

RESEARCH OUTPUTS / RÉSULTATS DE RECHERCHE

The Effective Use of Economics in the EU Digital Markets Act

Fletcher, Amelia; Crémer, Jacques; Heidhues, Paul; Kimmelman, Gene; Monti, Giorgio; Podszun, Rupprecht; Schnitzer, Monika E.; Scott Morton, Fiona; De Streel, Alexandre

Published in:

Journal of competition law & economics

DOI:

[10.1093/joclec/nhad018](https://doi.org/10.1093/joclec/nhad018)

Publication date:

2024

Document Version

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (HARVARD):

Fletcher, A, Crémer, J, Heidhues, P, Kimmelman, G, Monti, G, Podszun, R, Schnitzer, ME, Scott Morton, F & De Streel, A 2024, 'The Effective Use of Economics in the EU Digital Markets Act', *Journal of competition law & economics*, pp. 1-19. <https://doi.org/10.1093/joclec/nhad018>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

THE EFFECTIVE USE OF ECONOMICS IN THE EU DIGITAL MARKETS ACT^{§§}

Amelia Fletcher^{*}, Jacques Crémer^{**}, Paul Heidhues^{***},
Gene Kimmelman[#], Giorgio Monti^{##}, Rupperecht Podszun^{###},
Monika Schnitzer[†], Fiona Scott Morton[‡] & Alexandre de Streel[§]

ABSTRACT

Economic thinking and analysis lie at the heart of the objectives and the design of the EU Digital Markets Act (DMA). However, the design of the DMA reflects a very deliberate—and reasonable—intention to ensure clarity, speed, administrability, and enforceability. In doing so, this pro-competitive regulation omits several elements of standard competition law where economics has typically played a key role. Nonetheless, we believe that economic insights and analysis—including behavioural economic thinking—will continue to play an important role in enabling the DMA to achieve its ambitious and laudable goals, albeit in a somewhat different way.

- ^{*} Professor of Competition Policy, Centre for Competition Policy and Norwich Business School, University of East Anglia, and Research Fellow at the Centre for Regulation in Europe (CERRE).
- ^{**} Professor of Economics, Toulouse School of Economics. Within the last 3 years, he has engaged in consulting on matters unrelated to the topic of this paper for a marketplace platform with whom he has a nondisclosure agreement.
- ^{***} Professor of Behavioral and Competition Economics, Düsseldorf Institute for Competition Economics (DICE), Heinrich-Heine University of Düsseldorf. Within the last three years—in collaboration with E.CA economics—he engaged in competition consulting in the context of trucking and timber industries, and advised E.CA on work done by E.CA for Apple in the context of a competition case.
- [#] Senior Policy Fellow, Tobin Center for Economic Policy at Yale University and Research Fellow, Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School.
- ^{##} Professor of Competition Law, Tilburg Law and Economics Center, Tilburg University & Research Fellow, Centre for Regulation in Europe (CERRE). He is a member of the Supervisory Board for the Consumer Competition Claims Foundation in the Netherlands.
- ^{###} Chair of Civil Law, German and European Competition Law at Heinrich Heine University of Düsseldorf, Director of the Institute of Antitrust.
- [†] Professor of Economics, Ludwig-Maximilians-University Munich & Chair, German Council of Economic Experts.
- [‡] Theodore Nierenberg Professor of Economics, Yale School of Management and National Bureau of Economic Research. Within the last 3 years, she has provided economic consulting for corporate clients including Amazon and Microsoft on issues unrelated to implementation of the DMA, and for a number of government plaintiffs.
- [§] Professor of European Law at the University of Namur and the Namur Digital Institute. He is also Academic Director at Centre for Regulation in Europe (CERRE) and Chair of the EU Observatory on the Online Platform Economy advising the European Commission.
- ^{§§} We wish to thank Filomena Chirico for many insightful comments, as well as David Dinielli and Margaret O'Grady for their contributions. Thanks also to Natalie Nogueira (Yale Law School '23) and Mohamad Batal (Yale Law School '25), both of whom provided skilled drafting and research assistance during the development of this paper.

Received: August 7, 2023. Accepted: October 24, 2023

© The Author(s) 2024. Published by Oxford University Press.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

JEL: K21 Antitrust Law, K23 Regulated Industries and Administrative Law, L41 Monopolization, Horizontal Anticompetitive Practices, L51 Economics of Regulation, L86 Information and Internet Services, Computer Software

I. INTRODUCTION

Economic thinking and analysis lie at the heart of the objectives and the design of the EU Digital Markets Act (DMA).¹ This regulation seeks to address the entrenched market positions of a small number of large digital ‘gatekeeper’ platforms. It imposes a set of specific obligations that are intended to promote both ‘market contestability’ and the ‘fair treatment of business users’ by these platforms.²

At the most basic level, economics helps us understand why we should be concerned about the entrenched market positions we observe today. It teaches us that, when they are attainable, contestable markets are the best available means to generate positive long-term market outcomes for both consumers and business users. This is true even if markets themselves are sometimes messy and unpredictable. Where contestability is absent, either because of anti-competitive strategies by some of the participants or because the supply or demand conditions prevent it, we lose important benefits, and incur a serious risk that existing market positions will be leveraged into additional areas or otherwise unfairly exploited. Such concerns have led a diverse group of economists, including some of the authors of this article, to advocate for pro-competitive regulatory guardrails to help generate and protect competition in these markets. They explain that although large digital platforms have generated important innovations and consumer benefits in the past, the current concentration of market power can be expected to harm end users and business users, now and in the future.³

A core justification for regulation is that the market outcomes we observe in relation to large digital platforms are only partially driven by firms engaging in strategic anti-competitive conduct or anti-competitive mergers. They are also underpinned by some intrinsic economic characteristics of these markets that, according to the economic theory, are expected to lead to highly concentrated markets that exhibit high barriers to entry and expansion. In the language of Bain, entry into such markets is ‘blockaded’ rather than ‘deterred’; the latter involves strategic conduct.⁴

Specifically, digital platform markets are characterized by extensive global economies of scale and scope, powerful network and ecosystem effects⁵, and significant data feedback loops. All of these characteristics tend both to drive concentration within markets and to facilitate extension of market positions across markets. These tendencies are exacerbated by the fact that platforms control the user interfaces that intermediate all the interactions of the users with the platform (and with other users). The platforms can alter the ‘choice architecture’ on these interfaces to steer users subtly in ways that strengthen, consolidate, and/or extend their market positions, either in the market itself or across markets.⁶

No amount of competition enforcement can alter these fundamentals. However, we have learned how the market-concentrating effect of such network effects may be ameliorated by

¹ Regulation 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives 2019/1937 and 2020/1828 (‘Digital Markets Act’ or ‘DMA’), OJ [2022] L 265/1.

