.<sup>24</sup> This, in turn, has led to a high level of concentration in many digital markets.

There is evidence for a trend of growing market concentration at the industry level,<sup>25</sup> which seems particularly acute in digital markets where the level of concentration of economic power is unprecedented. Suffice it to mention that the top seven of the largest online platforms account for 69 percent of the total EUR 6 trillion valuation of the platform economy because of vertical and horizontal integration.<sup>26</sup> Growing market concentration, in addition to the inherent negative impact that this causes on innovation in the long run, also implies less choice for business-users to reach end-users and *vice-versa*.<sup>27</sup>

In summary, the above features that characterize digital markets have mutually reinforcing effects, which constitutes, in the specific dynamics of the winner takes it all, significant entry barriers that weaken market contestability and further entrench the gatekeeper position of a selected number of online platforms. Such scenario necessarily allows gatekeepers to engage in unfair behavior and, in the long run, leads to societal losses in terms of prices of products and services, consumer choice and suboptimal innovation opportunities and deliverables.

Having said that, the question that follows is how the DMA addresses such structural issues of digital markets. In this sense, it is worth referring to some of the obligations that the DMA puts forward, which in particular ensure a higher degree of inter-platform competition.

The prohibition of wide parity clauses under Article 5(b) of the DMA is one of them. This legal provision refrains gatekeepers from imposing the so-called wide parity clauses on their business users. Such clauses oblige business users to provide the gatekeeper with the best price and conditions in relation to other sales or distribution channels that they may be using as well. As a result, business users may be faced with higher commission rates payable to online platforms, less choice and less innovative platform services for end-users. The aim of this prohibition, thus, is to tackle this type of unfair behavior that undermines competition between platforms significantly.

Another type of behavior by gatekeepers that has the potential of causing an appreciable effect on inter-platform competition are anti-steering clauses, which prevent business users to promote their offers outside the core platform services provided by the gatekeepers. Article 5(c) of the DMA addresses such behavior by banning anti-steering clauses, accompanied with the additional obligation that allows end users that purchase content outside the gatekeeper's platform to use such content also in the core platform service of that same gatekeeper.

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**“The Geo-blocking Regulation as a sector-specific tool scales up the degree of intervention – it does not apply to areas that are already excluded from the Services Directive**

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Furthermore, other legal provisions of the DMA, instead of imposing a particular prohibition, open up the digital ecosystems that gatekeepers have created by allowing business users and end users to do some actions that so far were not possible. For instance, Article 6(1)(c) of the DMA allows for side loading. This implies that end users will be able to install and use third party software applications by means other than the app store imposed by the gatekeeper. This legal provision does not only benefit end users that are no longer locked-in within the walls of the gatekeeper's ecosystem, but also business users because they will not depend exclusively on the gatekeeper's app store to distrib-

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23 See in particular Stigler Committee on Digital Platforms, *id.* at 7.

24 E.g. *Google Search (Shopping)*, *supra* note 4, para 272.

25 See, generally, Matej Bajgar et al, industry concentration in Europe and North America (OECD Productivity Working Paper, No. 18, 2019); Gustavo Grullon, Yelena Larkin & Rony Michaely, *Are US Industries Becoming More Concentrated?*, 23(4) REVIEW OF FINANCE 697 (2019); Jason Furman, *Market Concentration* (OECD Hearing on Market Concentration, June 2018); Germán Gutiérrez & Thomas Philippon, *Declining Competition and investment in the U.S.* (NBER Working Paper Series, July 2017); Germán Gutiérrez & Thomas Philippon, *How European markets became free: A study of institutional drift* (NBER Working Paper Series, June 2018).

26 Rob Fijneman, Karina Kuperus & Jochem Pasman, *Unlocking the value of the platform economy* (KMPG report for the Dutch Transformation Forum, 2018).

27 See European Commission, Staff Working Document Impact Assessment Report accompanying the DMA proposal, SWD(2020) 363 final, paras 58 and 59.

ute their products. Another example can be seen in Article 6(1)(h) that requires gatekeepers to facilitate end users to exercise their data portability rights. This, again, promotes switching between online platforms and boosts inter-platform competition.

# 04

## GOING BEYOND PRECEDENTS

The final element that this article explores are the obligations of the DMA in relation to existing case law. In its Articles 5 and 6, the DMA proposal lists eighteen<sup>28</sup> very precise obligations that range from data combination to self-preferencing, to interoperability and data portability. Certainly, several of these provisions may be reminiscent of past or ongoing antitrust cases at EU or at national level. Perhaps the clearest illustrations of this are the ban of self-preferencing practices by gatekeepers laid down in Article 6(1)(d) of the DMA, or the prohibition of (wide) parity clauses in Article 5(b). However, the DMA is in fact much more than a mere codification of precedents.<sup>29</sup>

First, the DMA also covers practices that have not been yet the subject of antitrust investigations in the EU or any of its Member States. See, for example, the obligation that the DMA imposes on online search engines, which grants competitors access to ranking, query, click and view data on fair, reasonable and non-discriminatory terms (Article 6(1)(j)). Alternatively, consider the transparency obligations in the advertising sector under Articles 5(g) and 6(1)(g), which require gatekeepers to provide advertisers and publishers with price transparency and with access to the performance measuring tools used by gatekeepers.

These obligations are the result of a reflection process that has been going on since the preparatory work on the P2B Regulation, further corroborated by a plethora of third party reports, including specific studies prepared in the context of the Commission's Impact Assessment as well as the find-

ings of the EU Observatory on the Online Platform Economy.<sup>30</sup> Moreover, it is worth noting that, in the context of the Commission's Open Public Consultation, the tech community itself has provided the Commission with real-life examples of unfair practices happening every day – reflecting the lack of contestability that exists in digital markets today.

Second, the obligations and prohibitions laid down in the DMA that were indeed inspired by antitrust precedents are much broader than any case law could ever be. This is so because the practices listed in the DMA have been considered as *per se* harmful. This, in turn, justifies their automatic application to online platforms across the specific business models identified once these have been designated as gatekeepers. The obligations are self-executing which means that there will be no case-by-case analysis of actual effects of the prohibited (or mandated) behavior.

An important practical implication of this automaticity is that gatekeepers will not be heard on any efficiency defense or on claims that their particular case is different. Every gatekeeper will have to implement the necessary remedies to comply within the relevant obligations within six months following its designation. This is the essential difference between the DMA as an *ex ante* regulatory tool on the one hand and the *ex post* application of antitrust law on the other. Hence, although some obligations find their inspiration in antitrust precedents, many concepts used in antitrust analysis, such as relevant markets or dominance, will not apply in the context of the DMA.

Third, it should be mentioned that the DMA is forward-looking and future-proof in that obligations can be updated if harmful conduct evolves. Such updates will be possible via delegated acts.<sup>31</sup> To ensure a solid evidentiary basis, a thorough market investigation will be required before any such update.<sup>32</sup> It is not required that the new type of behavior has previously been dealt with in any way by competition agencies, so a preceding antitrust decision would by no means be required before adjusting the list of practices. The future-proofing mechanism is an important feature of the DMA; without it, the DMA would simply reflect the lawmakers' knowledge at the time of adoption. A static instrument, however, would not be appropriate given the highly dynamic and fast-evolving nature of digital markets.

28 For completeness, the DMA proposal also includes the obligation to inform about concentrations (art. 12) and the obligation to submit an audited description of any techniques for profiling consumers (art. 13).

29 For a similar argument, see Filomena Chirico, *Digital Markets Act: A Regulatory Perspective*, 12(7) *Journal Of European Competition Law & Practice* 493 (2021).

30 The EU Observatory on the Online Platform Economy is a group of Commission officials and prominent independent experts that monitors the online platform economy. The studies of the Observatory are available here: <https://platformobservatory.eu/>.

31 DMA proposal, art. 10.

32 DMA proposal, art. 17. Note that apart from new harmful practices, a market investigation can also reveal the emergence of new gatekeepers or new core platform services (with the latter requiring a revision of the Regulation through the ordinary legislative procedure instead of through delegated act).

# 05

## CONCLUSION

The adoption of the Digital Services package at the end of 2020 has marked two landmark deliverables of the European strategy on shaping Europe's digital future, the DMA and the DSA. Focusing on the DMA, this article looked at a number of elements with a view of establishing whether this regulation, as one of the two building blocks of this legislative package, can be considered a distinctive regulation in comparison to the existing regulatory framework in place and if so, on which grounds.

A short answer to this question is yes: the DMA represents a landmark, unique, and distinct regulation compared to other regulatory tools. This article shows that there are at least three distinct reasons to reach such a conclusion.

First, while the existing regulatory framework effectively deals with several issues in the platform economy environment, the DMA takes a step further than other legal tools in covering issues and services that business users and consumers encounter in digital markets when engaging specifically with the online platforms that hold gatekeeper power. It does so by going beyond general fairness principles or identified problematic behavior by a subset of online platforms that enjoy gatekeeper power and tackles up-front negative impact(s) that could arise from specific behavior by such market operators, in particular when combined with unique features of digital markets.

Second, the DMA does not only aim to address identified forms of “problematic” behavior, but also some of the most important structural issues prevalent in digital markets. In particular, the DMA tackles some of the inherent barriers to entry in the digital markets, which due to confluence of several (already known) economic features tend to favor the emergence of winner-takes-all ecosystems and thereby result in highly concentrated digital markets. This phenomenon, in turn, has allowed digital platforms to become gatekeepers in relation to the core platform services that they offer, leading to a lock-in of business users and end-users in the short term and to a reduction of contestability of digital markets in the long term.

Last, but not least, when looking at the configuration of the obligations under the DMA, it has been noted in the public debate that the DMA is nothing more than a codification of existing precedents, coming in particular from competition law enforcement. Yet, as shown in this article, while some of the provisions may be reminiscent of past or ongoing anti-trust cases at the EU or national level, there are a number of obligations where such precedents do not exist. In addition, due to their egregious nature and negative impact on digital markets, several practices by online platforms with gate-

keeper power point to *per se* negative effects on fairness, openness, and the contestability of digital markets. Finally, the DMA provides for several tools, such as market investigations into new practices or possible new core platform services that ensure that the DMA is a forward-looking, dynamic, and future proof *ex ante* regulatory tool.

To conclude, the DMA represents a novel and bold attempt to ensure fair, open, and contestable digital markets in the Union. The Commission is confident and determined to effectively implement and enforce the DMA to ensure that it achieves its objectives, whilst also carefully monitoring its effects on digital markets in order to adjust where this turns out necessary. ■

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**“An important practical implication of this automaticity is that gatekeepers will not be heard on any efficiency defense or on claims that their particular case is different. Every gatekeeper will have to implement the necessary remedies to comply within the relevant obligations within six months following its designation**

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# THE PROHIBITION OF PRICE PARITY CLAUSES AND THE DIGITAL MARKETS ACT



BY  
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University of Mannheim and MaCCI. Martin Peitz is grateful for helpful comments by Jens-Uwe Franck and Julian Wright. He acknowledges financial support from Deutsche Forschungsgemeinschaft (“DFG”) through CRC TR 224 (project B05).

## 01

### INTRODUCTION

Price parity clauses stipulate that sellers on a platform cannot set higher retail prices on this platform than in a certain set of alternative sales channels. This may include certain direct sales channels or other indirect sales channels provided by competing platforms. So-called wide price parity clauses stipulate that sellers must not offer a lower price through any other chan-

nel (including direct and indirect channels), while narrow price parity clauses stipulate that sellers must not offer a lower price in the direct sales channel but are allowed to set lower prices on other platforms. Wide-price parity clauses are widely seen as anti-competitive, while there is substantial disagreement about the likely effects of narrow-price parity clauses. Practitioners and academics often call price parity clauses most-favored-customer clauses or “MFNs” (standing for most-favored-nation clauses). This is unfortunate and possibly misleading. Most-favored-customer clauses traditionally stipulate that a seller cannot set different prices to different consumers or different prices over time. Price parity clauses do not

contain such restrictions, but impose restrictions concerning prices faced by a given consumer across different distribution channels.

Price parity clauses have been imposed by several large platforms in the past. This includes hotel booking platforms such as Booking, which has led to abuse cases in several jurisdictions in the 2010s. It also includes Amazon with its general pricing rule. Amazon addressed the sellers on its platform as follows: “you must always ensure that the item price and total price of an item you list on Amazon.com are at or below the item price and total price at which you offer and/or sell the item via any other online sales channel.” After the competition authorities initiated investigations, Amazon removed price parity clauses in Europe in 2013,<sup>1</sup> but continued to impose the clause in the U.S. In 2019, it then apparently removed the clause also in the U.S.; however, the clause was replaced by a similar “fair pricing policy.”<sup>2</sup>

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“**Price parity clauses stipulate that sellers on a platform cannot set higher retail prices on this platform than in a certain set of alternative sales channels**

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Another example is that Apple obliged publishers to set e-books prices in Apple’s iBookstore at the lowest retail price available in the market. Apple abandoned its practice.<sup>3</sup> In August 2015, Booking removed its wide price parity clauses

across all European Markets.<sup>4</sup> This led various NCAs, for example the CMA, to close its investigation against Booking.<sup>5</sup> Further, in Germany, Booking stopped using narrow price parity clauses in 2016. This came after the Bundeskartellamt found in 2015 that Booking’s narrow price-parity clause is anti-competitive.<sup>6</sup> Booking challenged that the decision, first successfully at the Higher Regional Court in Düsseldorf in 2019.<sup>7</sup> However, the BGH, Germany’s highest court, sided with the Bundeskartellamt in 2021.<sup>8</sup> End of story?

## 02

### THE PROHIBITION OF PRICE PARITY CLAUSES IN THE DMA

The *German Booking* case shows that competition law can deal with price parity clauses. The Bundeskartellamt is not alone; other competition authorities and courts<sup>9</sup> in Europe and beyond intervened by prohibiting wide and sometimes narrow price parity clauses.

Thus, at first glance, it may look surprising that the prohibition of price parity clauses is included in the Digital Markets Act (“DMA”). Several possible explanations come to mind. While competition law can deal with such cases, it may take too long to decide such a case. By explicitly pro-

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1 See press release of the Bundeskartellamt of November 26, 2013 “Amazon abandons price parity clauses for good” [https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Meldungen%20News%20Karussell/26\\_11\\_2013\\_Amazon.html](https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Meldungen%20News%20Karussell/26_11_2013_Amazon.html).

2 In May 2021, the District of Columbia filed a complaint against Amazon at the Superior Court of the District of Columbia that contains more details on the contractual clauses imposed by Amazon.

3 See European Commission, July 25, 2013, Case AT.39847 – E-Books, Annex I, Final Commitments – Apple, p. 4 (“Apple will not include in its new agreements with the 5 Publishers or in any new agreements with any other publisher a Retail Price MFN.”) [https://ec.europa.eu/competition/antitrust/cases/dec\\_docs/39847/39847\\_26805\\_4.pdf](https://ec.europa.eu/competition/antitrust/cases/dec_docs/39847/39847_26805_4.pdf).

4 In April 2015, the Swedish, French, and Italian competition authorities accepted a commitment by Booking.com to reduce its wide parity clause a narrow parity clause. See L’Autorità Garante della Concorrenza e del Mercato April 21, 2015 <https://www.agcm.it/media/comunicati-stampa/2015/4/alias-7623>.

5 Competition and Markets Authority September 16, 2015, Press Release “CMA Closes Hotel Online Booking Investigation,” <https://www.gov.uk/government/news/cma-closes-hotel-onlinebooking-investigation>.

6 Bundeskartellamt December 22, 2015, B9-121/13, Booking.com.

7 OLG Düsseldorf June 4, 2019, Kart 2/16(V), *Booking.com* (“Enge Bestpreisklausel II”).

8 BGH May 19, 2021, KVR 54/20, *Booking.com*.

9 Notably in Sweden, after in July 2018 the Stockholms Tingsrätt had ordered Booking.com to remove narrow parity clauses from its contract terms (PMT 13013-16, *Visita /Booking.com*), the Patent and Market Court of Appeal overturned this ruling, finding that the plaintiff, a tourist services industry association, had not sufficiently demonstrated an anti-competitive effect. Svea hovrätt, Patent- och marknadsöverdomstolen May 9, 2019, PMT 7779-18, *Booking.com*.

hibiting price parity clauses in the DMA, it will arguably be much easier to avoid that they arise in the first place and fewer public resources will be needed to go after those gatekeepers employing them. The fact that European Union Member States treat narrow price parity clauses differently (because of different decisions based on competition law or because of interventions of national legislatures as in Austria, Belgium, France, and Italy<sup>10</sup> in case of hotel booking platforms<sup>11</sup>) suggests that there may be a lack of coherence across the European Union. By including a prohibition of price parity clauses, the DMA removes incoherence whenever gatekeeper platforms are involved. Price parity clauses may also be seen as particularly problematic when invoked by gatekeeper platforms as addressed by the DMA and thus justifying a *per se* approach for those platforms.

The DMA deals with price parity clauses in Recital 37 and Article 5(b). The prohibition of price parity clauses follows from Article 5(b). In the proposal by the European Commission (DMA, COM(2020) 842 final, p. 39) it says, “In respect of each of its core platform services ..., a gatekeeper shall ... allow business users to offer the same products or services to end users through third party online intermediation services at prices or conditions that are different from those offered through the online intermediation services of the gatekeeper,” which in the draft proposed by the European Parliament (A9-0332/2021, p. 65) becomes: “refrain from applying contractual obligations that prevent business users from offering the same products or services to end users through third party online intermediation services or through their own direct online sales channel at prices or conditions that are different from those offered through the online intermediation services of the gatekeeper.”<sup>12</sup>

While the original version by the European Commission may be interpreted as a prohibition of wide price parity clauses only, the revised draft by the European Parliament states explicitly that the prohibition of price parity clauses also applies with respect to (online) direct distribution channels.

According to the Draft European Parliament Legislative Resolution (A9-0332/2021), published 30 November 2021, Recital 37 provides some reasoning:

Because of their position, gatekeepers might in certain cases, through the imposition of contractual terms and conditions, restrict the ability of business users of their online intermedia-

tion services to offer their goods or services to end users under more favourable conditions, including price, through other online intermediation services or through direct business channels. Such restrictions have a significant deterrent effect on the business users of gatekeepers in terms of their use of alternative online intermediation services or direct distribution channels, limiting inter-platform contestability, which in turn limits choice of alternative online intermediation channels for end users. To ensure that business users of online intermediation services of gatekeepers can freely choose alternative online intermediation services or other direct distribution channels and differentiate the conditions under which they offer their products or services to their end users, it should not be accepted that gatekeepers limit business users from choosing to differentiate commercial conditions, including price.

The underlined words have been added by the Committee on the Internal Market and Consumer Protection to the European Commission’s original draft and this amendment has been adopted by the European Parliament on December 15, 2021.

Price parity clauses when used by gatekeeper platforms and applied in the context of core platform services are seen as harmful to consumers (and businesses). Where does the harm stem from?