² DMA Art. 1(1).

³ See for example J. Crémer, Y.A. de Montjoye and H. Schweitzer, *Competition Policy for the Digital Era*, (Report to the European Commission, 2019); J. Furman, D. Coyle, A. Fletcher, D. McAuley, P. Marsden, *Unlocking Digital Competition* (Report of the Digital Competition Expert Panel, 2019); F. Scott Morton, P. Bouvier, A. Ezrachi, B. Jullien, A. Katz, G. Kimmelman, D. Melamed, D.J. Morgenstern, Committee for the Study of Digital Platforms, Market Structure and Antitrust Subcommittee (Stigler Center for the Study of the Economy and the State, 2019).

⁴ J.S. Bain, *Barriers to New Competition* (Harvard University Press, 1956).

⁵ A. Fletcher, ‘Digital competition policy: Are ecosystems different?’ (OECD, 2020).

⁶ A. Fletcher, ‘The Role of Behavioural Economics in Competition Policy’, Draft chapter for *Cambridge Handbook on the Theoretical Foundations of Antitrust and Competition Law* (Cambridge University Press, forthcoming 2024), available at <https://ssrn.com/abstract=4389681>.

interventions such as interoperability and multi-homing.⁷ Further, enhancing third party access to data—for example, through data portability and data sharing provisions—may limit the concentrating impact of data feedback loops. We also recognize that overcoming entrenched market positions can take a long time (if it is possible at all), and that it is important in the meantime to ensure that such positions are not exploited unfairly, nor leveraged into related markets, thereby worsening the extent of competition concerns. All of this important economic thinking has fed into the types of *ex-ante* rules imposed on gatekeeper platforms under the DMA.

In addition to motivating the existence of the DMA, economic thinking has also played a key role in informing its design.⁸ The regulation seeks to reduce barriers to entry and expansion, to pro-actively open markets to competition, and to limit the extent to which existing market power can be leveraged into new markets or otherwise unfairly exploited. It does this through positive obligations as various as interoperability, data portability, data sharing, fair access, facilitating multi-homing and switching, proactive choice, as well as negative prohibitions on anti-competitive conduct such as self-preferencing and tying.

Nonetheless, despite the pivotal role played by economics in motivating and informing the objectives and the design of the DMA, it is less obvious what role economics will play going forward in implementing and enforcing it. The Commission is not required to demonstrate substantial market power for firms to be designated, and the conduct requirements are intended to be self-executing. While these rules were specifically designed *ex-ante* to prevent or undo economic harm, there is no requirement for the Commission to demonstrate case-specific harm to enforce them, and there is limited potential for regulated platforms to adduce economic evidence to justify any exceptions. This situation is clearly distinct from that in competition law enforcement, where (at least outside of cartels) economic evidence plays a critical role in ensuring that any interventions are required and proportionate. From this perspective, the DMA is similar to banking supervision or utility regulation, where economic analysis informs the *ex-ante* design of the rules, but the day-to-day application of these rules does not rest on detailed economic assessment of the conduct of firms.

In this paper, we first examine the rationale for introducing the DMA as a complement to standard competition law for the largest digital gatekeeper platforms, and discuss the implications of this for the rather different approach to the use of economics within the DMA. We then discuss how we expect economic analysis to be used in the implementation of the DMA. As a note of caution, we recognize that regulation is a powerful tool, and that it can have important unintended consequences. In what follows, we focus on the intended use of the DMA. We do not suggest that the DMA will achieve its aims perfectly. Rather, we seek to show how economics can help it better achieve its aims.

II. DMA AS A COMPLEMENT TO COMPETITION LAW

Over the past decade, there has been extensive competition law enforcement activity relating to the conduct of the largest tech platforms on a global basis.⁹ In these competition cases, economic evidence has played its usual key role. However, competition law has increasingly been viewed as insufficient to deal with the conduct of the largest tech platforms, and *ex ante* pro-competitive regulation has increasingly been viewed as a necessary complement.¹⁰ We have seen this sequence before in Europe when, for example, new telecoms regulation and credit card

⁷ A. Fletcher, F. Scott Morton, G. S. Crawford, J. Crémer, D. Dinielli, P. Heidhues, M. Schnitzer, and K. Seim, 'Equitable Interoperability: The "Super Tool" of Digital Platform Governance' (2023) *Yale Journal of Regulation*.

⁸ Impact Assessment Report of the Commission Services of 15 December 2020 on the Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act), SWD(2020) 363. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52020SC0363>.

⁹ See for example the G7 Compendium of approaches to improving competition in digital markets, G7 Hiroshima Summit (2023).

¹⁰ See Furman et al (2019) and Scott Morton et al (2019) in footnote 3.

interchange fee regulation were adopted because competition law enforcement was considered insufficient to create and maintain competitive markets in these sectors.¹¹ To understand the DMA's rather different approach to the use of economics, relative to competition law, it is useful both to understand the rationale for the DMA's existence and the nature of its role as a complement to competition law.

A. Competition Law Is Not Enough

In most markets—albeit with important exceptions including utilities and healthcare—competition law is thought sufficient to address issues of market power. So why is it considered insufficient in relation to the largest digital platforms? In this section, we consider three important rationales for introducing rule-based regulation such as the DMA in digital markets as a complement to competition law: (1) concerns about under-deterrence; (2) the inapplicability of competition law to 'blockaded' entry; and (3) concerns about behavioural remedies.¹²

1. Concerns about Under-Deterrence

Over the last couple of decades, some areas of competition law enforcement have become highly resource-intensive. Since the European Commission elected to apply a more rigorous and economics-based approach to competition law enforcement, parties have invested heavily in economic and legal support that seeks to undermine the cases being developed against them by the public authorities. Economic input is seen as having played an increasingly important role in this story, with courts placing weight on case-specific economic evidence for the definition of relevant markets, the assessment of market power, and the identification of likely harmful effects. This evidence can take various forms, including insights from the existing literature, empirical calibration of theory-based models, and extensive econometric demand modelling.