## 03

### THEORIES OF HARM

The basic argument by which price parity clauses are anti-competitive is straightforward. Consider first a single platform that charges fees on the seller side and competes against the direct sales channel. If the platform obliges sellers on its platforms not to offer a lower price in the direct channel, consumers are not inclined to use the direct channel if the platform offers some convenience benefit. The platform will then set a high fee and extract a large

<sup>10</sup> European Commission, Impact Assessment Report, SWD(2020) 363 final, Part 2/2, p. 111. For an overview over these legislative interventions and their motivations see Franck and Stock (2020), What is ‘Competition Law’? – Measuring EU Member States’ Leeway to Regulate Platform-to-Business Agreements, *Yearbook of European Law* 39, 320, 362–370.

<sup>11</sup> In the case of Italy, the provision applies not only with regard to online platforms but also to offline travel agencies. *Id.* at 367.

<sup>12</sup> The European Parliament adopted this amendment on December 15, 2021.

fraction of seller profits if many consumers do not check for products in the direct sales channel when the product is not visible on the platform (more on “showrooming” below). If price parity clauses were prohibited the platform’s fee setting would be constrained because the sellers would serve consumers in the direct channel if the fee were too high. The idea here is that once consumers find a product they like on the platform they are inclined to check for this product outside the platform. This is a powerful argument against narrow and wide price parity clauses.

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“**Another example is that Apple obliged publishers to set e-books prices in Apple’s iBookstore at the lowest retail price available in the market**

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If there are competing platforms the argument extends to wide price parity clauses. Since the sellers’ retail prices must be the same across the competing platform under wide price parity, a seller cannot serve more consumers on a platform that lowers its fee. This reduces the incentive of a platform to offer a reduced fee. This means that wide price parity clauses can be used as a facilitating device to soften platform competition. At the same time, consumers have little reasons to try out new look-alike platforms and, thus, barriers to entry are higher with such clauses being in place.

One criticism to the above arguments may be that quality competition is neglected: With price parity in place, platforms may have strong incentive to increase service quality offered to consumers to attract them to their platform. Economic theory predicts that, accounting for such costly quality provision, will lead to socially excessive investments in service quality (which benefits consumers), but overall consumers will be harmed because the consumer surplus gain from higher service quality is more than offset by higher retail prices.<sup>13</sup>

Another criticism is that one should not neglect the investments by platforms that allow consumers to easily collect and process information about various offers on the platform. Absent price parity, consumers would continue to find this service useful but, with lower retail prices elsewhere,

desert the platform and finalize the transaction elsewhere, depriving the platform of revenues. Platforms would receive no compensation for such showrooming services, which may depress their incentive to provide such a useful service to consumers. Price parity clauses make seller free-riding unlikely since consumers cannot find lower prices elsewhere.

Absent price parity, consumers search on the platform and will not transact via the platform if the price differential between price on the platform and price on the direct distribution channel exceeds convenience benefit from transacting on the platform. Sellers will want to set low prices in the direct channel that induce consumers to switch only if fees exceed convenience benefits by a sufficient amount. This constrains the platform’s fee setting since the platform will want to avoid free-riding. Economic theory predicts that consumers are better off when price parity clauses are prohibited in such a context.<sup>14</sup>

With competing platforms and showrooming, wide price parity clauses continue to be consumer welfare decreasing. Results regarding narrow price parity clauses are less clear-cut. If narrow price parity is needed for the viability of platforms and platform competition is sufficiently intense, narrow price parity clauses are in the interest of consumers.<sup>15</sup>

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“**With price parity in place, platforms may have strong incentive to increase service quality offered to consumers to attract them to their platform**

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Without doing justice to a larger economics literature on price parity clauses, my summary would be that, in the case of B2C platforms, there are strong indications that price parity clauses are detrimental to consumer welfare if competition between platforms is not effective. This is likely to be the case for gatekeeper platforms within the meaning of the DMA. Thus, my reading of the economics literature is that economic theory backs the presumption that price parity clauses are anti-competitive and con-

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13 This argument is developed and formalized by Edelman & Wright (2015), Price Coherence and Excessive Intermediation, *Quarterly Journal of Economics* 130, 1283-1328.

14 This result is due to Wang & Wright (2020), Search Platforms: Showrooming and Price Parity Clauses, *Rand Journal of Economics* 51, 32-58.

15 For the economic theory behind this insight, see again Wang & Wright (2020), Search Platforms: Showrooming and Price Parity Clauses, *Rand Journal of Economics* 51, 32-58.

sumer welfare decreasing when imposed by gatekeeper platform.<sup>16</sup>

Overall, considering the sound theories of harm regarding price parity clauses when one platform is in a strong position, combined with the fact that there is little ambiguity as to whether a contractual restriction constitutes a price parity clause, one may come to the conclusion that the DMA solves the competition problem adequately for gatekeeper platforms (if the proposal by the European Parliament is adopted). Mission accomplished?

## 04

### PLATFORMS' BUSINESS RESPONSES TO PROHIBITING PRICE PARITY CLAUSES AND FOLLOW-UP REGULATORY ISSUES

To forecast the effects of the prohibition, it may be useful to look at what happened due to competition law enforcement after price parity clauses were withdrawn from the contracts between platforms and sellers. The Bundeskartellamt undertook an investigation of the hotel booking sector. It summarizes its main findings as follows:

*The investigations have shown that ultimately the elimination of the narrow price parity clauses has not harmed Booking.com's market success. Meanwhile Booking.com is by far the leading online hotel platform in Germany, and even without the price parity clause the company has been able to consolidate its market position further and achieve enormous growth rates ... The accommodations use the pricing options now available to them in a diversified sales mix, without neglecting the "hotel booking portal" sales channel ... Most consumers do not compare accommodation prices but book where they first found an accommoda-*

*tion, which rules out any significant redirection/free-riding activities ... An accommodation's own online direct sales channel is predominantly used by consumers who already knew the accommodation before they made a booking ...*<sup>17</sup>

Regarding hotel pricing, "more than half of the accommodations cooperating with Booking.com actually make use of the options for price differentiation now available between Booking.com and the hotels' own direct online sales." (p. 5) The Bundeskartellamt sees its position confirmed by these findings. Interestingly, the commission rates charged by the platforms to hotels have not changed. The investigation does not contain findings about consumer welfare.

Looking beyond the Bundeskartellamt's investigation, platforms make a number of design decisions that affect the interaction between sellers and buyers on the platform. A crucial role of platforms is to present consumers with an ordered list of recommendations and additional information about the offerings. These recommendations are generated by algorithms that use information available on the platform and possibly elsewhere. In particular, the algorithm may place a hotel high on the list for certain hotel queries if previously that led to a high conversion rate. A high conversion rate may be interpreted as the hotel providing a good match to consumers making certain queries. By contrast, a hotel with a low conversion rate in such a position may receive a less favorable treatment. Low conversion rates are generated if most consumers find things to dislike about the particular hotel and, therefore, decided against booking this hotel. Low conversion rates may also result if consumers do like the particular hotel but find more attractive offers for the same hotel outside the platform.

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**“Regarding hotel pricing, “more than half of the accommodations cooperating with Booking.com actually make use of the options for price differentiation now available between Booking.com and the hotels' own direct online sales.”**

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<sup>16</sup> A caveat is due. According to economic theory, in some environments price parity may be consumer welfare increasing and beneficial for the platform even if there is a single platform. See Liu, Niu & White (2021), Optional Intermediaries and Pricing Restraints, unpublished manuscript, for such a result when some consumers always use the direct distribution channel, and the other consumers choose between the direct distribution channel and the platform channel – the latter provides a convenience benefit that is not available in the direct distribution channel.

<sup>17</sup> Bundeskartellamt (2020), The Effects of Narrow Price Parity Clauses on Online Sales – Investigation Results from the Bundeskartellamt's Booking Proceeding, p.4.



Clearly, the lower the price offered in a different distribution channel, the more likely it is that a consumer books via a different distribution channel and, thus, the lower the conversion rate. The algorithm may use even prices outside the platform as input. Hotels that offer lower prices outside the platform can then be punished directly and immediately. Either way, such recommender systems may “discipline” hotels even in the absence of price parity clauses making sure that no better offers are found elsewhere.<sup>18</sup> All that is needed, are sufficient data and a recommendation algorithm that works in the best interest of the platform. Then, the platform no longer needs price parity clauses and achieves the same or a similar outcome.<sup>19</sup> The prohibition of price parity clauses might therefore turn out to be ineffective.

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**“Clearly, the lower the price offered in a different distribution channel, the more likely it is that a consumer books via a different distribution channel and, thus, the lower the conversion rate**

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The European Commission has not been blind to the concern that platforms may have alternative tools to discipline sellers. Indeed, Recital 37 of the Commission’s proposed DMA ends with “... it should not be accepted that gatekeepers limit business users from choosing to differentiate commercial conditions, including price. Such a restriction should apply to any measure with equivalent effect, such as for example increased commission rates or de-listing of the offers of business users” (COM(2020) 842 final). When applying Article 5 of the DMA, this statement suggests that the Commission may address unfavorable seller rankings due to lower prices on alternative platforms. More explicitly, the Committee on Economic and Monetary Affairs of the European Parliament had added “less favourable ranking”<sup>20</sup> as another example, which, however, was not included in the Draft European Parliament Legislative Resolution.

As a result, the DMA also addresses practices that serve as substitutes to price parity clauses, but there is uncertainty as to whether a particular design of a recommender system constitutes a non-compliance with Article 5. A particular difficulty arises if a platform cannot monitor whether a transaction was completed elsewhere. It then has a hard time to obtain good estimates of the overall conversion rates of a listing. Such a conversion rate would, however, be an important input for a well-functioning and non-biased recommender system. In a nutshell, when price parity clauses are not available to gatekeeper platforms, other practices that may be seen as substitutes raise important questions about how regulation will affect the overall quality of the platform services that are provided.

Looking beyond the design of recommender systems, a possible response by platforms faced with legal risks when using price parity clauses or substitute practices is to re-vamp the overall monetization model. As in the case of hotel booking services, platforms relied almost exclusively on transaction fees. It is noteworthy that, for example, Booking recently introduced an ad-funded part to its business: hotels can obtain attractive positions in the ranking and are labeled as “promoted.” To list such native ads, hotels place bids that, if successful, determine the cost-per-click (“CPC”). Such native advertising gives the platform a revenue source that does not require the transaction to be completed on the platform.

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**“A particular difficulty arises if a platform cannot monitor whether a transaction was completed elsewhere**

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Dealing with price parity clauses and other potentially anti-competitive business practices by gatekeeper platforms, the EC has provided a set of prohibitions and obligations. The European Commission did not take the path to enter into price regulation, different from what has happened for example in the case of telecoms. A possible regulatory action against excessive fees stemming from price parity clauses would be to impose a ceiling on those fees. While

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18 For an empirical analysis that finds lower rankings because of lower prices on other distribution channels, see Hunold, Kesler, & Laitenberger (2020), Rankings of Online Travel Agents, Channel Pricing, and Consumer Protection, *Marketing Science* 39, 92-116. A discussion of the platform’s incentives when designing its recommender system is provided, for instance, by Belleflamme & Peitz (2021, chapter 6), *The Economics of Platforms: Concepts and Strategy*, Cambridge University Press.

19 Detecting such behavior may be difficult for the regulator if sellers are hesitant to becoming invisible. The perceived threat to be pushed down in the ranking may be sufficient to discipline sellers and thus distortions in the recommendations may not be observed (using economic jargon, such distortions may occur only off the equilibrium path).

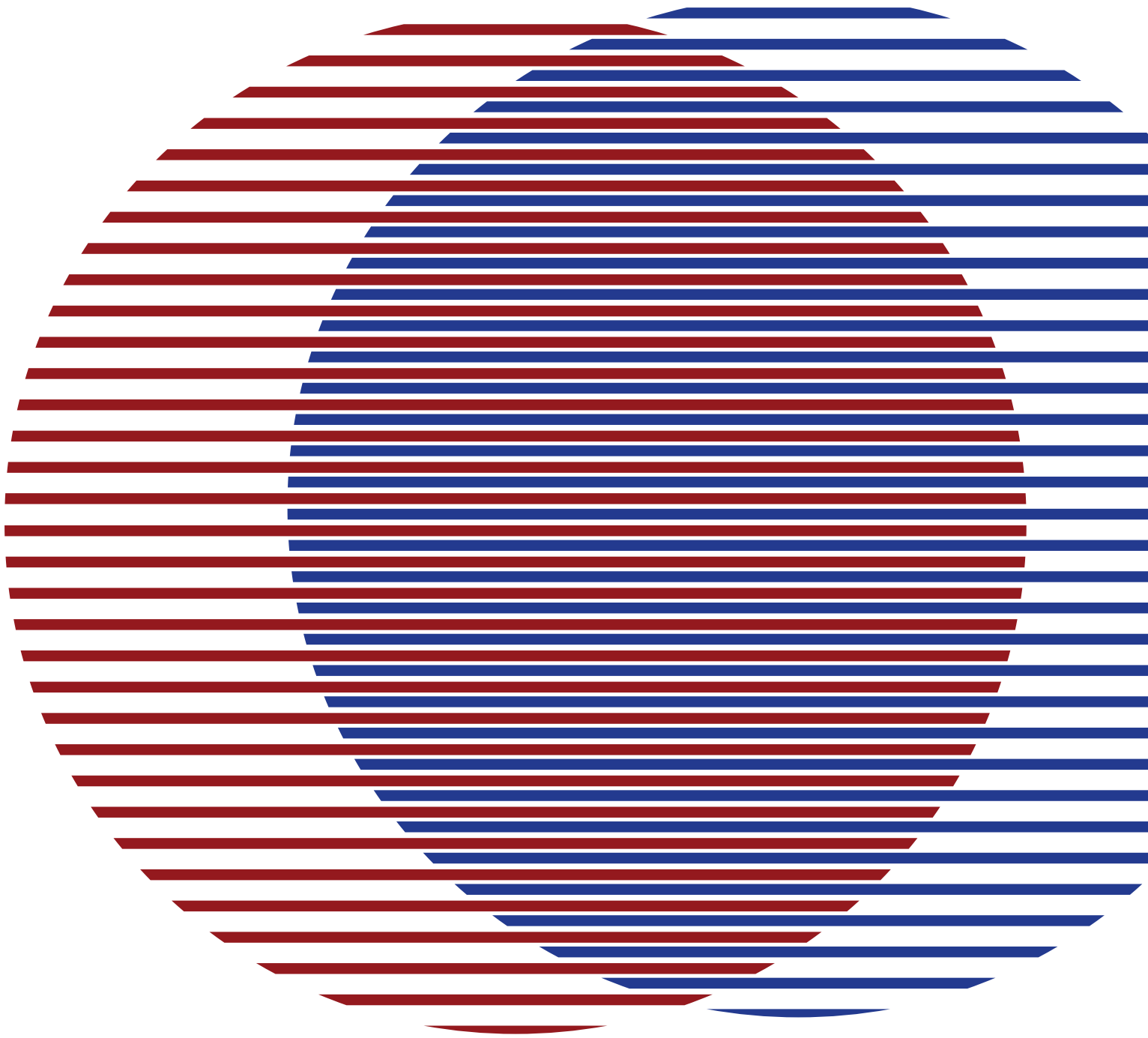
20 Draft European Parliament Legislative Resolution, A9-0332/2021, p. 164.

there are some theoretical merits for such are regulatory intervention,<sup>21</sup> my fear is that it can do a lot of damage in an innovative market environment, especially if a platform may want to provide integrated services.<sup>22</sup> It should be a policy of last resort. ■

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21 For a formal investigation showing advantages of fee regulation compared to banning price parity clauses, see Gomes & Mantovani (2021), Regulating Platform Fees under Price Parity, unpublished manuscript.

22 What is more, a ceiling applied to transaction fees may provide incentives for platforms to move towards the native ad-funded models, which may not lead to better outcomes for consumers or the sellers that use the gatekeeper platform. As mentioned before, while less immediate, a similar concern can be raised against the prohibition of price parity clauses.



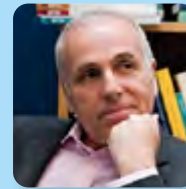


# THE BIRTH OF PLATFORM NEO-REGULATION IN THE UK



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&  
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## 01 INTRODUCTION

A new era of tech regulation is about to begin. This is the bold claim behind the UK's “globally

leading” Online Safety Bill which completed pre-legislative scrutiny in December 2021.<sup>1</sup> There was intense media attention on the proceedings in the Joint House of Lords/House of Commons Committee.<sup>2</sup> One highlight was the evidence given by Facebook whistle blower Frances Haugen on October 25, 2021<sup>3</sup> and a concrete scenario of unwelcome blogging offered by Graham Smith.<sup>4</sup> The Committee's report was issued on December 14, 2021.<sup>5</sup>

1 See <https://www.gov.uk/government/publications/draft-online-safety-bill>.

2 See <https://committees.parliament.uk/committee/534/draft-online-safety-bill-joint-committee/>.

3 See <https://committees.parliament.uk/committee/534/draft-online-safety-bill-joint-committeeneeds/157979/facebook-whistleblower-frances-haugen-to-give-evidence-to-uk-parliament/>.

4 See Smith, G. (November 2021) The draft Online Safety Bill concretised <https://www.cyberleagle.com/2021/11/the-draft-online-safety-bill-concretised.html>.

5 See <https://committees.parliament.uk/publications/8206/documents/84092/default/>.

The UK Government intends to publish the Bill in the first quarter of 2022, aiming for enactment in the current parliamentary session.

The core concept of the Online Safety legislation is the imposition of a new online duty of care on platforms, requiring the removal of illegal content. For “high-risk, high-reach” (so-called Category 1) services, this will extend to material that is lawful but harmful. Ofcom, the UK communications regulator,<sup>6</sup> will become the designated regulator, with enforcement powers, for platforms’ “**codes of practice**.” The Government itself will retain important delegated powers for the “Secretary of State” (currently Nadine Dorries).

At the same time, the UK government is consulting on the implementation of a new competition regime for digital markets.<sup>7</sup> This will centre on the activity of the Digital Markets Unit (DMU) which is presently in the orbit of the Competition and Markets Authority (CMA). The DMU will develop enforceable “**codes of conduct**” for firms with Strategic Market Status (SMS), which are likely to include the same platform services targeted by the Online Safety legislation. SMS designation will follow an “evidence-based assessment” identifying “those firms with substantial and entrenched market power, in at least one digital activity, providing them with a strategic position”.<sup>8</sup>

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“*The core concept of the Online Safety legislation is the imposition of a new online duty of care on platforms, requiring the removal of illegal content*”

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There is a tension between these approaches: new obligations in anticipation of future harms are created. Will these

encourage the flow of information, or prevent it? In each case, the state claims a stronger role, guided by an assertion of its sovereignty. The role of the executive (or national governments), the role of powerful firms in exercising state designated policing powers, and the safeguards against executive decisions need to be examined closely.

## 02

### A GLOBAL WAVE OF REGULATION

In research undertaken for the AHRC Creative Industries Policy & Evidence Centre (“PEC”), so far we have traced the emergence of the new wave of platform regulation since 2018. We presented our initial findings to five UK agencies in February 2020 at an event at the British Institute of International and Comparative Law.<sup>9</sup> Representatives from Ofcom, the CMA, the Information Commissioner’s Office (“ICO”),<sup>10</sup> the Intellectual Property Office (“IPO”),<sup>11</sup> and the Centre for Data Ethics and Innovation (“CDEI”) responded.<sup>12</sup> In June 2021, we published a detailed analysis of the state of the regulatory field as a PEC discussion paper<sup>13</sup> and policy brief.<sup>14</sup>

In follow-ups to this analysis of the first phase of platform regulation, two new working papers written by members of CREATE, have traced what we consider to be a “neo-regulatory” second phase in the development of the regulatory field. It is neo-regulation because it has responded, first, to the new realities due to Brexit; and second, because it has driven regulatory innovation that is focused on how to address platform power – by coalescing agencies’ powers. It

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6 <https://www.ofcom.org.uk/home>.