Economic thinking is necessary to inform legal judgements, allowing a better balancing of different elements. Moreover, firms should clearly have the right to be able to defend themselves, especially given the punitive sanctions that can be imposed. However, the discipline of economics was not developed with the intention of providing the high levels of certainty that are frequently expected within legal frameworks; and it is not always well suited to doing so. This is especially true in a contested legal context where the economic evidence is developed by rival parties, rather than by fully independent experts. As a result, in competition law cases, we frequently observe the development of very extensive economic evidence, which contributes to the huge expenditure of time and resources typically involved in such enforcement.

This has at least five important downsides. First and foremost, competition cases tend to take a long time.¹³ This is a particularly serious downside in digital markets that can 'tip' quickly to being highly concentrated if affirmative pro-competitive action is not taken in a timely manner.

Second, competition authorities can only take a small number of cases, given their limited resources.¹⁴ While private litigation can partially fill the gap, there are not always plaintiffs who can afford the relevant resources when there is a high risk of losing. In addition, where a firm is

¹¹ For example, within Directive 2018/1972 establishing the European Electronic Communications Code [2018] OJ L321/36, *ex ante* asymmetric regulation is justified when it is determined that competition law remedies are not sufficient to address market failures, art. 67(1.c) and Recital 163. In Regulation 2015/751 on interchange fees for card-based payment transactions [2015] OJ L123/1, the EU notes '[t]he application of existing legislation by the Commission and national competition authorities has not been able to redress this situation.' (Recital 12).

¹² In the DMA Impact assessment, paras 119–123 (see footnote 8), the Commission staff explain why competition may be ineffective in tackling some market failures of the platform economy and insufficient for other. Also DMA, Rec.5.

¹³ One study shows that the median duration of Article 102 procedures before the Commission that were not closed with a commitment decision has increased from four years in the period between 1990 and 2005 to 7.4 years in the period since 2015: Editorial Comments, 'Missing in Action? Competition Law as Part of the European Constitution, (2023) *Common Market Law Review* (forthcoming)

dependent on another, as many business users are in relation to the large digital gatekeepers, it may fear taking legal action in case this sours the relationship and so harms its long-term business prospects (the so-called fear factor).¹⁵

Third, the few cases that are taken tend to be narrowly focused and highly fact-specific, to ensure that the case is properly made and robust to appeal. This can mean that, while a case may be individually strong, it cannot provide clear and predictable guidance for related conduct by other firms, which limits its wider deterrence benefits. Other firms may correctly be able to argue that the facts relating to their own conduct are different, and thus there is no reason for them to alter their conduct. Their willingness to risk proceedings is increased by the fact that there would not be simple ‘read over’ from the precedent case, but a need for the authorities to invest huge resources all over again.¹⁶

Fourth, the strong emphasis on empirical economic evidence and a high standard of proof mean that some relevant anti-competitive conduct is inherently difficult to address, due to the core theories of harm being intrinsically uncertain and difficult to prove to the standard required. For example, concerns about harm to potential competition or to innovation can be difficult to evidence, but nonetheless capable of generating very serious negative consequences. Sole reliance on competition law risks allowing firms to continue such anticompetitive conduct unabated.

Fifth, and more generally, the weight placed on empirical evidence, and the difficulties inherent in developing compelling economic evidence within a contested legal case, risk creating an ‘inequality of means’ between well-resourced large platforms and capacity-constrained competition authorities (or other market actors acting as plaintiffs or complainants).¹⁷ This can result in cases failing on appeal, even when the core underlying competitive concern is valid, further reducing rates of successful intervention and the effectiveness of the regime.

In summary, while the heavy weight placed on strong empirical economic evidence is well-designed to limit the risk of Type I errors (false positives), it has arguably created competition regimes characterized by under-enforcement and under-deterrence (that is, excessive Type II errors).¹⁸ The attempt to ensure that firms who are accused of competition infringements are treated fairly has in practice led to a system that treats unfairly consumers and business users who would benefit from vigorous competition enforcement.

Competition authorities around the world are increasingly grappling with these concerns. In the context of the ongoing debate around the potential for the EU to introduce Article 102 guidelines, commentators (including an author of this paper) have proposed that there should be greater reliance on criteria that are specified upfront, based on state-of-the-art economics, and less requirement for case-specific economic evidence of effects.¹⁹ This approach is already

¹⁴ A report of the work of the Dutch competition authority argues that the high costs of enforcement plus the risk of a successful appeal leads to fewer cases being brought than would be optimal. C. Argenton, J. van den Boom, E. van Damme, I. Graef and G. Monti, *Can Abuses of a Dominant Position be Tackled More Effectively* (TILEC Report, 2023).

¹⁵ Similar issues arose in assessing the relationship between suppliers and large supermarkets in the EU: Commission Staff Working Document of 12 April 2018, Impact Assessment on the Proposal for a Directive on Unfair Trading Practices in Business-to-Business Relationships in the Food Supply Chain, SWD(2018) 92.

¹⁶ Incentives for compliance are further diminished if firms have such deep pockets that they would view any resulting fines as simply a ‘cost of doing business’.

¹⁷ This is exacerbated by the judgment in *Unilever Italia v Autorità Garante della Concorrenza e del Mercato*, Case C-680/20, ECLI:EU:C:2023:33 para 54 and 55, where the Court held that the competition authority must ‘carefully and impartially’ pay attention to any study brought forth by a defendant, explain why it does not succeed in rebutting the presumption, and even give the firm ‘the opportunity to determine the evidence which could be substituted for that study.’ This seems to force the authority to assist the firm in making its defence!

¹⁸ OECD, *Abuse of Dominance in Digital Markets*, 2020 available at <https://www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf>.

¹⁹ R. Podszun and T. Rohner, ‘Making Article 102 TFEU Future-Proof—Learnings from the Past’ 2023, available at <https://ssrn.com/abstract=4428170>.

utilized within competition law through the adoption of block exemptions and guidelines, but—these authors argue—it could usefully be extended.²⁰

These concerns are, however, especially relevant to the largest digital platforms. They have deep pockets to invest in developing evidence that supports only one side of infringement allegations. Countering such selective evidence takes resources and time that an authority may not have. And because the authority bears the burden of proof, resources of the defendant that are deployed this way can prevent effective enforcement. Digital platform theories of harm can be inherently hard to evidence empirically to the standard generally required for competition law enforcement, partly due to speed of change in these markets, and partly because the relevant theories (relating to potential and dynamic competition) are inherently hard to evidence. This is true even if the risk of harm is genuine, serious, and in line with economic analysis.

This provides an important rationale for the introduction of complementary rule-based regulation, such as the DMA. In contrast with competition law, such regulation can be more specific upfront about the conduct required from regulated firms. As explained by the law and economics literature on rules and standards, this greater specificity should enable speedier, less resource-intensive enforcement and thereby incentivize greater compliance.²¹ Such rules can—and should—be based on economic thinking. But, once in force, they limit the issues that are decided by case-specific economic evidence.

2. *The Inapplicability of Competition Law to ‘Blockaded’ Entry*

As discussed in the introductory section, the market outcomes we observe in relation to large digital platforms are only partially driven by strategic anti-competitive conduct or anti-competitive mergers. They are also underpinned by some intrinsic economic characteristics of these markets. That is, entry into such markets is ‘blockaded’ rather than ‘deterred’.

This has three important implications. First, it is not obvious that competition law is even applicable to competition concerns that arise from intrinsic economic fundamentals as opposed to strategic entry deterring conduct. Second, even if it were, opening up competition in these markets, once lost, will tend to require more than simply prohibiting anti-competitive conduct going forward. The entrenched market power of platforms may persist, even when those platforms behave in a perfectly legal manner. If competition is to be enhanced, proactive pro-competitive interventions will be required, such as interoperability or data portability. It is highly unlikely that these could be achieved through standard competition law.

Third, making allowances for short-term efficiencies—as is usually done within competition law, and for good reason—can seriously limit intervention. While short term efficiencies have not been accepted by the European Commission as a defence to anti-competitive conduct in previous cases,²² the Courts nonetheless tend to set a higher effective standard of proof in cases

²⁰ For example, extensive theoretical and empirical economic literature underpins the EU Guidelines on horizontal cooperation agreements and vertical restraints: Commission Guidelines of 1 June 2023 on the applicability of Article 101 TFEU to horizontal co-operation agreements, O.J. [2023] C 259/1 and Commission Guidelines of 10 May 2022, Vertical Restraints, O.J. [2022] C 248/1. But economic analysis is also used in specific agreements cases. There is substantial agreement that the former framework-setting role—which effectively involves balancing type I and type II errors—is highly valuable. It is the latter case-specific role, which arguably over-focuses on minimizing type I errors, that is more controversial.

²¹ L. Kaplow, ‘A Model of the Optimal Complexity of Legal Rules’ (1995) 11 *Journal of Law, Economics, and Organization* 150; in the context of the DMA, W. Kerber, ‘Taming Tech Giants with a *Per Se* Rules Approach? The Digital Markets Act from the “Rules vs. Standard” Perspective’, (2021) *Revue Concurrences* 28–33.

²² The Court has accepted that there is an efficiency defence in *British Airways v Commission*, Case C-95/04 P, ECLI:EU:C:2007:166, para 86. However, on the merits the parties have not succeeded in proving efficiencies in any case to date.

where there are efficiency benefits associated with a particular form of conduct.²³ This may be problematic in digital markets, given that economies of scale and scope, network and ecosystem effects, and data feedback loops, which can all be characterized as short-term efficiencies, can also drive uncompetitive market outcomes that can be harmful for welfare in the longer term. Balancing these two effects is extremely difficult.

Rule-based regulation such as the DMA can take a more proactive role by requiring pro-competitive measures to open up markets even in the absence of any strategic anti-competitive conduct, even if these risk generating a short-term loss in efficiency.

3. Concerns about Behavioural Remedies Which Seek to Change End User Decision-Making

A third core rationale for digital markets regulation relates to the need for a coherent approach to behavioural change in this space. While competition enforcement provides only limited deterrence (as discussed above), it could be argued that its key benefit is in setting rules for the companies in question going forward, in the form of behavioural remedies that seek to alter end user decision-making. However, there is plenty of evidence, including from the recent EU *Google Shopping* and *Google Android* cases,²⁴ that such behavioural remedies are hard to design, monitor, and enforce.

Few, if any, competition authorities and courts are well set up to carry out this work. For example, where such remedies involve measures designed to change consumer choices, the effectiveness of remedies may well be affected by the cognitive limitations and behavioural biases of consumers. In that context, remedy design is likely to require empirical testing of various alternative approaches to demonstrate their effectiveness, and economic analyses evaluating the pros and cons of such behavioural remedies, including identifying potential unintended consequences. However, competition authorities may have neither the power to require the firm to carry out the necessary testing, nor economists with the necessary skills or experience.

Of course, behavioural remedies that seek to change end user decision-making are inherently difficult, even in a regulatory context. However, the DMA has an important advantage in placing the responsibility on the gatekeepers to ensure that these remedies have appropriate outcomes.²⁵ This shift of responsibility reflects the fact that the gatekeeper is far better positioned than the Commission to achieve this.

Moreover, while the Commission is empowered to impose behavioural remedies upon finding an infringement,²⁶ its recent tendency has been to require that the undertakings propose remedies. This affords the firm the flexibility to redesign its business model within the parameters set by the prohibition decision and it ensures that the remedies are proportionate.²⁷ This approach was taken in *Google Shopping* and *Google Android*. However, while it may offer valuable protection for the firm's rights, given the huge asymmetry of information between the Commission and the firm, it creates a framework within which there is serious risk of remedies being ineffective or taking a long time to finalize.

²³ For example, in the framework of discounts offered to distributors in exchange for exclusivity, a high standard is required to demonstrate that discounts are an abuse of dominance. See G. Monti 'Rebates After the General Court's 2022 Intel Judgment' (2023) 60(1) *CMLRev* 107.