7 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1003913/Digital\\_Competition\\_Consultation\\_v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003913/Digital_Competition_Consultation_v2.pdf).

8 <https://www.gov.uk/government/consultations/a-new-pro-competition-regime-for-digital-markets>.

9 <https://www.create.ac.uk/platform-regulation-resource-page/>.

10 <https://ico.org.uk/>.

11 <https://www.gov.uk/government/organisations/intellectual-property-office>.

12 <https://www.gov.uk/government/organisations/centre-for-data-ethics-and-innovation>.

13 Kretschmer, M., U. Furgał, & P. Schlesinger (June 2021) The emergence of platform regulation in the UK: an empirical-legal study, available at <https://pec.ac.uk/discussion-papers/the-emergence-of-platform-regulation-in-the-uk>.

14 AHRC Creative Industries Policy & Evidence Centre (PEC) Discussion Paper Kretschmer, M., U. Furgał, & P. Schlesinger (June 2021) The regulation of online platforms: Mapping an emergent regulatory field, available at <https://pec.ac.uk/policy-briefings/the-regulation-of-online-platforms-mapping-an-emergent-regulatory-field>.

is important to mark these differences of context and practice, and so to understand how the UK is now arming itself to undertake platform regulation. We also need to raise some questions posed by this approach.

There is undoubtedly a global wave of concern about how to regulate the major platforms. This widely distributed “regulatory turn” has produced a plethora of documentation. Yet, so far as the UK is concerned, if you read through the major reports published in the UK in the past couple of years you will find that the key reference points are still the EU (and sometimes key member states, notably Germany), the U.S., and Australia.

A distinct British approach has crystallized in this global context. Given the UK’s Government’s promotion of its post-Brexit “Global-British” vision, to succeed in regulatory innovation is seen as having the advantage of potential “convening power” – in short, as offering an influential route for shaping the institutional changes to be negotiated internationally.

Yet, the geo-political repositioning undertaken by Prime Minister Johnson’s Government has set up a conundrum. The Global-British path is meant to be distinctive and unique, a liberation from unwanted trammels, and in particular to diverge manifestly from the EU’s course and practice.<sup>15</sup> But, at the same time, the more the UK diverges, the less can it rely on its previous regulatory equivalence with the world’s largest trading bloc.<sup>16</sup> Recourse to bilateral arrangements is one approach to this potential impasse, as has now become evident in the UK Government’s thinking about trade in data (DCMS 2021).<sup>17</sup> Moreover, it is amply clear that no state is capable of regulating major platforms on its own. Regulatory collaboration and coordination are needed. The UK’s regulators are explicit on this matter, often in ways that cut against the prevailing Governmental rhetoric about controlling the borders and exercising sovereignty.

# 03

## THE UK’S NEO-REGULATORY APPROACH

In 2020, the UK entered a consolidating phase in its development of platform regulation. The demand for expanded regulation has resulted in two key focuses: “online harms” (encompassing mainly social and political issues), and a “pro-competition” approach (which concerns the malfunctioning of the market, supporting consumer interests, and engendering innovation). While the subject of “online harms” has had most focus in parliamentary, media and public debate, in our view, it is the economic dimension of regulation – its focus on competition and innovation – that promises to be the leading edge of present developments.

In the first of our two recent CREATE analyses, Philip Schlesinger’s paper on the UK’s distinctive approach shows how, at a framing level, recent policy innovation – not least the centrality of a pro-competition stance – has been given new impetus by Brexit.<sup>18</sup> However, the institutional flesh on the bones has been provided by the Digital Regulators Cooperation Forum (“DRCF”).<sup>19</sup> This grouping, first set up in July 2020, comprises the CMA, the ICO, Ofcom, and the Financial Conduct Authority (“FCA”). In November 2021, the DRCF’s status as a new-style regulatory consortium was underlined by the appointment of its CEO, ex-Google senior executive, Gill Whitehead.<sup>20</sup> The forum will have an integrated secretariat, clearly crucial for undertaking business in a coherent way. However, the unaccountable growth of the DRCF has become a bugbear of the House of Lords Communications and Digital Committee which, in a report published on December 13, argued that parliamentary scrutiny is now needed as well as putting the forum on a formal footing as a “Digital Regulation Board”, with an independent chair.<sup>21</sup>

15 Kretschmer, M. (July 2020) UK sovereignty: A challenge for the creative industries <https://pec.ac.uk/blog/uk-sovereignty-a-challenge-for-the-creative-industries>, available at <https://pec.ac.uk/blog/uk-sovereignty-a-challenge-for-the-creative-industries>.

16 Di Novo, S., G. Fazio, N. Wessel (March 2020) 12 facts about the UK’s international trade in creative goods and services AHRC Creative Industries Policy & Evidence Centre (PEC) Research Report, available at <https://pec.ac.uk/assets/publications/12-facts-about-the-UK%E2%80%99s-international-trade-in-creative-goods-and-services.pdf>.

17 Department for Digital, Culture, Media & Sport (August 2021) UK Unveils Post-Brexit Global Data Plans to Boost Growth, Increase Trade and Improve Healthcare, available at <https://www.gov.uk/government/news/uk-unveils-post-brexit-global-data-plans-to-boost-growth-increase-trade-and-improve-healthcare>.

18 Schlesinger, P. (November 2021) The neo-regulation of internet platforms in the UK. CREATE working paper 2021/11.

19 <https://www.gov.uk/government/collections/the-digital-regulation-cooperation-forum>.

20 <https://www.ofcom.org.uk/news-centre/2021/gill-whitehead-appointed-digital-regulators-forum-chief-executive>.

21 Communications and Digital Committee. “Digital Regulation: Joined up and Accountable.” HL Paper 126, December 13, 2021.

Schlesinger's CREATE paper provides a detailed account of how the new collaborative arrangements were set up, and notably how the CMA has taken a leading role in shaping the policy discourse and institutional arrangements. He also shows how the 2019 Furman Report (strongly supported by the CMA) was highly influential in securing the creation of yet another regulator – one, as yet, not in the DRCF.<sup>22</sup> The Digital Markets Unit (“DMU”), which still awaits statutory underpinning, led by Catherine Batchelor, has been set up to spearhead the pro-competition agenda.<sup>23</sup> Its target will be what Furman has identified as “significant market power” in the digital marketplace.



*In 2020, the UK entered a consolidating phase in its development of platform regulation*

Magali Eben, in the second of our CREATE papers on neo-regulation, examines how the DMU might strive to promote competition in digital markets.<sup>24</sup> The new regulator has been conceived to target firms and activities considered to cause greatest harm, those designated as firms with Strategic Market Status (SMS). That means the DMU must identify firms with SMS, who would then be subject to a code of conduct. It will be empowered to undertake “pro-competitive interventions.” In her paper, Eben asks just what kind of economic power an SMS designation is meant to cover, and how the DMU will actually go about its task of identification, what methods it might employ for identifying relevant “activities,” “alternatives,” and “core components”?

Her analysis suggests a lack of clarity about the criteria that are used to identify a firm as possessing SMS. She questions whether such a firm will be judged to have relative market power or not. She also argues that as major digital firms operate across jurisdictions, how regulators in other countries define market power also matters greatly, especially where cross-border collaboration is an issue. As she notes, this is precisely the kind of approach open to the EU

under the 2002 Framework Directive (recast 2018).<sup>25</sup> Eben calls for more clarity in the use of evidence and in the definition of what a market is for the purposes of regulation.

Eben's work opens up questions about how the DMU will operate. Quite where the DMU will fit into the DRCF's future activities remains unclear. For his part, Schlesinger wonders how the Digital Regulators Cooperation Forum (“DRCF”) will operate as a cohesive entity, now that after its short, mostly unnoticed existence, it is being propelled into the regulatory limelight.<sup>26</sup> Indeed, the DRCF's days of largely private development are over as it has become a focus of other regulators and interests wishing to have a seat at the table. The Lords report has cautioned against the DRCF becoming a converged regulator for platforms – as Ofcom did for communications when it was first set up in 2003. Its future formalization and performance will be a matter of major public interest – not least for the UK government's ambition of leading in global “convening power.”

In our first empirical study on the emergence of the regulatory field of platform regulation, published by the PEC in June 2021, we had already diagnosed the issue of how to coordinate regulation. We termed it “the super-regulator problem.”<sup>27</sup> That question is now playing out in the Digital Regulators Cooperation Forum.

A second key finding from that initial study relates to the process of implementation – how to translate regulatory rules into behavioral changes. We identified “codes of practice” or “codes of conduct” as typical interventions in the British regulatory toolbox. Such codes are often developed in cooperation with the objects of regulation, and can respond flexibly and quickly to emerging issues (such as the targeting of videos at minors). Codes of practice or conduct, however, also tend to have weak statutory underpinnings and are not readily susceptible to public scrutiny.

The Online Safety Bill as well as the consultation on the Digital Markets Unit are open to discussion on this count. Magali Eben's paper highlights the potential discretion exercised in the designation of Strategic Market Status firms. The draft Online Safety Bill came with a Memorandum of no less than 87 pages, explaining deferred powers, i.e. the

22 Furman, J. (March 2019) Unlocking digital competition: Report of the Digital Competition Expert Panel. Treasury and Department for Business, Energy & Industrial Strategy [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/785547/unlocking\\_digital\\_competition\\_furman\\_review\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf).

23 <https://www.gov.uk/government/collections/digital-markets-unit>.

24 Eben, M. (November 2021) The interpretation of a “Strategic Market Status’: A response to the public consultation by the UK Government on ‘A new pro-competition regime for digital markets.’” <https://zenodo.org/record/5575183#.YbzVNr3P3Ms>.

25 <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L1972>.

26 <https://www.gov.uk/government/collections/the-digital-regulation-cooperation-forum>.

27 <https://pec.ac.uk/discussion-papers/the-emergence-of-platform-regulation-in-the-uk>.

mechanisms that describe how the new *ex ante* duties for platforms will be formulated, implemented and policed.<sup>28</sup> Unless this changes as the Bill makes its way through Parliament, the executive, in the form of the Secretary of State, will retain an unusually wide range of powers. Independent predictable regulation it is not. It remains to be seen how these contentious matters are addressed in the Bill's second reading and in future legislation on digital competition.

# 04

## CONCLUSION

We define UK neo-regulation as an inter-agency, executive-led approach, oscillating between digital libertarianism and digital authoritarianism in an under-examined space that is taking shape during the initial stage of Brexit.

At the libertarian end, the Government promotes innovation and transparency: the Online Safety Bill “will increase transparency around companies’ moderation processes, and ensure they are held to account for consistent enforcement of their terms of service.” The Government is also considering giving the competition authorities (via the Digital Markets Unit) “powers to engage, in specific circumstances, with wider policy issues that interact with competition in digital markets” (both quotes from the Government’s response to the House of Lords Communications and Digital Committee’s report on Freedom of Expression in the Digital Age, October 2021).<sup>29</sup>

At the authoritarian end, the key regulatory agencies are located in a space that may allow them to operate almost beyond the law, and potentially subject to the direct instruction of the Government. Twitter’s evidence to the Joint Committee put it thus (October 2021): “These issues are further complicated by the discretion given to the Secretary of State in the Bill to not just modify codes of practice, but to also designate (at any stage) what constitutes ‘legal but harmful’ content – even that which goes beyond the already ambiguous definition of harm set out (content for which there is a ‘material risk’ of having ‘significant adverse physical or psychological impact on an adult of ordinary sensibilities’).”<sup>30</sup>

We are on the brink of a moment in which online platforms are about to become the proxies for the exercise of regulatory and state power via new duties and codes of practice/conduct that are now going to be devised. The UK’s heady mix of innovation-promoting and harm-preventing interventions will have a profound effect on the production and consumption of culture – and the public sphere. ■

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“*We define UK neo-regulation as an inter-agency, executive-led approach, oscillating between digital libertarianism and digital authoritarianism in an under-examined space that is taking shape during the initial stage of Brexit*”

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28 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/985030/Delegated\\_Powers\\_Memorandum\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/985030/Delegated_Powers_Memorandum_Web_Accessible.pdf).

29 <https://committees.parliament.uk/publications/7704/documents/80449/default/>.

30 Twitter (October 2021) Written evidence submitted by Twitter (OSB0072) to the Joint Select Committee (Draft Online Safety Bill) <https://committees.parliament.uk/writtenevidence/39199/pdf/>.





# REGULATING DIGITAL PLATFORMS: BUSINESS MODELS, TECHNOLOGY ARCHITECTURES AND GOVERNANCE RULES



BY  
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## 01

### INTRODUCTION

Platforms are based on open innovation and the realization that no internal R&D can ever match innovation that happens outside a firm's boundaries. Physical product platforms such as airplanes, cars and computer hardware

have been around for many decades, enabling different complementors and their supply chains to contribute components and collectively develop stronger value propositions across broader ecosystems. By developing products on a platform (e.g. the Windows-Intel platform), complementors benefit from innovation spillovers, economies of scale and scope while also mitigating some of the risks of innovating on their own.<sup>1</sup>

Such innovation is very much dependent on modular components and standardized inter-

<sup>1</sup> Gawer, A. & Cusumano, M.A., 2002. *Platform Leadership: How Intel, Microsoft, and Cisco Drive Industry Innovation*. Boston, MA: Harvard Business School Press.

faces, which help to reduce technological complexity and increase flexibility.<sup>2</sup> Standardized interfaces capture each modular component's unique features, while at the same time enabling interdependencies between them. In this way, platforms can be developed through bundled components, from which varied products and services can be generated to achieve user differentiation across ecosystems.

Whereas non-digital platforms are nested and fixed to a product hierarchy (e.g. a gearbox is tied to car model), digital platforms can be product agnostic and generative.<sup>3</sup> For example, platforms such as, Netflix and YouTube can be integrated on Android and iOS, as well as the operating systems of multiple TV models; applications such as Google Maps can be integrated into car entertainment systems and even become components on other digital platforms such as Booking.com and Airbnb.<sup>4</sup> The product agnosticism of digital platforms can entail contributions by heterogeneous complementors that can constantly bring about new value propositions and, thus, generate even more network effects and market concentration.<sup>5</sup>

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“**Such innovation is very much dependent on modular components and standardized interfaces, which help to reduce technological complexity and increase flexibility**”

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For the big firms that orchestrate these digital platforms, controlling interactions between these various complements through application programming interfaces (“APIs”) means that they also have access to a myriad of data points about customers, competing products and services that they can use to benchmark their own apps, as well as to self-preference those.<sup>6</sup> Thus, these big firms are no longer just orchestrators of a single platform but rather orchestrators of multi-product and multi-actor ecosystems.<sup>7</sup> It is exactly this increased market concentration that has spurred discussions around whether *ex ante* regulation should supplement current *ex post* competition law on digital platforms.<sup>8</sup> *Ex ante* regulation consists of a set of sector-specific, structural rules for organizing market activities, whereas *ex post* competition policy is more concerned with one-off interventions once anticompetitive behavior is observed.<sup>9</sup>

Early utility infrastructures also held high market concentration. These infrastructures were thought to be most effectively managed through natural monopolies, with national or state governments often regulating such monopolies to benefit from economies of scale, while avoiding duplication of costs.<sup>10</sup> The implication of this is that there were high switching costs for users, while the suppliers of those infrastructures benefited from strong network effects. Utility infrastructures in energy, telecommunications, transportation, and water supply evolved through vertical integrations, with a handful of suppliers (often even with a sole national supplier) capturing the value from utilities use while acting as gatekeepers. *Ex ante* regulation for breaking these monopolies and establishing more competitive policies that would drive down prices and accelerate innovation were eventually introduced (in the 1990s onwards), even though

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2 Baldwin, C.Y. & Clark, K.B. (2000). *Design Rules – The Power of Modularity*, Cambridge, MA: MIT Press; Schilling, M.A. (2000). Towards a General Modular Systems Theory and its Application to Interfirm Product Modularity, *Academy of Management Review* 25(2): 312–334;

3 Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research. *Information Systems Research*, 21(4), 724–735.

4 Constantinides, P., Henfridsson, O. & Parker, G.G., 2018. Platforms and infrastructures in the digital age. *Information Systems Research*, 29(2), pp. 381–400.

5 Parker G.G., Van Alstyne M.W. & Choudary S.P. (2016) *Platform Revolution: How Networked Markets are Transforming the Economy and how to Make Them Work for You*. W. W. Norton, New York.

6 Padilla, J., J. Perkins & S. Piccolo (2020), “Self-Preferencing and Consumer Harm in Markets with Gatekeeper Platforms,” SSRN Working Paper.

7 Jacobides, M.G., Cennamo, C. & Gawer, A., 2020. *Distinguishing between Platforms and Ecosystems: Complementarities, Value Creation, and Coordination Mechanisms*. Working Paper, under review.

8 Crémer, J., de Montjoye, Y.A. & Schweitzer, H., 2019. Competition policy for the digital era. *Report For The European Commission*. <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf> ; HM Treasury (2019), Unlocking Digital Competition, *Report of The Digital Competition Expert Panel*. <https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel>.

9 Jacobides, M.G. & Lianos, I., 2021. Ecosystems and competition law in theory and practice. *Industrial & Corporate Change*, 00, 1–31.

10 Constantinides, P. 2012. *Perspectives And Implications For The Development Of Information Infrastructures*. IGI Global.



many monopolies still remain, especially in energy and water supply.<sup>11</sup>

Exactly because of their gatekeeping position, their ability to standardize production and consumption, and generate strong network effects with high switching costs for users some have argued that digital platforms should be regulated like early utility infrastructures.<sup>12</sup> However, digital platforms exhibit several differences that make utility regulation broadly inapplicable.

## 02

### KEY DIFFERENCES BETWEEN UTILITY INFRASTRUCTURES & DIGITAL PLATFORMS

Firstly, digital platforms have very distinct technological architectures that enable different business models for the production and consumption of digital products and services.<sup>13</sup> As described above, digital platforms are built on layered modular architectures, which are product agnostic.<sup>14</sup> This means that they are not contained within single industries or market sectors as in the case of utility infrastructures. Market boundaries are permeable. Amazon's Alexa, a voice recognition application, embedded in Amazon's Echo, can offer voice activated streaming content from Amazon's music library and Kindle audiobooks, as well as integrate music services from third parties such as Spotify. Amazon Alexa may also integrate with other third-party services such as smart thermostats, lighting switches and other smart home applications, as well as order food from Deliveroo, a ride from Uber, and so on.

Thus, the technological architecture of digital platforms enables generative business models with varied customer bases, across products and services, and with distinct revenue models and data aggregation strategies that can also

be monetized. Indeed, it is exactly the unique technological architecture of digital platforms that makes possible data aggregation and data-enabled learning, which can benefit not just current users, but potentially also new users when that learning can be incorporated into product improvements.<sup>15</sup>

Secondly, and following from the above, although the value that a digital platform generates for users and third parties can produce strong network effects, that value is not solely dependent on supply of services by the platform orchestrator. Much of that value is cocreated through demand-side economies of scale. Without platform participants, including end users and third parties such as app developers and advertisers, the platform itself becomes less valuable.

By contrast, utilities infrastructures feature strong supply-side economies of scale, with suppliers capturing all the value for themselves. The products and services delivered through these infrastructures, such as electricity and water are standardized and homogeneous with no opportunities for differentiation other than cost. There are limited value creation opportunities for third parties relative to digital platforms, because utility infrastructure offerings are bound within a highly specific market.<sup>16</sup> Innovation is mainly focused on the maintenance and improvement of existing physical infrastructures (e.g. upgrades to 5G telecom networks). In contrast, digital platforms benefit from constant innovation across boundaries and thus new value creation and capture opportunities.

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**“Thus, the technological architecture of digital platforms enables generative business models with varied customer bases, across products and services, and with distinct revenue models and data aggregation strategies that can also be monetized**

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Finally, digital platforms have different governance rules and control mechanisms for orchestrating the production

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11 *Supra* note 11; Also see Constantinides, P. & Slavova, M., 2020. From a monopoly to an entrepreneurial field: The constitution of possibilities in South African energy. *Journal Of Business Venturing*, 35(6), p.106061.

12 Ducci, F. (2020), *Natural Monopolies in Digital Platform Markets*. Cambridge University Press.

13 *Supra* notes 5 and 6.

14 *Supra* note 4.

15 Hagiu, A. & Wright, J., 2020. When data creates competitive advantage. *Harvard Business Review*, 98(1), pp.94-101.

16 Rutter, R, K J Chalvatzis, S Roper & F Lettice (2018), “Branding Instead of Product Innovation: A Study on the Brand Personalities of the UK's Electricity Market,” *European Management Review* 15(2): 255–272.

and consumption of services.<sup>17</sup> Governance determines how a digital platform creates, delivers, and captures value, by creating incentives for participation, rules of competition and setting up barriers to entry.<sup>18</sup> These governance rules are part and parcel of the technology architecture and market scope of the platform. The orchestrators of digital platforms need to protect their own interests in competition with other firms, while also allowing complementors who contribute to value creation on the platform to secure their interests. The way the platform firm balances these trade-offs is through enforcement of governance rules, which affect the extent of, for example, multihoming across platforms vs. exclusivity strategies; and convergence of market and competitive domains.<sup>19</sup>

These governance rules include gatekeeping through a set of boundary resources such as software development kits and standard interfaces.<sup>20</sup> These governance rules also influence pricing strategies. Platforms use subsidies to deal with the chicken-or-egg dilemma to incentivize user and complementor participation, value creation and capture. They also bundle products through subscription, while also flexibly marking up star complementors (e.g. Amazon Prime Video subscriptions vs. premium content). Such pricing strategies depend on cross-side network effects and the respective demand elasticities for the different market sides.<sup>21</sup> While on the surface, utility infrastructure suppliers use similar pricing strategies, utility pricing does not depend on cross-side network effects and demand-side elasticities, nor on the market power of complementors.

## 03

### WHAT SHOULD REGULATORS FOCUS ON?

Based on the above discussion, it becomes evident that digital platforms have very distinct *market*, *technology*, and *governance* scopes<sup>22</sup> than utility infrastructures. The *market*

scope of a digital platform defines its business model. Unlike, utility infrastructures that are subjected to *ex ante* regulation to apply fairly uniform business models, digital platforms operate a spectrum of business models. Digital platforms are often found to set the rules of competition on their platform, while at the same time participating in the same markets and generating revenue and growth from both.

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“These governance rules include gatekeeping through a set of boundary resources such as software development kits and standard interfaces

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For example, Apple allows Apple native apps to have in-app purchases, while inhibiting third party apps to do so – something which led to the Epic Games Inc vs Apple Inc lawsuit; Amazon collects data about third party products sold on its Amazon marketplace and then sells competing products directly to consumers, a practice known as ‘Sherlocking’; Google is also using Google Play – a set of proprietary API on Android (e.g. Google Search, Maps etc.) – to Sherlock data about competing apps, while also acting as a major player in online advertising and specialized search services (e.g. travel and accommodation).

As these examples show, often the market scope of these platforms is supported by their *technology scope*, that is, their technology architecture that allows them to internalize negative externalities, maximize positive generativity while monitoring for quality control, and by keeping competition where it benefits their own business model. For example, by adding Google Play as a set of middle-layer component in Android’s architecture, Google aimed at addressing fragmentation because of multiple Android versions and improving interoperability and OS updates across original equipment manufacturers (“OEMs”). However, in doing so, Google essentially changed the open source technology scope of all Android versions to accommodate its business model.<sup>23</sup>

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17 *Supra* notes 5 and 6.

18 Tiwana, A., 2013. *Platform Ecosystems: Aligning Architecture, Governance, And Strategy*. Newnes.

19 Cennamo, C., 2021. Competing in digital markets: A platform-based perspective. *Academy of Management Perspectives*, 35(2), pp.265-291.

20 *Supra* notes, 3 and 4.

21 *Supra* note 6.

22 Constantinides, P., Cennamo, C. & Aaltonen, A. (2021) The Evolution of Digital Platforms. *Working Paper*. Under Review

23 *Supra* note 23.

Even though in 2018, the European Commission forced Google to break up its anti-competitive practices – an *ex post* competition policy<sup>24</sup> – Google followed suit by changing its *governance scope* to offer separate licenses for each bundle of Google apps such as Maps, YouTube and Gmail, while charging for those. Exactly because Google Play has become the default option and with it making a number of other Google app bundles default options as well, OEM and users are deterred from leaving the Google Android ecosystem because of the high costs of switching.<sup>25</sup> For developers, these anti-competitive practices have an even bigger toll, since if they participate on Android versions without the pre-installed Google apps, not only is functionality between apps constrained, but also developers can no longer benefit from the network effects of the platform. They can no longer reach users and vice versa, users cannot find those third-party apps.<sup>26</sup> Thus, the governance scope is tightly interconnected to the market and technology scope of each digital platform.

Regulation such as the European Digital Markets Act are good starting points as *ex ante* regulation for digital platforms<sup>27</sup> because they focus on user base growth and revenue size to scrutinize gatekeeping activity. However, where they need further refinement is in understanding the interdependencies between the market, technology and governance scope of digital platforms that affect competition dynamics both within and across platform ecosystems. Scrutinizing the revenue generated through Google's specialized search and advertising business model alone, misses the point that the data collected from Google Search can help develop completely new services in Google's larger platform ecosystem, as directed by its technology and governance scope. The focus should not be on revenue and user base growth alone, which are the measures used by the Digital Markets Act to define a gatekeeper, but rather the technological architecture that enables apps to interconnect and how and with what impact for competition, as well as the governance rules for how value is created and captured by platform participants.

Digital platforms have the ability to respond to changes in different markets, adapt and even pivot to leverage new growth opportunities exactly because of their digital nature. They are not bound to the type of physical barriers that bound utility infrastructures nor are they constrained by industry boundaries. This makes regulating digital platforms very complex. We need both *ex ante* and *ex post* regulatory

approaches that can account for this dynamic evolution of digital platforms, by paying attention at their business models, technology architecture and governance rules. ■

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“**Digital platforms have the ability to respond to changes in different markets, adapt and even pivot to leverage new growth opportunities exactly because of their digital nature**”

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24 European Commission (2018) *Antitrust Investigation on Google* [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_18\\_4581](https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581).

25 Stigler Committee (2019). *Stigler Committee on Digital Platforms: Final Report* <https://www.chicagobooth.edu/research/stigler/news-and-media/committee-on-digital-platforms-final-report>.

26 *Supra* note 23.

27 Cabral, L., Haucap, J., Parker, G., Petropoulos, G., Valletti, T.M. & Van Alstyne, M.W., 2021. *The EU Digital Markets Act: A Report From a Panel of Economic Experts*. Cabral, L., Haucap, J., Parker, G., Petropoulos, G., Valletti, T. & Van Alstyne, M., The EU Digital Markets Act, Publications Office of the European Union, Luxembourg.

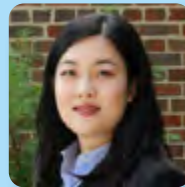




# INTERCONNECTION REGULATION FOR DIGITAL PLATFORMS: THE NEW CHALLENGES AND LESSONS FROM THE U.S. TELECOMMUNICATIONS INDUSTRY



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## 01 INTRODUCTION

Digital platforms are usually defined as a commercial network that enables transactions in the form of business-to-business (“B2B”), business-to-customer (“B2C”), or customer-

to-customer (“C2C”) exchange.<sup>1</sup> When digital platforms carry different networks, connection of multiple networks for the mutual exchange of traffic is often considered as a common form of platform interconnection.<sup>2</sup>

In the era of the digital economy, whether to impose interconnection regulation for digital platforms has been an important debate. With an increasing number of policy proposals, investigations, and lawsuits targeting digital platforms, the current debate revolves around whether in-

<sup>1</sup> Ahmad Asadullah, Isam Faik & Atreyi Kankanhalli, “Digital Platforms: A Review and Future Directions,” PACIS 2018 Proceedings (2018), available at <https://aisel.aisnet.org/pacis2018/248/>.

<sup>2</sup> “Terms and definitions,” U.S. Electronic Code of Federal Regulations, title 47 (2021) CFR §51.5, available at <https://www.law.cornell.edu/cfr/text/47/51.5> (defining interconnection as “the linking of two networks for the mutual exchange of traffic”).



terconnection regulation is necessary, what the regulation (if any) should entail, and how much any potential regulation may benefit and cost consumers and the overall economy.

One potential way to find answers to these questions is to look back at the experience of industries where interconnection regulation has been imposed. For example, it has been asked whether and to what extent the mandatory interconnection regulation framework established in the U.S. telecommunication industry can and should be applied to digital platforms. In this article, we argue that while the lessons from the telecommunication industry can shed light on the potential interconnection regulation for digital platforms, the distinctive features of digital platforms make the interconnection regulation for digital platforms a much more complex topic.

This article explores the new challenges of interconnection regulation for digital platforms. To proceed, the rest of the article is organized as follows. In Section 2, the article reviews the economic reasoning behind regulations. In Section 3, the article reviews the development and impact of interconnection regulation in the U.S. telecommunication industry. In Sections 4 and 5, the article discusses the distinctive features of digital platforms and considerations around interconnection regulations for digital platforms. The article concludes in Section 6.

## 02 THE ECONOMICS OF REGULATION

The main objective of regulation is to correct market failures and promote economic efficiency. Market failures may occur when the market lacks the conditions to achieve a competitive market outcome. Commonly observed causes of market inefficiency include monopoly power, negative externalities, and asymmetric information.<sup>3</sup> When these conditions are present, incentives of self-interested market participants may cause the equilibrium prices and quanti-

ties to deviate from the socially optimal levels. Under such circumstances, the market forces may lead to inefficient market outcomes and cause potential market failures.<sup>4</sup>

Regulation can be used as a tool to correct the deviation from the socially optimal outcomes, prevent market failures and promote economic efficiency.<sup>5</sup> In particular, regulation can help maintain market competition by restraining the abuse of monopoly power, internalizing the negative externalities to mitigate overconsumption of economic activities, and correcting the adverse selection by providing market participants symmetric information. It is generally observed that industries such as telecommunication, airlines, trucking, buses, railroads, natural gas, electricity, cable television, banking, and insurance are among the ones which have been heavily regulated, at least in part due to the presence of the aforementioned market conditions.<sup>6</sup>

Despite its potential benefits, regulation may also come at a cost. Regulation has been debated as a source of distorting firms' incentives to innovate and invest.<sup>7</sup> For example, a study conducted by the OECD finds that regulation can have both positive and negative impacts on innovation. While it can maintain a certain level of openness which provides the necessary conditions for research and innovation, regulation can discourage firms' R&D efforts, distort choices of technologies that are explored and adopted, and erect barriers to innovation by increasing the uncertainty and costs of the development process.<sup>8</sup>

## 03 LESSONS FROM INTERCONNECTION REGULATION IN THE U.S. TELECOMMUNICATIONS INDUSTRY

It has long been recognized that the U.S. telecommunication industry benefits significantly from network effects and

3 Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization* (Boston: Pearson/Addison Wesley, 2005).

4 Joseph E. Harrington, Jr., John M. Vernon & W. Kip Viscusi, *Economics of Regulation and Antitrust*, fourth edition (The MIT Press, 2005).

5 Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization* (Boston: Pearson/Addison Wesley, 2005). See also Joseph E. Harrington, Jr., John M. Vernon & W. Kip Viscusi, *Economics of Regulation and Antitrust*, fourth edition (The MIT Press, 2005); Joseph Stiglitz, *Government Failure vs. Market Failure: Principles of Regulations* (Cambridge University Press, 2010).

6 OECD, "Regulatory Reform and Innovation," available at <https://www.oecd.org/sti/inno/2102514.pdf>.

7 Philippe Aghion, Antonin Bergeaud & John Van Reenen, "The Impact of Regulation on Innovation," NBER Working Paper No. 28381, January 2021, available at [https://www.nber.org/system/files/working\\_papers/w28381/w28381.pdf](https://www.nber.org/system/files/working_papers/w28381/w28381.pdf).

8 OECD, "Regulatory Reform and Innovation," available at <https://www.oecd.org/sti/inno/2102514.pdf>.

has historically been highly concentrated.<sup>9</sup> In 1986, the three largest companies — AT&T (81.9 percent), MCI Communications (7.6 percent), and Sprint (4.3 percent) — accounted for a total share of 93.8 percent in the long-distance service market.<sup>10</sup>

As a market leader in providing the long-distance service, AT&T refused to interconnect with independent telephone companies, citing the quality standards of independents as a concern. The lack of an interconnected long-distance network forced many businesses to subscribe to multiple telephone companies with disconnected and incompatible networks.

Moreover, as subsidiaries of AT&T, the regional Bell operating companies (“RBOCs”) also patented and deployed improved technology that often prevented the independent telephone companies from interconnecting with their “long-distance” service.<sup>11</sup> In addition, by acquiring its equipment from an exclusive provider — Western Electric — AT&T only allowed its or Western Electric’s equipment to be connected to its network and charged high prices for such equipment.<sup>12</sup>

With the observed market power and a lack of interconnection, the U.S. Department of Justice (“DOJ”) filed a lawsuit against AT&T in 1974, alleging that AT&T monopolized the long-distance service market and that its refusal to interconnect telecommunications competitors and consumers’ premises equipment is liable for a “refusal to deal.”<sup>13</sup>

In 1996, the U.S. officially passed the Telecommunications Act (hereafter, the “1996 Act”), which, among other things, mandated interconnection of telecommunication networks.

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Built upon regulation by the Federal Communications Commission (“FCC”), the 1996 Act outlined a regulatory regime of duties to connect, of parity in quality between connections offered to the incumbent’s own affiliates and competitors, and of rates and contract terms that were just, reasonable, and nondiscriminatory.<sup>14</sup>

While the objective of the 1996 Act was to promote competition and facilitate entry, reduce prices, and increase the quality of telecommunication services, and encourage innovation in the telecommunication industry,<sup>15</sup> the realized outcome, however, was not deemed desirable by many critics.

As discussed in Economides (2005), the 1996 Act allowed the RBOCs to enter the long-distance call market and leverage a classic vertical price squeeze strategy, which caused some long-distance rivals to be marginalized or even driven out of the long-distance call market. He further considers the 1996 Act as an “immense” failure, noting that residential and small-business customers were faced with few choices and high prices for many telecommunication services.<sup>16</sup> In addition, another study published in 2006 finds that, with the persistence of long-term contracts, early termination fees, and stagnating prices, the 1996 Act was not effective

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9 Kurtis DeMaagd, Erik D. Goodman, Johannes M. Bauer, Kendall J. Koning, Tithi Chattopadhyay & Nicolas Friederici, “A Complex Systems Model of Industry Concentration and Broadband Infrastructure Investment,” TPRC 2011, September 24, 2011, available at <https://ssrn.com/abstract=1985745>.

10 FCC, “Trends in Telephone Service,” Industry Analysis Division Common Carrier Bureau, August 2001, available at [https://transition.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/IAD/trend801.pdf](https://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/trend801.pdf).

11 Robert W. Crandall, “The Failure of Structural Remedies in Sherman Act Monopolization Cases,” *Oregon Law Review* 80 (2001): 109-198, available at [https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/4590/80\\_Or\\_L\\_Rev\\_109.pdf?sequence=1&isAllowed=y](https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/4590/80_Or_L_Rev_109.pdf?sequence=1&isAllowed=y).

12 “The Break-up of AT&T and the Story of MCI,” Cybertelecom, November 13, 2020, available at [https://www.cybertelecom.org/notes/att\\_antitrust.htm](https://www.cybertelecom.org/notes/att_antitrust.htm).

13 Nicholas Economides, “Telecommunications Regulation: An Introduction,” in Richard R. Nelson (ed.), *The Limits and Complexity of Organizations* (2005), available at [http://neconomides.stern.nyu.edu/networks/Economides\\_Telecommunications\\_Regulation.pdf](http://neconomides.stern.nyu.edu/networks/Economides_Telecommunications_Regulation.pdf).

14 Federal Communications Commission, “S.652 - 104th Congress (1995-1996): Telecommunications Act of 1996,” S.652, 104th Congress, January 31, 1996, available at <https://www.congress.gov/bill/104th-congress/senate-bill/652>.

15 Federal Communications Commission, “S.652 - 104th Congress (1995-1996): Telecommunications Act of 1996,” S.652, 104th Congress, January 31, 1996, available at <https://www.congress.gov/bill/104th-congress/senate-bill/652>. See also “Telecommunications Act of 1996,” June 20, 2013, available at <https://www.fcc.gov/general/telecommunications-act-1996>.

16 Nicholas Economides, “Telecommunications Regulation: An Introduction,” in Richard R. Nelson (ed.), *The Limits and Complexity of Organizations* (2005), available at [http://neconomides.stern.nyu.edu/networks/Economides\\_Telecommunications\\_Regulation.pdf](http://neconomides.stern.nyu.edu/networks/Economides_Telecommunications_Regulation.pdf).

in reducing the costs of long-distance services for consumers.<sup>17</sup>

Importantly, the 1996 Act has been deemed by some as one reason for a reduction in innovation and investments across the telecommunication industry. For example, critics of the 1996 Act point out that innovation and investment “took a backseat to the short-term goal of rapidly increasing the number of new entrants into the market.”<sup>18</sup> Pociask (2004) finds that telecommunication capital spending by the incumbent local exchange carriers, including descendants of the original RBOCs and by newly formed competitive local exchange carriers, fell by about 50 percent from a peak in 2000.<sup>19</sup>

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Moreover, academic studies also point to substantial costs associated with telecommunication regulation. Hausman (1993) finds that regulating the telecommunication industry in the U.S. leads to significant costs in forgone consumer surplus and may ultimately slow productivity to the extent of billions of dollars in losses.<sup>20</sup> Depending on calculation mechanisms, Ellig (2006) estimates that the regulations in the telecommunication industry cost anywhere from \$25 to \$100 billion a year in lost consumer surplus due to factors such as prices above or below competitive levels, and reduced innovation and entrepreneurship.<sup>21</sup>

Overall, the lessons from the U.S. telecommunication industry suggest that mandatory interconnection regulation may not necessarily serve the goal of promoting market efficiency and consumer welfare. The regulation implementation can come at significant costs, particularly in undermining firms’ innovation and investment incentives.