²⁴ Commission Decision of 27 June 2017, Case 39,740 *Google Search (Shopping)* which has been upheld by the General Court in Case T-612/17 *Google v. Commission*, ECLI:EU:T:2021:763 and Commission Decision of 18 July 2018, Case 40,099 *Google Android* which has been upheld (in part) by the General Court in Case T-604/18 *Google v. Commission*, ECLI:EU:T:2022:541.

²⁵ Such an 'outcomes-based' or 'performance-based' approach to regulation has been strongly advocated in L.E. Willis, 'Performance-Based Remedies: Ordering Firms to Eradicate Their Own Fraud' (2017) 80(3) *Law and Contemporary Problems*, 7–41.

²⁶ Article 7, Regulation 1/2003 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1.

²⁷ V. Botka, L. Repa and E. Rousseva, 'Ordinary Procedure: From Initiation of Proceedings to the Adoption of a Final Decision' in E. Rousseva (ed.) *EU Antitrust Procedure* (Oxford University Press, 2020), paras 6.104–6.109.

In addition, if we see a range of competition cases generating behavioural remedies, this risks creating a multiplicity of requirements—potentially different across EU member states, or different across platforms that may overlap in particular markets—all of which require ongoing monitoring, sanctions for non-compliance, etc. This is effectively a regulatory system, but one that is overly *ad hoc* and potentially incoherent when considered as a whole, and which risks creating an uneven playing field between firms, depending on their antitrust history. Far better, given the extent and variety of interrelated issues arising in digital platform markets, to consider these markets holistically and design regulation—such as the DMA—that is appropriately targeted, and has a carefully designed system for monitoring and enforcement.²⁸

B. The Need for Complementary Regulation

The points above have critical implications for the role of economics within digital markets regulation. While economics has a valuable role to play in ensuring that competition law enforcement is well targeted, they suggest that there are genuine costs involved in placing too strong a reliance on case-specific economic evidence. This can seriously hamper the speed, administrability, enforceability, and effectiveness of the regime, slowing things down, reducing the range of issues that the Commission can enforce against at any one time, and potentially limiting its ability to impose pro-competitive interventions. Since the introduction of digital markets regulation is specifically intended to overcome exactly these concerns, this implies that its impact may be reduced if too great a role is afforded to such case-specific economic evidence.

By contrast, the DMA has clearly been designed to prioritize clarity, speed, administrability, and enforceability.²⁹ In doing so, it omits several elements of standard competition law where economics has typically played a key role. First, there is no longer a requirement for the Commission (or courts) to define markets based on economic methodologies, but rather the use of the more legally based concept of Core Platform Service (CPS).³⁰ Second, the Commission (or courts) is not required to show economic dominance or market power, but rather an entrenched and durable gatekeeper position.³¹ And while there remains a pathway for considering qualitative factors, the DMA has supplemented these forms of analysis where economics could play a role with presumptions based on a set of purely quantitative criteria. Third, there is also no need for the Commission to show case-specific economic harm; the obligations set out in Articles 5–7 simply apply, and non-compliance suffices to impose liability. The obligations apply equally to all relevant designated core platform services.

It should be highlighted that this does not imply a lower standard of proof. The Commission is still required to demonstrate non-compliance, which will need to be appropriately evidenced and may require the use of economics as explained below. What has changed, though, is the nature of what the Commission needs to show. Demonstrating a breach of a DMA provision, with no requirement to show consequent economic harm, is likely to involve a more straightforward economic analysis than demonstrating a breach of competition law.³²

In short, if economic regulation were based on demonstrating market power, evidencing case-specific economic harm, and allowing efficiency defences, these requirements would risk creating legal quagmires that could absorb a large amount of scarce enforcement resources and effectively delay the impact of the regulation or neuter it entirely. While it will always be true

²⁸ A similar debate took place two decades ago for the regulation of (tangible) network industries: M. Hellwig, *Competition Policy and Sector-specific regulation in network industries*, in X. Vives (ed.), *Competition Policy: Fifty Years on from the Treaty of Rome* (Oxford University Press, 2009).

²⁹ DMA Impact Assessment, paras 159–164.

³⁰ DMA Art. 2(2).

³¹ DMA Art. 3.

³² F. Chirico, 'Digital Markets Act: A Regulatory Perspective' (2021) 12(7) *Journal of European Competition Law & Practice*, 493.

that further study, specification, and analysis will tend to produce digital platform regulation that is slightly more targeted—and the UK Digital Markets, Competition and Consumers Bill does move somewhat in this direction³³—there is a clear need to avoid ‘making the perfect the enemy of the good’.

III. A DIFFERENT APPROACH TO ECONOMICS IN THE IMPLEMENTATION OF THE DMA

While the DMA does not rely on antitrust methodologies and associated economics, we nonetheless believe that there remains a role for economics to play within this new framework. After all, the extent of the DMA’s success in promoting its objectives of contestability and fairness will be determined by the precise way in which the regulation is tailored, implemented, and developed in the future. Good economic analysis can help with all of this.³⁴

By ‘economic analysis’, we do not simply mean the quantification of basic indicators, such as the number of users that have switched their default (albeit economic analysis may be useful for considering the appropriate establishment and use of such indicators). Nor do we seek to propose a return to the way in which economic analysis is used in competition law, with the creation of huge amounts of selective evidence and long, drawn-out procedures. As seen above, the DMA deliberately, and, understandably, bypasses this. It is important that any use of economics in implementing and enforcing the DMA avoids falling back into the trap of ineffective intervention by requiring excessive evidence and analysis.

Rather, in this section, we discuss six contexts in which economics can play a useful role: (A) the gatekeeper designation process; (B) the obligation specification process; (C) evidencing compliance; (D) enforcement and prioritization; (E) assessing impact and revising the DMA; and (F) facilitating coordination among legal instruments across the EU and beyond.

A. The Gatekeeper Designation Process

The first step in the DMA regulation process is the designation of the ‘gatekeepers’ to which it applies.³⁵ Designated gatekeepers must adhere, where applicable, to a set of specific obligations. These are mostly outlined in Articles 5–7, but there are additional obligations in Articles 14 (merger reporting) and 15 (auditing of profiling techniques). The gatekeepers are expected to self-execute and demonstrate their compliance in annual reports to the Commission. The fines for non-compliance can be extremely large: gatekeepers can be fined up to 10% of worldwide turnover in the preceding financial year, or 20% in case of recidivism.³⁶

The designation of a ‘gatekeeper’ under the DMA primarily involves a quantitative assessment. There are pre-specified thresholds for a platform’s market cap, its number of active end users, and its number of active business users.³⁷ If a platform meets or exceeds these thresholds, there is a presumption that it is a gatekeeper.