## 04 DISTINCTIVE FEATURES OF DIGITAL PLATFORMS RELEVANT TO THE DEBATE OF INTERCONNECTION REGULATION

### A. Varying Degree of Network Effects Across Platform Types and Market Segments

A key feature of digital platforms is that they often benefit from network effects, meaning a platform becomes more attractive for the users on one side of the platform if the number of users on the same side (i.e. direct network effect) or the other side (i.e. indirect network effect) of the platform grows.<sup>22</sup>

Economic theories of network effects present mixed views of their impacts on market competition. One potential concern is that network effects may give rise to market concentration and potentially result in the so-called “winner-

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<sup>17</sup> Gene Kimmelman, Mark Cooper & Magda Herra, “The Failure of Competition Under the 1996 Telecommunications Act,” *Federal Communications Law Journal* 58, no. 3 (2006): Article 9, available at <https://www.repository.law.indiana.edu/fclj/vol58/iss3/9>.

<sup>18</sup> Adam D. Thierer, “UNE-P and the Future of Telecom ‘Competition’,” Cato Institute, TechKnowledge No. 48, February 1, 2003, available at <https://www.cato.org/techknowledge/une-p-future-telecom-competition>.

<sup>19</sup> Stephen Pociask, *A Failure to Communicate: Reforming Public Policy in the Telecommunications Industry*, (Economic Policy Institute, 2004), available at [https://www.epi.org/publication/books\\_failure/](https://www.epi.org/publication/books_failure/).

<sup>20</sup> Jerry Hausman, Timothy Tardiff & Alexander Belinfante, “The Effects of the Breakup of AT&T on Telephone Penetration in the United States,” *The American Economic Review* (1993), available at <https://www.jstor.org/stable/2117661>.

<sup>21</sup> Jerry Ellig, “Costs and Consequences of Federal Telecommunications Regulations,” *Federal Communications Law Journal* 58, no. 1 (2006): Article 3, available at <https://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=1422&context=fclj>.

<sup>22</sup> Armstrong, “Competition in Two-Sided Markets.” *The RAND Journal of Economics* 37, no. 3 (2006): 668–91, available at <http://www.jstor.org/stable/25046266>. See also Michael L. Katz & Carl Shapiro. “Systems Competition and Network Effects.” *The Journal of Economic Perspectives* 8, no. 2 (1994): 93–115, available at <http://www.jstor.org/stable/2138538>.



takes-all” market outcome.<sup>23</sup> That is, as a growing number of users makes a firm more valuable, it will in turn attract more users. This positive feedback loop could result in a consolidation of the marketplace and may ultimately lead to one firm dominating the market.<sup>24</sup> On the other hand, economists find that network effects can also constrain digital platforms’ incentives to increase prices.<sup>25</sup> For example, if a platform raises the price charged to one side of the market (e.g. merchants), such price increase may lead to not only a loss in the same side of the markets (e.g. merchants leave the platform), but also a loss in the other side of the markets (e.g. more consumers leave the platform due to indirect network effect), which can further reduce the attractiveness of the platform to merchants. Consequently, both the platform’s tendency to increase its price and the extent of the price increase will be lower than in the absence of network effects.<sup>26</sup>

Despite the depth of research on network effects and their impact on competitive outcomes, economic studies suggest that the influence of network effects appears to be increasingly complex across markets and a more comprehensive understanding of these dynamics is required.<sup>27</sup> One study by Sun & Tse (2007) argues that the “winner-takes-all” outcome is most likely seen when participants tend to single-home, while the network co-existence can happen if multi-homing is prevalent.<sup>28</sup> A more recent work by Boudreau & Jeppesen (2015) suggests that one needs to assess conditions including the presence of strong network effects, the stickiness and/or switching costs of the installed base,

and low and/or declining costs of adding more complementors to determine the consequence of platform network effects.<sup>29</sup>

While the presence of network effects is often observed for digital platforms, the magnitude of network effects often varies depending on different platform types and market segments.<sup>30</sup> For example, direct network effects are often high for social networks such as LinkedIn and WhatsApp. Indirect network effects are typically significant for platforms that facilitate transactions such as Amazon and platforms with an advertisement-based revenue model like YouTube. Different degrees of network effects can lead to different strengths of self-reinforcing feedback loops, which further leads to different growth rates of user bases.

## **B. Heterogeneous Preferences Toward Platform Interconnection**

It is observed that digital platforms have heterogeneous preferences in the levels of interconnection for their products or services, to satisfy their unique business models and profit maximization objectives. On one hand, a higher degree of interconnection allows firms to offer more flexibility and a larger set of choices to their customers. On the other hand, some firms may opt for a lower level of interconnection to provide customers with a more streamlined user experience, as more interconnection may be associated with higher risks in terms of reliability, security, and data privacy.<sup>31</sup>

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23 Olga Batura, Nicolai van Gorp & Pierre Larouche, “Online Platforms and the EU Digital Single Market,” November 23, 2015, available at [https://ec.europa.eu/information\\_society/newsroom/image/document/2016-7/nicolai\\_van\\_gorp\\_-\\_response\\_e-economics\\_to\\_the\\_uk\\_house\\_of\\_lords\\_call\\_for\\_evidence\\_14020.pdf](https://ec.europa.eu/information_society/newsroom/image/document/2016-7/nicolai_van_gorp_-_response_e-economics_to_the_uk_house_of_lords_call_for_evidence_14020.pdf). See also David S. Evans, “How Catalysts Ignite: The Economics of Platform-Based Start-Ups,” in Annabelle Gawer (ed.), *Platforms, Markets and Innovation* (Cheltenham, UK and Northampton, MA, US: Edward Elgar, 2009), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1279631](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1279631); David P. McIntyre & Asda Chintakananda, “Competing in network markets: Can the winner take all?” *Business Horizons* 57, no. 1 (2014): 117-125, available at <https://www.sciencedirect.com/science/article/abs/pii/S0007681313001407>.

24 Friso Bostoen, “Regulating Online Platforms Lessons from 100 Years of Telecommunications Regulation,” *Technology Review* 335 (2019): 335-40, available at [https://www.ptc.org/PTC20/Proceedings/Paper\\_YS\\_1\\_21\\_Bostoen\\_Friso.pdf](https://www.ptc.org/PTC20/Proceedings/Paper_YS_1_21_Bostoen_Friso.pdf).

25 Howard Shelanski, Samantha Knox & Arif Dhilla, “Network Effects and Efficiencies in Multisided Markets,” *127th meeting of OECD Competition Committee*, 2017, available at [https://one.oecd.org/document/DAF/COMP/WD\(2017\)40/FINAL/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2017)40/FINAL/en/pdf).

26 See, for example, Lapo Filistrucchi, Tobias J. Klein & Thomas O. Michielsen, “Assessing unilateral merger effects in a two-sided market: an application to the Dutch daily newspaper market,” *Journal of Competition Law and Economics* 8, no. 2 (2012): 297-329, available at <https://core.ac.uk/download/pdf/6633221.pdf>.

27 David S. Evans & Richard Schmalensee, “Why Winner-Takes-All Thinking Doesn’t Apply to the Platform Economy,” *Harvard Business Review*, May 4, 2016, available at <https://hbr.org/2016/05/why-winner-takes-all-thinking-doesnt-apply-to-silicon-valley>.

28 Mingchun Sun & Edison Tse, “When does the winner take all in two-sided markets?” *Review of Network Economics* 6, no. 1 (2007), available at <https://www.degruyter.com/document/doi/10.2202/1446-9022.1108/html>.

29 Kevin J. Boudreau & Lars B. Jeppesen, “Unpaid crowd complementors: The platform network effect mirage,” *Strategic Management Journal* 36, no. 12 (2015): 1761-1777, available at <https://onlinelibrary.wiley.com/doi/pdfdirect/10.1002/smj.2324>.

30 David P. McIntyre & Asda Chintakananda, “Competing in network markets: Can the winner take all?” *Business Horizons* 57, no. 1 (2014): 117-125, available at <https://doi.org/10.1016/j.bushor.2013.09.005>.

31 Wolfgang Kerber & Heike Schweitzer, “Interoperability in the Digital Economy,” *Journal of Intellectual Property, Information Technology and E-Commerce Law* 8 (2017): 39, available at <https://www.jipitec.eu/issues/jipitec-8-1-2017/4531>.

One eminent example to illustrate such heterogeneous preferences is to compare the different interconnection choices made by Apple and Google. Apple takes the approach of building a closed ecosystem that only allows individual software applications to be interconnected in a limited and restricted manner.<sup>32</sup> Specifically, apps can only be downloaded from the App Store on Apple devices.<sup>33</sup> If a developer would like to develop an app for Apple devices, he or she must pay a developer fee and then distribute the app through the App Store.<sup>34</sup> This streamlines the process for app development and download across all Apple devices. The near-perfect control of the developer and customer experience with a closed ecosystem offers consistency and predictability in terms of upgrades, performance, and operation across different generations of Apple devices.<sup>35</sup> Apple's closed ecosystem has been seen as one key reason why Apple can provide better user experience, higher product quality and security, and constant innovation.

Google, on the other hand, chooses to build an open ecosystem that allows individual software applications to be interconnected more freely and broadly.<sup>36</sup> Specifically, Google's Android operating system runs on a wide variety of phones made by a variety of original equipment manufacturers.<sup>37</sup> Android is open source, meaning that individual developers can go into the code and change it as they see fit to tailor to certain needs. Such open architecture allows customization and flexibility.<sup>38</sup> Having open-source code means that if there are issues with the code, many people not even part of the development team will be looking at the source and can help find solutions, leading to more efficiency and collaboration. Also, Android's open-source nature means that one can download apps from not only the Google Play store but also third-party app platforms.<sup>39</sup>



*One eminent example to illustrate such heterogeneous preferences is to compare the different interconnection choices made by Apple and Google*

Both the Apple and Google platforms have been successful, with substantial adoption by developers and consumers. Bresnahan et al. (2014) note that Android and iOS are roughly equally attractive as platforms to U.S. developers and that neither platform has attracted significantly more applications than the other.<sup>40</sup> With both platforms and users having heterogeneous interconnection preferences and platforms of various interconnection levels co-existing and well-accepted by the markets, it is not clear whether a single threshold of “optimal” interconnection level necessarily exists and should be implemented for all digital platforms.

### **C. Innovative Business Nature and Dynamic Competition of Digital Platforms**

Even in markets that are concentrated, digital platforms often have a highly innovative business nature. It is found that digital platforms often involve a much higher level of R&D spending compared to other industries. The biggest R&D spenders worldwide are fairly consistently large tech companies, with Amazon and Alphabet topping the list and Apple, Microsoft and Facebook following closely.<sup>41</sup> In 2018, 31.3 percent of technology industry spending was on R&D investment, with the total amount equal to 268.8 billion U.S. dollars. Among the top 50 companies that have the highest

<sup>32</sup> “‘Open’ vs. ‘Closed’ Software Ecosystems: A Primer,” LeasePilot, available at <https://leasepilot.co/blog/open-vs-closed-software-ecosystems-a-primer/>.

<sup>33</sup> Chris Hoffman, “Android is ‘Open’, and iOS Is ‘Closed’ — But What Does That Mean to You?” How-To Geek, June 20, 2017, available at <https://www.howtogeek.com/217593/android-is-open-and-ios-is-closed-but-what-does-that-mean-to-you/>.

<sup>34</sup> “Apple Developer Program,” Apple, available at <https://developer.apple.com/programs/>.

<sup>35</sup> Ian Sherr & Michael Totty, “Is It Better for Businesses to Adopt Open or Closed Platforms?” Wall Street Journal, November 15, 2011, available at <https://www.wsj.com/articles/SB10001424052970204554204577023994194742720>.

<sup>36</sup> “‘Open’ vs. ‘Closed’ Software Ecosystems: A Primer,” LeasePilot, available at <https://leasepilot.co/blog/open-vs-closed-software-ecosystems-a-primer/>.

<sup>37</sup> Ian Sherr & Michael Totty, “Is It Better for Businesses to Adopt Open or Closed Platforms?” Wall Street Journal, November 15, 2011, available at <https://www.wsj.com/articles/SB10001424052970204554204577023994194742720>.

<sup>38</sup> Chris Hoffman, “Android is ‘Open’, and iOS Is ‘Closed’ — But What Does That Mean to You?” How-To Geek, June 20, 2017, available at <https://www.howtogeek.com/217593/android-is-open-and-ios-is-closed-but-what-does-that-mean-to-you/>.

<sup>39</sup> Priyadharshini, “App Development with Android or the iOS: Which One to Choose?” Simplilearn, July 6, 2021, available at <https://www.simplilearn.com/android-or-ios-app-development-which-is-the-best-article>.

<sup>40</sup> Timothy Bresnahan, Joe Orsini & Pai-Ling Yin, “Platform Choice by Mobile Apps Developers,” February 13, 2014, available at <https://siepr.stanford.edu/system/files/multihoming%20BOY.pdf>.

<sup>41</sup> Matthew Lane, “How Competitive Is the Tech Industry?” Disruptive Competition Project, July 29, 2019, available at <https://www.project-disco.org/competition/072919-how-competitive-is-the-tech-industry/>.

R&D expenses, 19 of them are in platform-related sectors, including Software, Internet or Computing and Electronics.<sup>42</sup>

Moreover, the incumbent platforms can face fierce competition from young “disruptive” rivals, which challenge the incumbents with their revolutionary products or services. It is observed that many digital platform markets evolve through sequential “winner-takes-all” battles, with superior new platforms replacing the old ones.<sup>43</sup> For example, Slack, by focusing on “a new experience” and offering “the simplest and easiest way” for teams to communicate and collaborate, has taken up significant market shares from other messaging platforms. New companies like TikTok have also been able to carve out successful markets and challenge the established tech firms in those specific categories.<sup>44</sup> Thus, even the more successful platforms need to maintain strong innovation efforts.

# 05

## NEW CHALLENGES OF INTER-CONNECTION REGULATION FOR DIGITAL PLATFORMS

### A. Current Debates Around Interconnection Regulation for Digital Platforms

Practically, there have been past regulations and ongoing debates on interconnection regulation for digital platforms

across multiple jurisdictions. However, no consensus has been reached among regulators and policymakers in terms of the benefits, costs, and optimal form of interconnection regulation for digital platforms.

In the U.S., the FCC established a regulatory mechanism for resolving Internet interconnection disputes on a case-by-case basis in 2015 and suggested that “*the best approach is to watch, learn, and act as required, but not intervene now, especially not with prescriptive rules.*”<sup>45</sup> The FCC later on abandoned the regulatory mechanism and deferred to the antitrust authorities to settle any such disputes.<sup>46</sup> In particular, the FCC noted the following benefits of the antitrust laws over interconnection regulation: “(1) *the rule of reason allows a balancing of pro-competitive benefits and anti-competitive harms; (2) the case-by-case nature of antitrust allows for the regulatory humility needed when dealing with the dynamic Internet; (3) the antitrust laws focus on protecting competition; and (4) the same long-practiced and well-understood laws apply to all Internet actors.*”<sup>47</sup>

In Europe, the European Commission (“EC”) has also advocated for ensuring the interconnection of digital goods, services, platforms, and communication networks. In its 2010 Digital Agenda, the EC has identified the lack of interoperability as one of the significant obstacles to a thriving economy.<sup>48</sup> In 2020, an interoperability requirement for large online platforms has been suggested by the EC in its proposed Digital Markets Act (“DMA”), as a way to encourage competition.<sup>49</sup> However, commentators of the DMA have also expressed concerns over possible adverse effects of the DMA in terms of innovation incentives, noting that the EC “*has yet to demonstrate that the new revolution in competition law and policy proposed in the DMA*

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42 Skillicorn, “Top 1000 companies that spend the most on Research & Development (charts and analysis),” Idea to Value, August 28, 2019, available at <https://www.ideatovalue.com/inno/nickskillicorn/2019/08/top-1000-companies-that-spend-the-most-on-research-development-charts-and-analysis/>.

43 David McIntyre, “Beyond a ‘Winner-Takes-All’ Strategy for Platforms,” MIT Sloan Management Review, January 3, 2019, available at <https://sloanreview.mit.edu/article/beyond-a-winner-takes-all-strategy-for-platforms/>.

44 Matthew Lane, “How Competitive Is the Tech Industry?” Disruptive Competition Project, July 29, 2019, available at <https://www.project-disco.org/competition/072919-how-competitive-is-the-tech-industry/>.

45 Federal Communications Commission, “Report and Order on Remand, Declaratory Ruling, and Order,” March 12, 2015, available at [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-24A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1.pdf).

46 Tim Tardiff, “Ex Ante Regulation of Digital Platforms?: Cautionary Tales From Telecommunications,” Competition Policy International, January 27, 2021, available at <https://www.competitionpolicyinternational.com/ex-ante-regulation-of-digital-platforms-cautionary-tales-from-telecommunications/>.

47 Federal Communications Commission, “Declaratory Ruling, Report and Order, and Order,” March 12, 2015, available at <https://docs.fcc.gov/public/attachments/DOC-347927A1.pdf>.

48 European Commission, “Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Agenda for Europe,” 2010, available at <https://eufordigital.eu/library/a-digital-agenda-for-europe/>.

49 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),” December 15, 2020, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0842&from=en>.

will not further suppress innovation and entrepreneurship in Europe.”<sup>50</sup>

## B. Complexity with Mandatory Interconnection Regulation

Given that digital platforms have many distinctive features, regulators should consider all the factors specific to digital platforms in designing and evaluating any potential interconnection regulation for digital platforms. In addition, in light of the criticisms of the 1996 Act as discussed above, including a lack of impact on promoting market efficiency and consumer welfare in the U.S. telecommunication industry, it is unclear whether the interconnection regulation framework from the U.S. telecommunication industry should necessarily apply to digital platforms.<sup>51</sup> While the various levels of network effects and different types of platforms and markets complicate the need of government regulation in general, whether to require mandatory interconnection regulation in particular adds additional complexity to the puzzle.

Moreover, even if there are serious market failures for digital platforms such that interconnection regulation is pursued, there may not be a “one-rule-fits-all” regime for all digital platforms. In particular, mandatory interconnection may not be the best approach given that there may not be an “optimal” level of interconnection that applies universally to all digital platforms. Given the heterogeneous interconnection preferences from both platforms and users’ perspectives, a single threshold of mandatory interconnection regulation may not necessarily serve the purpose to improve consumer welfare and market efficiency.

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**“Given that digital platforms have many distinctive features, regulators should consider all the factors specific to digital platforms in designing and evaluating any potential interconnection regulation for digital platforms**

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## C. Potential Issues with Interconnection Regulation for Digital Platforms

In addition to controversies around the optimal form of interconnection regulation, it is important to note that the costs associated with interconnection regulation could be significant for digital platforms.

Interconnection regulation may suppress platforms’ innovation and investment incentives by creating a tension between static and dynamic welfare considerations, the former of which refers to the short-term benefits to consumers (e.g. additional product options due to the mandatory interconnection) whereas the latter refers to the long-term market efficiency (e.g. reduced innovation incentives and quality improvement due to the mandatory interconnection).<sup>52</sup> In particular, if a large digital platform is forced to interconnect with other competitors without appropriate compensation, there may be diminished incentives for the platform to invest the necessary time and resources to innovate and further improve its network, considering that part of its R&D achievements might have to be shared with its rivals.

Moreover, mandatory interconnection could also lead to the free-rider problem and collusive behavior that have the impact of reducing innovation incentives.<sup>53</sup> In particular, smaller platforms may be able to take advantage of the shared network developed by large platforms without having to incur the costs to develop and expand their own networks. The need for standardization and coordination across competing platforms may also soften their incentive to compete and provide opportunities for potential collusive behavior. Therefore, taken altogether, the incentives of all digital platforms to invest and innovate may be diminished if they collectively believe that all players in the market will be mandated to share a successful innovation.

Finally, given the rapid development of technology and market conditions, it is less clear whether *ex ante* regulation is the key to interconnection-related issues for digital platforms.<sup>54</sup> There are competitive opportunities created by technological advancement. For example, the innovative

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50 See, for example, Meredith Broadbent, “Implications of the Digital Markets Act for Transatlantic Cooperation,” September 15, 2021, available at <https://www.csis.org/analysis/implications-digital-markets-act-transatlantic-cooperation>.

51 Tim Tardiff, “Ex Ante Regulation of Digital Platforms?: Cautionary Tales From Telecommunications,” Competition Policy International, January 27, 2021, available at <https://www.competitionpolicyinternational.com/ex-ante-regulation-of-digital-platforms-cautionary-tales-from-telecommunications/>.

52 U.S. Department of Justice, Antitrust Division, “Chapter 7 Unilateral, Unconditional Refusals to Deal with Rivals,” available at [https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-7#N\\_37\\_](https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-7#N_37_).

53 William B. Tye & Carlos Lauperta, “The economics of pricing network interconnection: Theory and application to the market for telecommunications in New Zealand,” *Yale Journal on Regulation* 13 (1996): 419, available at <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1438&context=yjreg>. See also Jacques Cremer, Yves-Alexandre de Montjoye & Heike Schweitzer, “Competition policy for the digital era,” European Commission, available at <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>.

54 Tim Tardiff, “Ex Ante Regulation of Digital Platforms?: Cautionary Tales From Telecommunications,” Competition Policy International, January 27, 2021, available at <https://www.competitionpolicyinternational.com/ex-ante-regulation-of-digital-platforms-cautionary-tales-from-telecommunications/>.



nature of digital platforms “fosters new forms of competition against traditional, incumbent firms and services that often benefit consumer choice and prices,” which is difficult to be incorporated as part of the regulation.<sup>55</sup> In situations where the interconnection regulation cannot adapt quickly to new technologies or market conditions, there may be significant harms to the overall efficiency of competition in the markets of digital platforms.

Overall, although interconnection regulation may have some immediate benefits, these static benefits may come at high costs of distorting market efficiency and harming consumer welfare in the long run.<sup>56</sup> The costs on innovation incentives and consumers’ long-term well-being should be given full consideration when deciding whether and how to establish an interconnection regulation regime for digital platforms.

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*Overall, although interconnection regulation may have some immediate benefits, these static benefits may come at high costs of distorting market efficiency and harming consumer welfare in the long run*

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# 06

## CONCLUDING REMARKS

This article reviews the distinctive features of digital platforms and the lessons from the telecommunications industry and concludes that establishing a potential interconnection regulation regime for digital platforms can be a complex task. It remains an open question as to whether interconnection regulation is necessary, what the regulation (if any) should entail, and how much any potential regulation may benefit and cost for consumers and the overall economy.

With network effects varying across platform types and market segments, and different levels of interconnection preferred by platforms and consumers, a single threshold of regulatory intervention may not serve the purpose of improving consumer welfare and economic efficiency. Given the more innovative business nature and dynamic competition faced by digital platforms, the potentially significant costs on undermining platforms’ innovation and investment incentives and distorting consumers’ long-term welfare need to be cautiously examined and taken into full consideration. ■

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<sup>55</sup> Justin S. Brown, “Revisiting the Telecommunications Act of 1996,” *PS: Political Science & Politics* 51, no. 1 (2018): 129-32, available at <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/346386E824534B014FAB77EBFEA65910/S1049096517002001a.pdf/revisiting-the-telecommunications-act-of-1996.pdf>.

<sup>56</sup> U.S. Department of Justice, Antitrust Division, “Chapter 7 Unilateral, Unconditional Refusals to Deal with Rivals,” available at [https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-7#N\\_37\\_](https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-7#N_37_).





# PLATFORM REGULATION: TAKING STOCK OF LESSONS FROM THE MEDIA SECTOR



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## 01 INTRODUCTION

Due to sector-specific economics, such as network effects and customer inertia, and the lack of appropriate regulation that could “tame” them, certain online platforms have engaged in various types of damaging conduct, ranging

from user exploitation through the processing of excessive amounts of (personal and commercially sensitive) data to multi-layered self-preferencing practices, which have prevented other businesses from building a sustainable user base. In a first wave of initiatives, antitrust laws have taken the lead in addressing issues such as those described above. Numerous infringement decisions imposing hefty fines on platforms have been adopted while several jurisdictions have reformed (or are in the process of reforming) their competition rules to make them fit for the digital age.

Over the past couple of years, we have been witnessing a second wave of activity. Policymakers across the globe posit that, even if competition rules are adapted to the specificities of digital markets, they are not sufficient to address the problems arising from the “gatekeeping” role that certain platforms perform.<sup>1</sup> There seems to be broad consensus that vigorous competition enforcement must be complemented with *ex ante* rules that would level the playing field in digital markets by promoting fairness in platform-to-business relations. Numerous initiatives that have been undertaken in recent years, such as market studies and policy reports, have recently culminated in legislative proposals, including the EU proposal for a Digital Markets Act (“DMA”)<sup>2</sup> and the U.S. Ending Platform Monopolies Act (“EPMA”).<sup>3</sup>

To state the obvious, there are many sectors of the economy that have been subject to specific rules for the same reason that legislators around the globe attempt to regulate platforms; a natural tendency to concentration combined with a favorable regulatory regime has led to certain platforms acquiring significant bargaining power, depriving (business and end users) of choice. What is less obvious is whether the proposals for platform regulation that have emerged recently have taken stock of the lessons learnt from the design and implementation of rules regulating those other sectors. This contribution will attempt to answer this question by discussing those proposals in the light of the experience we have gained from the media sector. I will focus on the following four areas where I believe useful analogies between media and platform regulation can be drawn:

- Rules restricting concentration through presumptions of market power: In Part II, I will discuss whether recent proposals for platform regulation, which establish thresholds to adduce “gatekeeping” power, adequately consider and address the drawbacks that have arisen from quantitative criteria that have been set to restrict media concentration;
- The audiences’ role in controlling market (or opinion-forming) power: In Part III, I will discuss whether relying on audiences to consume and create a wide range of information about matters of common concern has paid off. If not, why should we rely on online users to promote fairness in platform-to-business relations?

- Mandated access to a valuable input: In Part IV, I will attempt to draw lessons from the obligation imposed on certain broadcasters to share premium content in order to assess how the obligation to share data has been designed; and
- Merger control rules: In Part V, I will discuss issues arising from “killer acquisitions” and whether the approach followed in certain jurisdictions to regulate media mergers could prove useful to facilitate scrutiny of M&A activity in markets where platforms operate.

I conclude by making some forward-looking remarks on the legislative proposals for platform regulation that have surfaced in recent years.

## 02

### RESTRICTING CONCENTRATION THROUGH PRESUMPTIONS OF MARKET POWER

Media markets have a natural tendency to concentration, which several jurisdictions have attempted to restrict in order to limit the power of specific organizations to influence public opinion. It is generally believed that, due to the ability of the media to shape the political agenda and to guide public opinion, accumulation of market power in the hands of a few “may result in a skewed public discourse where certain opinions are excluded or under-represented.”<sup>4</sup> The means through which national laws aim at alleviating concerns over media concentration vary from one country to another. For example, certain States establish limitations on the (ad) market shares that may be acquired by the same person or organization, whereas others impose restrictions on the size of the audiences that a media firm may reach.<sup>5</sup>

1 See, for instance, European Commission, Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (“DMA Proposal”), COM(2020) 842 final, Recital (5), <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0842&from=en>; U.S. House of Representatives, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Investigation of Competition in Digital Markets (U.S. House Report), pp. 6, 20 and 396.

2 *Ibid.*

3 A bill to promote competition and economic opportunity in digital markets by eliminating the conflicts of interest that arise from dominant online platforms’ concurrent ownership or control of an online platform and certain other businesses (Ending Platform Monopolies Act or “EPMA”). H.R.3825 — 117th Congress (2021-2022), <https://www.congress.gov/bill/117th-congress/house-bill/3825/text?r=34&s=1>.

4 European Commission Staff Working Document on Media Pluralism in the Member States of the EU, SEC (2007) 32, 5.

5 An overview of rules that apply in Europe can be found in Centre for Media Pluralism and Media Freedom (2021), Monitoring Media Pluralism in the Digital Era, [https://cadmus.eui.eu/bitstream/handle/1814/71970/CMPF\\_MPM2021\\_final-report\\_QM-09-21-298-EN-N.pdf?sequence=1&isAllowed=y](https://cadmus.eui.eu/bitstream/handle/1814/71970/CMPF_MPM2021_final-report_QM-09-21-298-EN-N.pdf?sequence=1&isAllowed=y).

Once the relevant thresholds are fulfilled, the media company under consideration is presumed to have acquired significant opinion-forming power, thereby falling under the scope of stricter rules pertinent to “content bottlenecks.”

Those thresholds can be (and have been) criticized on several grounds. First, the design of those rules has undermined their effectiveness. For example, in several jurisdictions, the authority in charge of overseeing **compliance** can examine whether the applicable thresholds have been exceeded only after an *ex officio* investigation or once a complaint has been submitted.<sup>6</sup> In other words, there are no rules that require the company concerned to notify the competent authority that it indeed meets those thresholds. The absence of rules that would increase transparency of media ownership has exacerbated enforcement problems.<sup>7</sup> Second, broadly speaking, rules attempting to restrict media concentration are far from **flexible or balanced**. There are no rules that would enable the competent authority to examine whether an entity that does not meet those thresholds may nevertheless hold significant opinion-forming power (e.g. because the regulatory thresholds are high). Moreover, there is no mechanism that would enable the companies that exceed the applicable thresholds to rebut the presumption that they can affect citizen behavior. Third, “static” rules for media markets, which move at a **fast pace**, are likely doomed to fail.

Recent proposals for platform regulation are based on the same logic as the above rules. Most notably, the DMA proposal<sup>8</sup> and the EPMA<sup>9</sup> establish a set of quantitative criteria (accompanied by a set of qualitative parameters) to determine whether a platform qualifies as a “gatekeeper” or “covered platform.” If those criteria are met, that platform is presumed to have the ability to engage in unfair practices that harm its business users. Compared to antitrust enforcement, which requires a detailed analysis of the competitive constraints exercised on the company under investigation, this approach has a distinct advantage, namely straightforwardness; quantitative criteria “curb shenanigans and flannelling by companies trying to argue against all common sense, and speed up the process of designation.”<sup>10</sup> But, have the EU and U.S. legislators drawn any lessons from the flaws underpinning the media ownership rules discussed above?

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“Those thresholds can be (and have been) criticized on several grounds

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**Designation process and information gathering.** Leaving aside the fact that the European Commission has yet to explain why it proposed the thresholds it did (e.g. why is having 45 – and not 46 – million monthly active users sufficient for a platform to qualify as a gatekeeper?), the DMA proposal would seem prepared to address some of the issues that arose from the design and implementation of media ownership restrictions. For starters, business users would not rely only on the Commission to monitor whether a platform falls under the scope of the DMA. Though the Commission would not be prevented from designating platforms as “gatekeepers” at any time,<sup>11</sup> the platforms concerned would be required to notify the Commission within three months after the applicable thresholds are met and provide it with all the relevant information.<sup>12</sup>

Unfortunately, the EPMA does not clarify how the designation of a company as a “covered platform” is to take place.<sup>13</sup> Would it be the platform or the regulator (the Federal Trade Commission or the Department of Justice) that would collect the relevant data? If it is the latter, our experience from the media sector indicates that the compliance hurdles may be considerable.

**Flexible and balanced rules.** Turning to the matter of whether the recently proposed rules for platforms are adaptable to the specificities of digital markets, the EPMA is quite rigid. Similar to the instruments setting media ownership restrictions, it does not include rules that would enable the competent authorities to assess whether a platform that does not fulfil the quantitative criteria it sets should comply with the obligations the Act establishes. This approach falls short of addressing one of the issues that might prevent effective competition in digital markets that was discussed in the U.S. House Report, that is, “tipping” (the Report goes to great lengths to explain how Facebook has tipped the social net-

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6 See, for instance, Greek Law No. 3592/2007 of 19/07/2007 on Media Concentration and Licensing Procedures [2007] Official Gazette 161/3371.

7 See, for instance, Centre for Media Pluralism and Media Freedom (2021). Monitoring Media Pluralism in the Digital Era. Country Report. Greece, p. 10, [https://cadmus.eui.eu/bitstream/handle/1814/71948/greece\\_results\\_mpm\\_2021\\_cmpf.pdf?sequence=1&isAllowed=y](https://cadmus.eui.eu/bitstream/handle/1814/71948/greece_results_mpm_2021_cmpf.pdf?sequence=1&isAllowed=y).

8 DMA proposal, Article 3(2).

9 EPMA, Section 5(B).

10 Cristina Caffarra & Fiona Scott Morton, The European Commission Digital Markets Act: A Translation, VOX (January 5, 2021), <https://voxeu.org/article/european-commission-digital-markets-act-translation>.

11 DMA proposal, Article 3(4).

12 *Ibid.* Article 3(3).

13 EPMA, Section 6(A).



work market in its favor).<sup>14</sup> Contrary to its U.S. counterpart, the DMA proposal is more flexible; it establishes a mechanism that would allow the Commission to bring under the DMA's scope platforms that do not exceed the thresholds it establishes. Though it is meant to address concerns relating to "tipping,"<sup>15</sup> the proposed rule is not devoid of drawbacks.

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“Unfortunately, the EPMA does not clarify how the designation of a company as a “covered platform” is to take place

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As it currently stands, the proposal mentions that, in conducting the relevant assessment, the Commission is expected to consider several parameters, such as lock-in, scale and scope effects arising from data, and structural market characteristics.<sup>16</sup> An element that is arguably missing from the above list is user behavior. In other words, an assessment of whether a large online platform is a gatekeeper must not be restricted to supply-side considerations. It should further consider consumption patterns.<sup>17</sup> Part III will explain in detail how ignoring the demand side has affected the effectiveness of media regulation and how it sets certain provisions of the DMA up for failure. For the purposes of this section, suffice it to say that having a flexible rule in place to allow for early intervention in order to prevent concentration of market power is not enough; the rule in question must adequately reflect how the market it regulates works in practice.

Approaching the matter of flexibility from the platforms' perspective, both the DMA proposal and the EPMA establish rules that would enable a platform to rebut the presumption that it is a “gatekeeper” or a “covered platform.” Pursuant to

the EPMA, a party that is subject to a covered platform designation may petition for review within 30 days of the issuance of such designation (and at a later stage as markets evolve).<sup>18</sup> Under the DMA proposal, a platform may present “sufficiently substantiated” arguments to demonstrate that it does not qualify as a “gatekeeper.”<sup>19</sup> Essentially, this would apply to platforms that meet the thresholds but may not constitute an “important gateway” (e.g. because there is no business user or end user lock-in).<sup>20</sup> Compared to media ownership rules, which are based on presumptions that cannot be rebutted, the above rules are not only able to take account of the specificities of the markets they regulate, they are also aligned with the principle of proportionality. Put differently, they are more balanced (i.e. mindful of the rights of both sides).

**Reliance on qualitative criteria.** Finally, though the EU and U.S. proposals have opted for the same approach that was followed to regulate media concentration, recent initiatives in other jurisdictions seem to dismiss the idea of using “static” criteria to adduce gatekeeping power. Pursuant to the recently revised German Act Against Restraints of Competition,<sup>21</sup> the Bundeskartellamt may issue a decision declaring that an Undertaking is of Paramount Significance for Competition Across Markets (“UPSCAM”).<sup>22</sup> Contrary to the EPMA and the DMA proposal, the German Act does not set quantitative criteria that an UPSCAM must fulfil in order to qualify as such. The German Act refers to qualitative parameters that may influence the Bundeskartellamt's decision, including vertical integration and its activities in otherwise related markets, access to data relevant for competition, and its influence on third parties' businesses.<sup>23</sup>

The UK seems to be moving in the same direction; the Code of Conduct for platforms with a “Strategic Market Status” (“SMS”) is likely to be influenced by qualitative considerations, such as the “position to exercise market power over a gateway or bottleneck in a digital market, where [it controls] oth-

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<sup>14</sup> U.S. House Report, pp. 13, 134, 141-143, and 384.

<sup>15</sup> DMA proposal, Recital (25).

<sup>16</sup> *Ibid.* Article 3(6).

<sup>17</sup> This is vividly illustrated by recent antitrust decisions. See, for instance, Commission Decision of June 27, 2017 relating to proceedings under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the Agreement on the European Economic Area (Case AT.39740, *Google Shopping*), C(2017) 4444 final, paragraphs 307-312 and fn. 333.

<sup>18</sup> EPMA, Sections 7 and 6(b).

<sup>19</sup> DMA proposal, Article 3(4).

<sup>20</sup> DMA proposal, Recital (23).

<sup>21</sup> An unofficial translation into English is available at: <https://www.d-kart.de/wp-content/uploads/2021/01/GWB-2021-01-14-engl.pdf>.

<sup>22</sup> *Ibid.* Section 19a(1).

<sup>23</sup> *Ibid.*



ers' market access" and the "powerful negotiating position" a platform holds vis-à-vis businesses that rely on it to survive.<sup>24</sup> Focusing on qualitative considerations is not groundless; invariable conditions may be designed in a way that does not accommodate markets that evolve rapidly. Nevertheless, one may wonder whether relying on qualitative parameters alone can serve legal certainty, which is also important for protecting the rights of those operating in such markets.

It is too soon to tell which approach is best. Germany has only recently started to undertake enforcement initiatives against platforms that may qualify as UPSCAM,<sup>25</sup> whereas in the other three jurisdictions examined above the legislative process has not been concluded yet. On the face of it, drawing from the application of media ownership rules, it seems that the DMA proposal introduces a sensible approach. Though it establishes quantitative conditions to assess whether a platform is a "gatekeeper," there are two mechanisms to address issues arising from the rigidity of (user, business user, and turnover/market capitalization) thresholds. The Commission may designate as gatekeepers platforms that do not fulfil the quantitative criteria, whereas platforms that meet the thresholds are allowed to put forward arguments to rebut designation. The examples discussed above show that the relevant rules would benefit from improvements, but they seem to be a step in the right direction.