There are at least four ways in which economic analysis can be used in the designation process. First, Article 3(8) outlines the possibility of designating a gatekeeper on qualitative grounds even if it does not meet the quantitative criteria. Doing so requires a market investigation and

³³ Text available at <https://bills.parliament.uk/bills/3453>.

³⁴ P. Hanspach and M.V. Kuyterink, ‘You can (try to) keep the economists out of the DMA but you cannot keep out the economics’ (2022) 3(2) *CPI Antitrust Chronicle* December, 17–21.

³⁵ The first wave of designations under the DMA was completed in September 2023. (European Commission, *Commission Designates Six Gatekeepers Under the Digital Markets Act*, News Announcement 6 September 2023, available at https://digital-markets-act.ec.europa.eu/commission-designates-six-gatekeepers-under-digital-markets-act-2023-09-06_en).

³⁶ DMA Art. 30.

³⁷ DMA Art 3(2): Annual EU turnover of at least €7.5 billion in each of the last three financial years, or average market capitalisation or fair market value of at least €75 billion in the last financial year; plus at least 45 million monthly active EU end users and at least 10,000 yearly active EU business users.

(presumably) economic evidence.³⁸ The Commission will clearly need to prioritize carefully, and thus we might not expect to see extensive activity in this area at the beginning of the enforcement of the DMA. But it certainly should not be ruled out, and could even be used as a ‘safety net’ to enable designation in any core platform services where the quantitative approach is found to be under-inclusive.³⁹

Second, and with more immediate relevance, the DMA allows for rebuttal of the quantitative presumption if a platform can show it does not meet the three qualitative criteria set out in Article 3(1). The standard of proof for such rebuttal has been set deliberately high. Article 3(5) states that firms must present sufficiently substantiated arguments to demonstrate that exceptionally the presumption can be rebutted. It is not envisaged that the rebuttal process will involve significant economic analysis, and indeed Recital (23) states ‘the Commission should take into account only those elements which directly relate to the quantitative criteria’ and ‘any justification on economic grounds seeking to enter into market definition [. . .] should be discarded, as it is not relevant to the designation as a gatekeeper.’ Nonetheless, economic insights may still be relevant. For example, Recital (23) states that a relevant factor is ‘the importance of the undertaking’s core platform service considering the overall scale of activities of the respective core platform service’, which arguably comes close to considering the likely economic impact of this undertaking’s core platform service on contestability or fairness.⁴⁰

Third, the Annex to the DMA makes clear that different platforms within the same ‘Core Platform Service’ (CPS) category may be treated as distinct if they are used for ‘different purposes by the business users and/or end users, which relate to to features and the components of the services offered’.⁴¹ This is important because the quantitative requirements relating to user numbers are also relevant to designation of individual CPSs. Thus, if two of a platform’s services fall within the same CPS category, the question of whether they are treated as distinct could prove decisive for their designation. But how is the ‘different purposes’ test to be applied in practice? How ‘different’ do the ‘purposes’ have to be? For example, if a gatekeeper owns one social network that primarily involves video sharing and another that is more based on text, photos and links, are their ‘purposes’ sufficiently ‘different’ to count as distinct CPSs? It is clearly not envisaged that answering this question requires a standard market definition test, assessing the extent of price-substitution between the different ‘purpose’-related services. Indeed, the 45 working day constraint on the designation process would make such evidence hard to collect and assess. But equally, economic insights may help to identify alternative measures, such as the extent of multi-homing across services, which could be an indicator that they serve different purposes in the eyes of users.

Fourth, a linked issue arises when a single integrated digital service incorporates aspects of two CPSs. For example, TikTok could be argued to be at once both an online social networking service and a video-sharing platform service, with these two aspects of the service intrinsically linked.⁴² This raises the question of whether such services should be designated twice, as two

³⁸ A. de Stree, ‘Gatekeeper Power in the Digital Economy: An Emerging Concept in EU Law’, Note for the OECD, DAF/COMP/WD(2022)57, June 2022.

³⁹ In the first wave of gatekeeper designation (footnote 35), the Commission has opened a market investigation to further assess whether Apple’s iPadOS should be designated as gatekeeper, despite not meeting the quantitative thresholds.

⁴⁰ In the first wave of gatekeeper designation (footnote 35), the Commission has accepted the presumption rebuttal made by Alphabet for Gmail, Microsoft for Outlook and Samsung for its Internet browser. The Commission also opened four market investigations to better assess rebuttal claims made by Microsoft in relation to Bing, Edge and Microsoft Advertising and by Apple in relation to iMessage.

⁴¹ In the first wave of gatekeeper designation (footnote 37), the Commission has chosen to designate Instagram and Facebook separately as distinct social network CPAs because they are used by business and end users for different purposes as the features of the services are different. See *Commission Decision of 5 September 2023*. Case DMA.100020, 100024, 100035, 100044, Meta Platforms, paras 44-57.

⁴² We note that the Commission has in fact chosen to designate TikTok as an online social networking service only: *Commission Decision of 5 September 2023*, Case DMA.100040 ByteDance, paras 38-63.

separate CPS, or just once. And, if the latter, in which CPS? This issue is important as it affects which provisions apply. For example, if TikTok comprises two separate CPSs, it could be argued that, it will need permission from end-users to combine data across them.⁴³ However, if TikTok comprises just one CPS, then the choice of whether it is a social networking service or a video-sharing platform service will affect whether it is covered by the FRAND requirement that applies to the former but not the latter.⁴⁴ While this might appear to be purely a question of legal interpretation, it does raise issues where economic insights might be useful. In particular, what might be the economic consequences of these alternative options, in terms of the DMA obligations that would then apply?

B. The Obligation Specification Process

The obligations that the DMA imposes on gatekeepers are detailed in the legislation, and do not require the Commission to demonstrate that there is any need for them, economic or otherwise. There is, however, some potential for further specification of these obligations, and this creates an opening for economic input.