## 03

### THE ROLE OF USERS IN CONTROLLING MARKET (OR OPINION-FORMING) POWER

Two of the main changes that digital technologies have brought about in the media sector are content abundance

and the audiences' ability to exercise control over content. Those two changes have prompted a wave of de-regulation; some jurisdictions have either softened or altogether abolished their media ownership restrictions for the reason that the amount of information citizens have at their fingertips and their ability to choose or create content allow for a "healthy varied (media) diet" and an active participation in public discourse.<sup>26</sup> However, the assumption on which de-regulation was grounded was false, for it did not reflect audience behavior. The ability to consume content on-demand has increased content personalization, which restricts exposure to diverse ideas, whereas it can be doubted whether audiences use platforms that have emerged in recent years (e.g. social networks) to distribute content that contributes to public discourse (rather than taking selfies).<sup>27</sup> In other words, it was wrong to rely on the audiences in order to achieve the normative goal initially pursued by media ownership rules, namely media pluralism.

Regrettably, some of the recent proposals for platform regulation either purposefully or unintentionally ignore the lesson learnt from the media sector. Most notably, the DMA proposal includes provisions that place the burden on the online user as a means to achieve the objective the instrument pursues, that is, fairness in P2B relations. One of those provisions is the obligation that would require platforms to refrain from combining personal data sourced from many different services. However, such prohibition would *not* apply if the end user were presented with the specific choice and provided consent in the sense of the GDPR.<sup>28</sup> It is submitted that this solution is not adequate to address the issues it seeks to resolve. Though it is based on the standard set by the GDPR, it does not reflect how users actually behave. The GDPR is grounded on the principle of "informational self-determination."<sup>29</sup> This principle rests on the assumption that data subjects are sufficiently informed about and able to assess how their data is processed when they grant their consent. However, in practice, this does not represent how data subjects act. This is best illustrated by the so-called "privacy paradox," a term that is used to describe the well-documented phenomenon that, while users claim

<sup>24</sup> J. Furman, D. Coyle, A. Fletcher, D. McAuley, & P. Marsden (2019), Unlocking Digital Competition, Report of the Digital Competition Expert Panel (Furman report), pp. 55 and 59. The logic underlying the Furman recommendation was endorsed by the CMA in its sector inquiry report. See CMA (2020), Online Platforms and Digital Advertising Market Study, paragraph 7.56 et seq.

<sup>25</sup> See, for instance, Bundeskartellamt. Press Release of June 21, 2021. Proceeding against Apple based on new rules for large digital companies (Section 19a(1) GWB) – Bundeskartellamt examines Apple's significance for competition across markets [https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/21\\_06\\_2021\\_Apple.html](https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/21_06_2021_Apple.html).

<sup>26</sup> I discuss these issues in detail in Konstantina Bania, The Role Of Media Pluralism in the Enforcement of EU Competition Law, pp. 50-83 (Concurrences, 2019).

<sup>27</sup> *Ibid.* pp. 74-83.

<sup>28</sup> DMA proposal, Article 5(a).

<sup>29</sup> European Union Agency for Fundamental Rights and Council of Europe, Handbook on European Data Protection Law, 18 (2018).

to care about data protection, this is not mirrored in their online behavior;<sup>30</sup> users usually agree with the platforms' Terms of Use *without* reading them or after *only partially* reading them.<sup>31</sup> Even if users' consent in the above cases renders data processing compliant with the GDPR, the privacy paradox reinforces concentration of market power. In other words, the DMA proposal does not adequately consider whether users exercise competitive constraints on platforms amassing excessive amounts of data.

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“**Regrettably, some of the recent proposals for platform regulation either purposefully or unintentionally ignore the lesson learnt from the media sector**

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Similar remarks can be made on other obligations included in the DMA proposal. For example, according to the DMA proposal, gatekeepers should allow end users to uninstall any pre-installed apps on a CPS.<sup>32</sup> Gatekeepers should also refrain from technically restricting the end users' ability to switch between different services to be accessed through the gatekeepers' OS.<sup>33</sup> The above provisions do not take account of certain important characteristics of the markets regulated by the DMA. Those markets are characterized by customer inertia and “stickiness” to default settings. Clearly, the Commission is aware of these issues. For example, in the Impact Assessment accompanying the DMA proposal, it refers to behavioral bias as a problem that merits attention.<sup>34</sup> Interestingly, the Impact Assessment correctly identifies **the cause** of the problem, pinpointing the advanced behavioral profiling and testing techniques (e.g. sneaking items into the user's shopping basket, social pressure) used by gatekeepers to nudge users into certain decisions.<sup>35</sup> The

Impact Assessment further identifies the various **types of biases** (e.g. “escalation of commitment,”<sup>36</sup> “availability bias,”<sup>37</sup> “social norming”) that users suffer from. Finally, it pinpoints **the problems** brought about by such biases. It notes specifically that biases lead to “increased insight into user profiles and preferences, allowing gatekeepers to offer them more personalized services and advertisements, thus attracting even more users and reinforcing consumer lock-in, favoring single-homing and rendering switching to alternative platforms more difficult.”<sup>38</sup>

Against this backdrop, one may wonder whether a more paternalistic approach is needed (similar to the one that has underpinned media regulation before the process of deregulation discussed above was initiated). A telling example is the revised German Act Against Restraints of Competition, which lays down a prohibition of exclusive pre-installing of a gatekeeper's own services.<sup>39</sup> In other words, the German Act does not rely on consumers to un-install apps the gatekeeper offers; it imposes a positive obligation on the gatekeeper, arguably getting at the core of the problem. The EPMA uses different means to achieve the same objective. Contrary to the German Act Against Restraints of Competition, it does not regulate specific issues (e.g. default settings). The EPMA is drafted in broad terms that focus on how platforms should behave (rather than on how *users might* behave). For example, the Act prevents “conflicts of interest.” Such conflicts exist where:

a covered platform operator owns or controls a line of business, other than the covered platform; and the covered platform's ownership or control of that line of business creates the incentive and ability for the covered platform to advantage the covered platform operator's own products [...]; or [...] disadvantage, the products [...] of a competing business.

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<sup>30</sup> See, for instance, Susanne Barth & Menno J.T. de Jong, The privacy paradox – Investigating discrepancies between expressed privacy concerns and actual online behavior – A systematic literature review, 34(7) *Telematics and Informatics* 1038-1058 (2017).

<sup>31</sup> See, for instance, European Commission, Data Protection Report, Special Eurobarometer 431 (2015), [https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs\\_431\\_en.pdf](https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_431_en.pdf); Pew Research Center, What Internet Users Know About Technology and the Web, 3 (2014), [www.pewinternet.org/files/2014/11/PI\\_Web-IQ\\_112514\\_PDF.pdf](http://www.pewinternet.org/files/2014/11/PI_Web-IQ_112514_PDF.pdf).

<sup>32</sup> DMA proposal, Article 6(1)(b).

<sup>33</sup> *Ibid.* Article 6(1)(e).

<sup>34</sup> European Commission, Impact Assessment Report Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector, SWD(2020) 363 final, paragraph 73, <https://digital-strategy.ec.europa.eu/en/library/impact-assessment-digital-markets-act>.

<sup>35</sup> *Ibid.* paragraph 80.

<sup>36</sup> *Ibid.* paragraph 81.

<sup>37</sup> *Ibid.*

<sup>38</sup> *Ibid.* paragraph 84.

<sup>39</sup> German Act Against Restraints of Competition, Section 19a(2)(2)(a).

The above wording would arguably capture “data aggregation” and practices relating to the installation of default settings that were discussed above.

For reasons relating to consumption patterns, the approach followed in Germany and in the U.S. seems more appropriate than the DMA proposal to tackle unfair platform practices. Similar to the regulatory initiatives in the media sector that were undertaken in recent years, the DMA proposal is grounded on the uncorroborated assumption that users act responsibly. When discussing the process of de-regulating the media sector, Helberger argued that “ill-advised is the idea that governments can simply shift the responsibility for qualitative and diverse information away from the suppliers onto the ... consumers.”<sup>40</sup> Putting all of the above in a DMA context, it is not reasonable to believe that the user has been mutated from a set of powerless eyeballs in a fully enlightened and vigilant consumer.

# 04

## MANDATED ACCESS TO A VALUABLE INPUT

Competition enforcement and regulation have often mandated access to arguably the most valuable input in audiovisual markets, that is, “premium content” (e.g. popular football events, Hollywood blockbusters).<sup>41</sup> Such intervention was meant to protect competition and promote media pluralism; reducing exclusivity was deemed to enable competing providers (or companies active in neighboring markets) to reach viewers, thereby offering audiences more choice.

The DMA proposal is based on the same logic as the above intervention. It includes two obligations that are meant to ensure access to the equivalent of “premium content” in

digital markets, namely (personal and non-personal) data. In the case of search engines, gatekeepers would be required to grant to competing search engines access to ranking, query, click and view data on FRAND terms.<sup>42</sup> In the case of gatekeepers offering services other than search engines, the obligation would govern platform-to-business relations and data would be provided for free.<sup>43</sup>

Some lessons we have learnt from “access to premium content” obligations can inform the design of the proposed DMA provisions. Based on aspects that have occasionally rendered access obligations onerous or ineffective, there are three thorny issues that would need to be resolved, namely the scope of the regulatory duty, the pricing mechanism whereby data will become available to competing search engines, and enforcement gaps that may deprive the duty of its purpose.

First, as regards the scope of the obligation, in many cases, the term “premium content” was poorly defined, thereby giving rise to disputes. This is arguably a problem that arises from the DMA proposal, which broadly refers to the duty to provide access to “effective” and “high quality” data. Nevertheless, what qualifies as such is not easy to determine. For example, should data be raw or processed?<sup>44</sup> Some might argue that, for data to be effective and high quality, it needs to have been processed by the gatekeeper. Others might say that the DMA should comply with the principle of proportionality and that its implementation should not chill innovation; as a result, gatekeepers should only be required to provide raw data.

Second, in the case of search engines, access to data would come at a cost. However, the Commission does not specify what would qualify as fair and reasonable prices that competitors would have to pay to access the data concerned. In many cases where the Commission has imposed access remedies, it would leave it to the firms concerned to propose the pricing mechanism that would determine the fees paid by competitors (e.g. retail minus, wholesale plus).<sup>45</sup> The Commission has occasionally failed to conduct a proper assessment of such pricing mechanisms, which

<sup>40</sup> Natali Helberger, From Eyeball to Creator – Toying with Audience Empowerment in the Audiovisual Media Service Directive, 6 *Entertainment Law Review* 134–5 (2008).

<sup>41</sup> For a comprehensive overview of the issues that arose from the relevant licensing mechanisms see Ofcom (2009). Wholesale must-of-fer remedies: International examples.

<sup>42</sup> DMA proposal, Article 6(1)(j).

<sup>43</sup> *Ibid.* Article 6(1)(i).

<sup>44</sup> For a categorization of data based on the levels of the supply chain see, for instance, Michal S. Gal & Daniel L. Rubinfeld, Access Barriers to Big Data, 59 *Arizona Law Review* 339 (2017); Inge Graef *et al.*, Limits and Enablers of Data Sharing An Analytical Framework for EU Competition, Data Protection and Consumer Law, (TILEC Discussion Paper 24, 2019), 4-5, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3494212](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3494212).

<sup>45</sup> For an overview of cases affecting media markets see Konstantina Bania, *supra* note 27, 128 et seq. and 151 et seq.

led to litigation over whether the prices charged were fair and reasonable.<sup>46</sup> Though there should be room for commercial negotiations, the Commission should provide concrete guidance on the elements that govern pricing in cases of mandated data sharing.

Third, in setting out the characteristics of data that gatekeepers need to share with their business users, the Commission refers to “real-time” data because the latter is more valuable to business users. One example illustrating the problems that may arise in the absence of a concrete timeframe concerns cases where the Commission established the duty to grant access to major sports competitions, which are more valuable when they are transmitted “live.” In relevant decisions, the Commission did not set a deadline by which the merged entity should grant access to the content that fell under the umbrella of the access remedy.<sup>47</sup> The decision merely provided that the wholesale offer “[should] be made on reasonable terms and conditions,” but without explaining what is meant by “reasonable.”<sup>48</sup> Related to this issue, introducing a binding arbitration system does not fully address the concerns that may arise from compliance with the obligation to grant access within a “reasonable” time frame.<sup>49</sup> For example, in *News Corp/Telepiù*, it took the International Court of Arbitration two years to decide whether the FIFA World Cup was must-offer content covered by the remedy.<sup>50</sup> The above illustrates that there needs to be adequate guidance on how disputes over lack of access to “real time” data will be resolved. The existing uncertainty is expected to cause problems to gatekeepers and business users alike.

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“*Third, in setting out the characteristics of data that gatekeepers need to share with their business users, the Commission refers to “real-time” data because the latter is more valuable to business users*”

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It is worth noting that the EU is currently the only jurisdiction that has dared to propose rules that would mandate access

to data. It remains to be seen whether the relevant obligations will apply in a way that promotes fairness in digital markets.

# 05

## OBLIGATION TO INFORM ABOUT CONCENTRATIONS

One of the concerns that has emerged in recent years is that merger control may not have been particularly effective to address problems arising from M&As affecting digital markets. The Furman report notes that “*over the last 10 years the 5 largest firms have made over 400 acquisitions globally. None has been blocked and very few have had conditions attached to approval (...) or even been scrutinized by competition authorities.*”<sup>51</sup> This can be attributed to various factors, including the inability of merger control rules to “capture” the acquisition by dominant platforms of potential rivals and nascent competitors.

The U.S. House Report notes that “potential rivals and nascent competitors play a critical role in driving innovation, as their prospective entry may dislodge incumbents or spur competition. For this reason, incumbents may view potential rivals and nascent competitors as a significant threat, especially as their success could render the incumbent’s technologies obsolete.”<sup>52</sup> In the EU, the acquisition of potential rivals and nascent competitors may not meet the thresholds set by the Merger Regulation because those firms may generate low revenues at the time of their acquisition. It is thereby feared that mergers that stifle competition may fly under the Commission’s radar. One of the solutions the Commission is considering to address the above issue is a provision in the DMA proposal that would require gatekeepers to inform the Commission of any intended concentration involving another provider of CPS *or* of any other services provided in the digital sector<sup>53</sup> irrespective of whether it is notifiable to a Union competition authority

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<sup>46</sup> *Ibid.*

<sup>47</sup> Commission Decision of April 2, 2003 (Case COMP/M.2876 *NewsCorp/Telepiù*), 2004 O.J. (L 110) 73.

<sup>48</sup> Konstantina Bania, *supra* note 27, 134.

<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*

<sup>51</sup> Furman report, p. 12.

<sup>52</sup> U.S. House Report, p. 394.

<sup>53</sup> The term “digital sector” is defined in the DMA as the sector of products and services provided by means of or through information society services. See DMA Proposal, Article 2(4).



under the EU Merger Regulation or to a competent national competition authority under national merger rules.<sup>54</sup> The proposal currently lacks teeth in the sense that it does not afford the Commission the powers to block the acquisition by a gatekeeper of a potential rival or nascent competitor. As a result, it cannot be expected to prevent “killer acquisitions” in and of itself.

However, one of the amendments to the DMA proposal that the European Parliament’s Internal Market Committee (IMCO) has recently adopted, would go a (significant) step further. Based on that amendment, the Commission would be afforded the power to prevent gatekeepers from making acquisitions in areas relevant to the DMA for a limited period “provided that such restrictions are [...] necessary in order to remedy the damage caused by repeated infringements **or to prevent further damage to the contestability and fairness of the internal market.**”<sup>55</sup> It is not clear whether this wording could amount to a disproportionate interference with the freedom to conduct a business. Though the amendment would seek to produce a deterrent effect on repeated infringers, the text in bold leaves one to wonder how broadly the amended provision could be interpreted to block acquisitions that may not undermine the objective of the DMA.

In between the two proposals discussed above, one could envisage a *via media* in the future, that is, stricter notification requirements for gatekeepers. In many jurisdictions, media companies are bound by lower turnover thresholds that trigger the obligation to notify with a view to ensuring that media pluralism is not harmed.<sup>56</sup> Since the DMA pursues fairness, that is, a legitimate interest that is distinct from those competition law seeks to serve, the argument could be made that sector-specific merger rules are needed to protect that value. Of course, the question remains as to what notification requirements in the case at hand should be set. Nevertheless, this is an avenue worth exploring. Indeed, the UK, which is currently in the process of designing its own regulatory regime applicable to SMS platforms, is considering establishing rules that would require SMS firms to report *all* transactions to the CMA (i.e. not only those that would meet the applicable jurisdictional tests).<sup>57</sup>

## 06 CONCLUSIONS

Platform regulation is not a piece of cake. It is a daunting task to propose instruments that achieve a number of (sometimes opposing) goals. Digital markets evolve rapidly. As a result, the applicable rules must ensure a reasonable degree of legal certainty so that large platforms know how to behave, and business users know whether their rights have been violated. At the same time, precisely because they are fast-paced, the applicable rules must also be flexible. Though platform regulation should reduce platforms’ bargaining power, it should also comply with the principle of proportionality. Those aspects are difficult to reconcile. However, many sectors that have characteristics similar to those of the platform economy have been regulated. In many cases, such sector-specific regulation has applied for decades, which enables the legislator to understand what might prove effective for digital markets. Our discussion of recent proposals for platform regulation against the backdrop of rules regulating the media showcases that the proposals in question do not always reflect the lessons learnt from the media sector. Though it is still soon to tell how the final texts of this first generation of proposals will look like, taking a step back to consider what has worked in sectors with similar traits should be a continuous effort to maximize the effectiveness of this new, complex, and arguably necessary legal toolkit. ■

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“*In between the two proposals discussed above, one could envisage a via media in the future, that is, stricter notification requirements for gatekeepers*”

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<sup>54</sup> *Ibid.* Article 12(1).

<sup>55</sup> Andreas Schwab, Digital Markets Act Version of November 18, 2021 (Compromise Amendment A), Article 16(1a), [https://www.europarl.europa.eu/meetdocs/2014\\_2019/plmrep/COMMITTEES/IMCO/DV/2021/11-22/DMA\\_Compromise\\_AMs\\_EN.pdf](https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/IMCO/DV/2021/11-22/DMA_Compromise_AMs_EN.pdf).

<sup>56</sup> See, for instance, Greek Law No. 3592/2007 of 19/07/2007 on Media Concentration and Licensing Procedures [2007] Official Gazette 161/3371.

<sup>57</sup> CMA (2020). Appendix F: The SMS regime: a distinct merger control regime for firms with SMS, pp. 12 et seq., [https://assets.publishing.service.gov.uk/media/5f9e90e07562d20986f/Appendix\\_F\\_-\\_The\\_SMS\\_regime\\_-\\_a\\_distinct\\_merger\\_control\\_regime\\_for\\_firms\\_with\\_SMS\\_-\\_web\\_-\\_pdf](https://assets.publishing.service.gov.uk/media/5f9e90e07562d20986f/Appendix_F_-_The_SMS_regime_-_a_distinct_merger_control_regime_for_firms_with_SMS_-_web_-_pdf).