- For the twelve Article 6 provisions, Article 8 explicitly recognizes there may be a need for further specification. It allows the Commission to specify the measures that will be ‘effective in achieving the objectives of the DMA and the obligation’, and ‘proportionate’ in the specific circumstances of the gatekeeper and service.
- For the nine Article 5 provisions, there is no formal provision for specification, on the basis that these provisions are intended to be sufficiently clear already. Nonetheless, the Commission may specify measures for these too, if it is concerned that a firm is circumventing a provision, which could include both Article 5, 6, and 7 provisions.⁴⁵
- In addition, in the context of a market investigation into ‘systematic non-compliance’,⁴⁶ the Commission can impose remedies or agree ‘commitments’ offered by gatekeepers to resolve the investigation. These remedies and commitments may effectively result in further specification of provisions in Articles 5, 6, and 7.

Economics may be useful both for ensuring that obligations are effective and that they are proportionate. However, economic insights and analysis must themselves be used in a proportionate way. They should primarily be utilized to provide guidance on the general framework for specification, rather than on the particular situations of specific gatekeepers. In this context, we note that—unlike in competition law—the burden is on the gatekeepers to demonstrate effectiveness, which should reduce the burden on the Commission to consider all economic angles. The burden is also on the gatekeepers to make proportionality arguments.

1. Economic Analysis to Ensure that Obligations Are Effective

In specifying obligations, the critical goal for firms and the Commission is to identify measures that not only meet the letter of the obligation but are also effective in delivering what the obligation intends in terms the DMA’s two primary objectives: promoting contestability and fairness. As is outlined in Recitals 32 and 33, ‘contestability’ relates to the ability of firms to overcome barriers to entry and expansion and challenge the gatekeeper on the merits of their products and service; ‘fairness’ is defined as related to business users, not end users, and to an

⁴³ According to Article 5(2) DMA.

⁴⁴ According to Article 6(12) DMA.

⁴⁵ Article 13(7) DMA.

⁴⁶ Article 18 DMA.

imbalance between the rights and obligations of business users whereby the gatekeeper obtains a disproportionate advantage.⁴⁷

The specification process is likely to be important in several key areas where economic analysis may be useful. Indeed, we note that a number of provisions appear to require at least some analysis of competition between services. For instance, Article 6(2) requires that the ‘gatekeeper shall not use, in competition with business users, any data . . .’. Implementation of this provision would seem to positively require an analysis of competition in order to assess the scope of the data use restriction.

Below, we discuss a couple of specific areas—self-preferencing and default settings—where economic analysis may be expected to assist in a purposive interpretation of the relevant DMA provisions.⁴⁸

Example 1: Self-Preferencing.

Article 6(5) prohibits a gatekeeper from self-preferencing its own services and products in rankings, and requires that the gatekeeper applies transparent, fair, and non-discriminatory conditions to such rankings. This requirement may seem clear on its face, but it in fact it gives rise to some important ambiguities. Resolving these will require the Commission to assess what was intended by the obligation, in the context of that obligation being intended to promote fairness and contestability. And here, economic analysis can potentially play a role.⁴⁹ A few examples:

First, and at the most basic level, the article requires that the ‘gatekeeper shall not treat more favourably, in ranking and related indexing and crawling, services and products offered by the gatekeeper itself than similar services or products of a third party’. As with the example of Article 6(2) above, economic thinking would seem relevant to the interpretation of the term ‘similar’ in this context.

Second, it is not fully clear what counts as a ‘ranking’. Recital (52) makes clear that it includes instances where only one result is presented. But does this only apply where there has been an underlying ranking process to determine which result is presented, or could it also apply to what are effectively vertical integration decisions?⁵⁰ It is not immediately obvious which interpretation would best promote fairness and contestability, but assessing this fully may require consideration of the economic pros and cons of vertical integration.⁵¹

Third, any ranking will be based on certain criteria. Article 6(5) clearly prohibits gatekeepers from using criteria that directly favour their own products and services. But what about criteria that indirectly favour them? For example, suppose that Amazon bases its rankings partly on speed of delivery, a factor that it believes its customers value highly, but that this, in turn, advantages products utilizing Amazon’s highly effective logistics service. Does this count as self-preferencing? To assess this issue, economic analysis could be valuable. For example, empirical techniques could be used to assess consumers’ true valuation of shipping speed relative to other potential ranking criteria.

⁴⁷ This includes ‘behaviour that does not allow others to capture fully the benefits of their own contributions’ and ‘unilaterally sets unbalanced conditions for the use of their core platform services or services provided together with’ them. It also includes ‘excluding or discriminating against business users, in particular if the latter compete with the services provided by the gatekeeper’. See J. Crémer et al, ‘Fairness and Contestability in the Digital Markets Act’ (2023) *Yale Journal of Regulation*.

⁴⁸ For more examples, see CERRE, *Effective and Proportionate Implementation of the DMA* (2023).

⁴⁹ See M. Peitz, ‘The Prohibition of Self-Preferencing in the DMA’ (2023) 14(5) *Journal of European Competition Law & Practice*, 310.

⁵⁰ An example of a vertical integration decision might be Google’s choice to feature Google Maps on its general search results page rather than using a third-party map. It could be argued that constitutes ‘ranking,’ even if the company’s decision to ‘rank’ Google Maps more highly than third-party maps was a discrete, one-time decision.

⁵¹ See M. Slade, ‘Vertical Integration and Mergers: Empirical Evidence and Evaluation Methods’, OECD (2019).

Fourth, paid-for rankings⁵² raise especially complex issues. The gatekeeper may transparently disclose to users that payments to the platform will raise the ranking of that result. However, if a gatekeeper platform markets its own services via its own paid-for rankings, then it will tend to have a stronger economic incentive to raise its payment for such ranking relative to third parties, since it gets back any money it pays.⁵³ Avoiding self-preferencing in such a situation is far from straightforward, but functional separation and smart auction design might help.