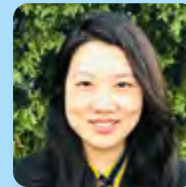


**DE  
FAULT**

# COMPETITION, DEFAULTS AND ANTITRUST REMEDIES IN DIGITAL SEARCH



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## 01 INTRODUCTION

With the rapid development in information technologies, digital platforms have flourished and reshaped the economies. The expansion in digital user base has been further accelerated since 2020, when we all experienced the global COVID-19 pandemic. The social distancing rules and lockdown policies during this crisis pushed a large majority of users to switch from in person to online activities, such as online meetings and shopping. Therefore,

the proper design of digital platforms, as well as the mechanisms through which they compete, and, also, how competition is realized within the different platforms, is crucial to avoid waste and enhance social welfare.

The convenience of the internet has endowed users with more accessible information, but at the same time it has increased users' dependence on search engines during their daily lives. Both the rapid expansion in customer size and users' growing dependence on online platforms are making digital markets the most attractive advertising media for firms. Indeed, digital advertising has been widely perceived as the financial engine behind most online plat-

forms, so understanding the latter requires an in-depth understanding of the former. By analyzing the recent changes to default search apps on Android devices driven by the European Commission “Google Android case,”<sup>1</sup> we aim to present some supplemental thoughts on how to enhance competition in digital markets.

## 02

### SEARCH IN DIGITAL MARKETS

Compared with traditional media, digital advertising has several unique characteristics. First, the potential customer base in digital markets is much larger than in off-line markets. By early 2021, the number of active internet users has achieved 4.66 billion, taking up to 60 percent of the global population. Among them, 92.6 percent of them access the internet through mobile devices.<sup>2</sup> In addition to the tremendous market size, targeting is another distinctive feature of digital advertising.<sup>3</sup>

Similarly, compared with traditional media, online platforms have much easier access to users’ information. The rich data set with rapid-developed algorithms enable advertisers to be better matched with potential customers and enjoy possibly cheaper prices. Moreover, the correlation between user base and targeting accuracy is further enhanced by the presence of network effects, which make the user base grow exponentially and make it stick to the platform. Consequently, this positive loop further accelerated the growth in digital advertising.

These unique features of digital advertising have motivated a tremendous number of firms to shift their marketing budgets from TV, radio, and newspapers to digital platforms – most notably Google and Facebook, but also Amazon, Taobao, and most of the tech giants dominating modern economies. Spending on digital advertising was estimated

to have reached a total of US\$378 billion in 2020 and to have overtaken advertising on traditional media in nearly all developed economies.<sup>4</sup> Digital advertising has developed into a vital section of the digital economy, and its regulation receives enormous attention.

Studies on the inner workings of how internet advertising space is sold by online platforms form the fundamental building blocks of the current understanding of the digital economy,<sup>5,6</sup> and there are growing efforts by regulators worldwide to assess whether competition is working properly in this market. In the absence of effective competition, incumbent digital platforms have low incentives to innovate, limiting the speed at which consumers might benefit from technological progress.<sup>7</sup>

Lack of competition might also mean both reduced choice for consumers and high advertising prices for businesses, implying further welfare loss for consumers through increased product prices. Finally, the shift of advertising revenues toward digital platforms is undermining the profitability of newspapers and other publishers, making it harder for them to produce valuable content.

Despite efforts by both researchers and regulators, it remains uncertain to us whether and how competition for the digital platforms, instead of emerging endogenously from the intermediaries or other players, can be induced by regulators. While the heated policy debate on this topic is still ongoing, some first attempts in regulation are emerging.

## 03

### ANDROID CHOICE SCREEN

Since 2019, several influential policy reports have argued in favor of introducing new regulations for digital markets.<sup>8</sup> The

1 The change implemented by Google is not formally a remedy imposed by the European Commission, but a behavioral change adopted by Google in accordance with and in response to the EC competition concerns.

2 For more information, please visit <https://www.statista.com/statistics/617136/digital-population-worldwide/>.

3 Bergemann, D., & Bonatti, A. (2011). “Targeting in Advertising Markets: Implications for Offline vs. Online Media,” *Rand Journal of Economics*, 42 (3), 417-443

4 For more information, please visit: <https://www.statista.com/statistics/237974/online-advertising-spending-worldwide>.

5 Varian, Hal R. 2007. “Position auctions,” *International Journal of industrial Organization*, 25(6).

6 Levin, J. (2013). “The Data Revolution and Economic Analysis” in Acemoglu, Arellano, Dekel (eds.) *Advances in Economics and Econometrics*. Cambridge University Press, 2013, Vol. 1.

7 Takalo, T., Tanayama, T. & Toivanen, O. (2013). “Market failures and the additional effects of public support to private R&D: theory and empirical implications,” *International Journal of Industrial Organization*, 31, 634-642.

8 These include the U.S. Stigler Committee Report, the Furman Review for the UK government, the Competition Policy for the Digital Era report by the European Commission and the UK Competition and Markets Authority Interim Report on Online Platforms and Digital Advertising.

proponents of this approach argue that for the largest digital platforms (certainly the so-called “FAANGs” – Facebook, Amazon, Apple, Netflix, and Google, – but possibly even smaller platforms), proceeding through the antitrust laws by verifying *ex post* whether they illegally altered competition is ineffective. The *ex post* approach is too slow and, moreover, being developed for markets not organized as platforms, it is mostly inadequate for digital markets. Hence, an *ex ante* regulatory approach is required to determine which types of practices should be forbidden.

## A. Choice Screen Auction

Google, as a dominant global search engine, has raised regulatory concerns over the lack of a level playing field. Therefore, a series of investigations and new legislations have been proposed to limit the number of its practices. On July 18, 2018, the European Commission (“EC”) fined Google €4.34 billion for imposing illegal restrictions on Android device manufacturers and mobile network operators.<sup>9</sup> The case revolved around contractual restrictions that Google had allegedly imposed to strengthen its dominant position in the market for internet search.

The EC Directorate-General for Competition established that Google’s conduct constituted an abuse of dominance. Market dominance *per se* is not illegal under European Union law. However, a dominant company has a special responsibility to ensure that its conduct does not distort competition. In the period considered, Google offered its mobile apps to manufacturers as a bundle (Google Mobile Services) which included the Play Store, the Google Search app, and the Google Chrome browser. The abuse revolved around the fact that manufacturers were required to pre-install both the Google Search app and the Google Chrome browser. Both apps represent important entry points for search queries on mobile devices.

The EC concluded that Google’s behavior reduced both the incentives for users to download competing search and browser apps and the incentives for manufacturers to pre-install such apps, thus reducing competition in search. Hence, the EC, in addition to imposing a fine, also coordinated with Google a change in business practices involving the determination of the default search engine on new Android devices.

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**“The EC Directorate-General for Competition established that Google’s conduct constituted an abuse of dominance**

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From March 2020, Google had to implement a choice screen for general search providers on all new Android phones and tablets shipped in the European Economic Area (“EEA”) and the UK where the Google Search App is pre-installed. During the device setup, users will be required to select their preferred search provider from a screen offering a choice of four different providers. Choosing a search provider will (i) set the search provider in a home screen search box; (ii) if Google Chrome is installed, set the search provider as Chrome’s default search provider; and (iii) install the search app of the selected provider. An auction will determine the other search providers that will appear in the choice screen along with Google.<sup>10</sup>

The auction will be conducted quarterly, and separately for each EU Member State. In each auction, search providers will bid the amount that they are willing to pay Google every time a user selects them from the choice screen. The three highest bidders will appear on the choice screen for that country (together with Google, all in random order) and if a provider is selected by a user, it will pay the amount of the fourth-highest bid received. If fewer than three eligible search providers bid in the auction, any remaining slots will be filled randomly from the eligible search providers on a per device basis.

## B. Revised Choice Screen

This pay-to-play model has then received numerous criticism and questions in the past two years. First, people are concerned that the market share of Google seems to remain undented after the screen choice auction.<sup>11</sup> According to the StatCounter data, Google’s market share on the mobile platform stood at 97.05 percent in September 2021, which is only 0.36 percent lower than that in March 2020, when the choice screen auction first started.<sup>12</sup>

Second, search engines competing with Google complained about the fact that the auction mechanism favors search engines that extract high value from customers’

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9 For more information, please visit [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_18\\_4581](https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581).

10 For more information, please visit <https://www.android.com/choicescreen/>.

11 For the comprehensive empirical investigation over the quantitative effect of the choice screen, please check Decarolis, F., Li, M., Paterollo, F.(2021). “Search Engine Competition: Evidence from the Android Choice Screen” Bocconi University-IGIER, working paper.

12 For more information, please visit <https://statcounter.com/>.



data (or from customers).<sup>13</sup> Specifically, this criticism emphasizes that the choice screen auction tends to price out those popular search alternatives without a business model capable of generating revenues, particularly those aiming at solving broader social, ethical, or ideological problems.<sup>14</sup>

For instance, DuckDuckGo is a search engine that stresses protecting the privacy of searchers and avoiding the “filter bubble” of personalized search results. Like many search engines, a source of its revenues is the advertising and sponsored links, but a difference lies in its advertising being based on the keywords used in the search box and not on the user’s data. For example, if a user searches for “car,” they may be shown a car ad. However, this ad is based solely on the search term and not on a “profile” of the user constructed by the search engine.

Therefore, online ads on DuckDuckGo may be less relevant to the user and so less likely to be clicked on, affecting DuckDuckGo’s revenues. Ideological reasons notwithstanding, DuckDuckGo’s business model may hinder its ability to effectively participate in the auction. Analogously, the search engine Ecosia, whose business model is a “social business,” donates 80 percent of its profits from advertising to support reforestation projects. This is another search engine with a business model that may not be capable of generating enough revenues. On October 27, 2020, DuckDuckGo, Lilo, Seznam, Ecosia, and Qwant filed an open letter to Google and EC, expressing their dissatisfaction with the pay-to-play model in the choice screen auction.<sup>15</sup>

To promote the antitrust goal of the choice screen, EC decided to make further adjustments over this pay-to-play setting. Beginning on September 1, 2021, a revised choice screen appeared on new devices in the EEA and the UK. With the new mechanism, participation in the choice screen became free of charge. Particularly, search engines satisfying the criteria do not need to pay when appear or are selected by a user.

Furthermore, the number of search engines that appear on the choice screen also increases. On the new choice screen, the five most popular eligible general search engines in each country (including Google, all in random order) will always be displayed at the top of the customer’s scrollable list. Specifically, the initial set of these top five search

services is decided based on its market share estimated by StatCounter and should be refreshed annually. There are then up to seven remaining search services, which are randomly chosen among eligible search engines, will be listed below the popular ones in random order.

## 04

### POTENTIAL DETERMINISTIC FACTORS

The influence of the revised choice screen remains unclear, as little evidence is available in such a fleeting period. However, the market response and search engines’ feedback regarding previous choice screen auction do have silver linings. It reminds us of the need to carefully consider the characteristics and properties of search before proposing new rules for this market.

First, it is critical to figure out whether the digital market resembles a natural monopoly. The property of market type greatly affects whether antitrust remedies should be applied and how to make it more efficient.

Second, we shall investigate whether users of search engines are rational players, meaning that they always choose the search engine with the highest quality. The neglect of users’ behavior bias may lead us to wrong predictions and move the market in unexpected directions. Without figuring out these two dimensions, it is challenging for us to provide correct insights into how optimal regulation should be designed.<sup>16</sup>

## 05

### NATURAL MONOPOLY

Like most digital platforms, Google is a typical two-sided market. There are two distinct groups of agents: the con-

<sup>13</sup> Specifically, DuckDuckGo produced seven articles between October 2019 and May 2021, mainly on the possible defects of the choice screen auction on competition and proposed potential improvements. The series of posts is available at: <https://spreadprivacy.com/tag/preference/>.

<sup>14</sup> Ostrovsky, M. (2021, July). “Choice screen auctions”. In Proceedings of the 22nd ACM Conference on Economics and Computation (pp. 741-742).

<sup>15</sup> For more information, please visit [https://ddg-staticcdn.s3.amazonaws.com/press/2110\\_Search\\_coalition\\_letter\\_calling\\_on\\_a\\_default\\_ban\\_in\\_DMA.pdf](https://ddg-staticcdn.s3.amazonaws.com/press/2110_Search_coalition_letter_calling_on_a_default_ban_in_DMA.pdf).

<sup>16</sup> For the comprehensive overview, please check Viscusi, W. K., Harrington Jr, J. E., & Vernon, J. M. (2005). Economics of regulation and antitrust. MIT Wollmann, T. G. (2019). “Stealth consolidation: Evidence from an amendment to the Hart-Scott-Rodino Act,” American Economic Review: Insights, 1(1), 77-94.

sumers who search for keywords, and the advertisers who seek to capture their attention. Google's search engine is the platform that brings both sides of the market together.

One unique feature that distinguishes the two-sided market from others is the network effect, indicating the dependence of a user's surplus the size of the user base.<sup>17</sup> More precisely, the cross-group network effect exists when a user's surplus is affected by the number of users on the other side of the market, while the within-group network effect exists when the surplus is affected by the number of users on the same side of the market.

Both the positive cross-group network effect and within-group network effect are observed on Google. First, the platform becomes more attractive to advertisers when there are more consumers, and possibly more search queries on Google. Furthermore, the more advertiser and more consumers are on the platform, the more accurate the targeting provided by Google. Therefore, consumers and advertisers both can expect better matching with larger user bases on both sides of the market.

With these positive network effects, the number of advertisers joining Google depends heavily on the number of consumers. Therefore, attracting enough consumers plays a crucial role in the successful operation of Google. Otherwise, the market may collapse due to the well-known chicken-egg problem.

Another element sometimes stressed by commentators is the linkage between sponsored and natural links, and how higher quality of the latter implies more value of the former. The user base and the users' data can be used also to target non-sponsored searches, for example based on the geographical location of the user. This might allow Google to provide a more "relevant" product for the users, therefore becoming more attractive for them compared to other search engines, where the results are targeted based on a smaller user base (and therefore less precise) or are not targeted at all (such as with DuckDuckGo).<sup>18</sup>

As shown by existing research,<sup>19</sup> a platform's optimal pricing in the two-sided market is jointly determined by elasticities on both sides of the market and any network externalities. Since the surplus of an advertiser depends more heavily on the number of customers, it is optimal for Google to provide free services to consumers and build a large user base. According to the latest survey, the number of Google users worldwide is approximately 4 billion.

Because there are only 4.66 billion internet users globally, Google's market share in search engines is astonishing. This, in turn, makes Google more valuable for advertisers, who mainly provide revenue to the search engine. Furthermore, the substantial number of users and advertisers can possibly generate a positive loop for Google's growth. The more consumers make Google more valuable to advertisers, and the more advertisers also indicate better financial support for search engine development and more appealing service to users.

The presence of these network effects implies a tendency for digital platforms to assume a "winner takes all" form, where the market tips to a situation of highly concentrated oligopoly or even monopoly. This feature puts into question whether the forces of free market competition are enough to guarantee that this concentration does not harm consumers and businesses. Although reducing Google's user size diminishes its comparative advantage over rivals, it may also hurt consumer surplus at the same time, as users benefit from the network effects generated by large user sizes.

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**“Both the positive cross-group network effect and within-group network effect are observed on Google**

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#### **A. Behavioral Bias**

More interesting, however, is the situation in which the market is not a natural monopoly. In this case, the regulatory intervention might indeed aim at bolstering competition, but the right tools for achieving this goal will then be crucially dependent on whether the platform's users are rational or have behavioral biases.

Indeed, the design of the choice screen, which requires Google to change both the search engine and internet browser default options during the installation phase of Android-operated mobile devices, has explicitly sought to account for the user default effect. The pre-installation of apps creates a *status quo* bias: users are more likely to stick with the browser and search apps pre-installed on their devices rather than downloading and installing alternatives. In this specific market, the data point to a default effect. For example, according to the CMA (2019), in 2018 in the UK, Google was willing to pay around £1 billion – 16 percent of all its search revenues – to be the

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<sup>17</sup> Belleflamme P. & Peitz, M., (2018). "Platform and Network Effects," in Corchon & Marini (eds), Handbook of Game Theory and Industrial Organization, Cheltenham: Edward Elgar.

<sup>18</sup> See <https://spreadprivacy.com/google-filter-bubble-study/>.

<sup>19</sup> Rochet, J. C., & Tirole, J. (2004). "Two-sided markets: an overview," Institut d'Economie Industrielle wp. Roth, A. E. (2015). Who gets what and why, William Collins.

default search engine on mobile devices such as Apple phones.

This high willingness to pay to be the default option can be explained by considering that, for instance, in February 2016, only 17 percent of iOS users in the United Kingdom had used their downloaded Google Search app, whereas 76 percent of Android users had used their pre-installed Google Search app. This has implications for the total search volume by mobile devices. For example, in 2016, 95 percent of searches on Android devices with the Google Search app and Google Chrome pre-installed were made using Google, while on Windows Mobile devices on which Google Search and Chrome were not pre-installed, fewer than 25 percent of all search queries were made using Google and more than 75 percent of search queries used Microsoft's Bing search engine, which was pre-installed.<sup>20</sup>

Whether the platform's users are rational or biased is crucial as it ultimately determines the effectiveness of regulations. For instance, if the users are rational in choosing search services, then the reason they cluster on Google is likely to be the superior quality of its service. In turn, this quality is the outcome of a large number of Google's users. In this case, a regulation mandating Google to share the data from its queries with other search engines would allow these rivals to improve their own quality and, hence, become more effective competitors. Regulatory interventions of this type, centered around data portability and platform interoperability, are the ones most often discussed in the current debate.



***Whether the platform's users are rational or biased is crucial as it ultimately determines the effectiveness of regulations***

However, they will be completely ineffective if behavioral biases are the motive behind a platform's concentration. Continuing with the example of search, suppose that there is no quality advantage of Google relative to its rivals. Consumers, however, have a behavioral bias: due to a default effect,<sup>21</sup> they will keep using whatever search engine they find pre-installed on their device, without trying out different, possibly better, search engines. In this case, a regulation mandating that Google share its data with the other search engines would be completely ineffective in fostering competition in search. What is needed, instead, is a type

of regulatory intervention that accounts for both behavioral biases of the platform's users and limited information about effective alternatives to the dominant platform.

## 06 CONCLUSION

The advent of digital platforms brought great convenience and benefits to the economies and societies we live in, while it also delivered potential challenges. With the presence of network effect, platforms with large user sizes have comparative advantages and the "winner takes all" issue raised antitrust concerns. To better understand the underlying mechanism through which consumers make decisions and platforms compete among themselves, we study the recent changes in Google Android default search app originating from the EC "Google Android case."

Based on the adjustment in policy and market feedback, we point out two crucial factors that potentially determine the effectiveness of regulations. The first is whether a market is a natural monopoly; the second is whether the agents that the platform connects are rational players. Through the study, we show the underlying reasons why market properties and consumer behaviors may greatly affect the influences and effectiveness of regulations. ■

<sup>20</sup> Additional evidence on the default effect comes from Arcep, the French communications regulator. Through face-to-face interviews with a representative sample of the French population, they found that users strongly prefer the pre-installed browser, with fewer than 20 percent of users using a browser other than the pre-installed one.

<sup>21</sup> The role of default options in driving choices is a well-known phenomenon (Thaler & Sunstein, 2008) and its relevance for economically important choices has been extensively documented in various environments, especially in the case of household finance problems (see Beshears, Choi, Laibson & Madrian, 2019).

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