Example 2: Default Settings

A similar issue of interpretation arises in respect of Article 6(3), which relates to the ‘choice architecture’ relating to default settings. This requires gatekeepers to ‘enable end users to easily change default settings on the operating system, virtual assistant, or web browser of the gatekeeper that direct or steer end users to products or services provided by the gatekeeper.’ This is clearly a useful provision, in terms of protecting and enhancing the ability of end users to choose their preferred default, as well as promoting contestability. But the precise scope of the provision is not immediately clear.⁵⁴ What does it mean for a service to be ‘provided by’ a gatekeeper platform, and specifically does this obligation cover services provided by the gatekeeper under contract from a third party, such as the default setting for Google app on the Apple phones? Recital (49) might suggest that the answer is no, as it refers to gatekeepers’ ‘own’ software applications and services. However, from a legal perspective, it is the wording of the obligation that matters. In the end, the right question to ask may be what interpretation would be the more effective in driving contestability. The answer to this question is not obvious, but economic insights may help.

Separate from this interpretation issue, this Article also gives rise to significant implementation questions.⁵⁵ What does it take to enable end users to change default settings ‘easily’? In particular, how easy should it be to find the relevant choice box, and then how should that choice box be designed? How many options should end users be provided with? How should these options be chosen? Should they include (at least) any relevant apps that the end user has proactively downloaded? How should options be ordered? Should ordering be horizontal or vertical? Should all options be available without scrolling or clicking? Should logos be included? How about short descriptions? How much do colours and font sizes matter? Should it be clear to end users that their choices are reversible as consumers may be more hesitant about trying something new if they are unsure whether they can switch back?

None of these questions about choice architecture have straightforward answers. For example, if gatekeepers were to make too many options available to end users, this could backfire. People can become overwhelmed if there are too many options (‘choice overload’) or disengaged if they are asked to make too many decision (‘choice fatigue’). On the other hand, if end users are given too few options or choices, then this is unlikely to contribute to meaningful contestability and fairness.

Here, it is behavioural economics, rather than neoclassical economics, that has the potential to play a valuable role in ensuring that this provision is implemented in a way that really promotes fairness and contestability in the context of default settings. Empirical techniques can be utilized to examine the impact on end user choices of the sorts of factors set out above. For example,

⁵² Note that advertising placement also constitutes a form of ‘paid for ranking’ and thus might also be in scope, with the same issues applying.

⁵³ R. Feasey and J. Kramer, *Implementing Effective Remedies for Anti-Competitive Intermediation Biases on Vertically Integrated Platforms* (CERRE Report, 2019).

⁵⁴ A. Fletcher, DMA Switching Tool and Choice Screens, in *Effective and Proportionate Implementation of the DMA* (CERRE Report, 2023).

⁵⁵ A. Fletcher and Z. Vasas, ‘Implementing the DMA: The Role of Behavioural Insights’ 2023, available at SSRN: <https://ssrn.com/abstract=4501429>.

are end users more likely to choose a particular service to be their default if they have actively downloaded it? If so, it would seem appropriate that the services available as default settings should include such downloads.

2. *Economic Analysis to Ensure that Compliance Is Proportionate*

Recital 29 provides that the Commission may impose implementing measures on gatekeepers that must comply with (among others) the principle of proportionality.⁵⁶ This means that, when the Commission intervenes to prescribe conduct, it cannot request measures that are disproportionate relative to the objectives of the DMA. This is clear within Article 8 itself when it comes to specification decisions,⁵⁷ which is supported by a general principle of proportionality in EU law.⁵⁸

The economist observer might think that this principle brings in an additional role for economic analysis because economic analysis is frequently used to evaluate proportionality in terms of costs and benefits within regulatory frameworks. There is indeed an additional role for economics, albeit not necessarily as much as economists might think. Proportionality within the DMA does not require the Commission to assess costs and benefits of the gatekeeper's compliance effort. Instead, it operates in this manner: if the same objective (e.g. making markets more contestable) can be obtained by two kinds of conduct, then the gatekeeper may choose to implement the conduct that is least restrictive of its business plans.

We therefore expect a gatekeeper to explain that its relatively limited compliance effort is sufficient to achieve the objectives of the DMA, even if third parties might have preferred it to take more onerous steps. It is for the Commission to determine if compliance is adequate to meet the obligations. Likewise, when the Commission issues a specification decision, it may only impose obligations that are necessary to achieve the DMA objectives.

Whether a gatekeeper's compliance efforts achieve the objectives of the DMA involves an assessment of how far it improves 'contestability', which is an inherently economic concept. Therefore, economics will be relevant to the question of 'could the objective (contestability) have been achieved in a less restrictive way?' For example, consider again the choice of default settings required under Article 6(3). One easy way to create more long-term contestability in search might be to require Google to make it harder for end-users to find Google Search, for example by including it as an option only 'below the scroll'. But would this be proportionate? One answer is 'perhaps not,' since end users who actively prefer Google Search may not be inclined to scroll down. But the opposite view needs to be considered since there may otherwise be few entry points for rivals. Moreover, there are many subtler variants of the same issue. For example, would a requirement that Google randomize the ordering of Google Search options be proportionate? Economic insights, including empirical evidence, may well be relevant to such questions. Since it is for the gatekeeper to demonstrate compliance under the DMA, the gatekeeper is more likely than the Commission to invoke evidence such as A/B-testing.

As another example, consider Article 6(2), which prohibits gatekeepers from using data generated by business users to compete against them. This does not prohibit all uses of these data, so the question arises as to which uses are allowed and which are forbidden. If the data are utilized to improve the platform's recommender system, and this disadvantages a competing business user, is this a contravention, or is such use proportionate, given the wider benefits to all users of more effective recommender systems? What if the gatekeeper uses that data to develop

⁵⁶ The Recital also provides that such measures must also be effective and respect the fundamental rights of the firms concerned and third parties.

⁵⁷ DMA, Art 8(7).

⁵⁸ Article 5(4) TEU provides: 'Under the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties'.

a valuable product that does not currently exist, but could conceivably have been developed by another firm if it had access to the same data? Again, these questions are not straightforward, but economic analysis of the alternative scenarios may be useful for assessing them.

Proportionality also plays a role in the limited defences provided within the DMA obligations. While there is no efficiency defence, certain provisions explicitly include a requirement of proportionality in relation to service integrity, security, and privacy. For example, Article 6(4) requires gatekeepers to allow the installation and effective use of third-party apps and app stores that can be accessed separately from the gatekeeper's core platform service. However, the gatekeeper may nonetheless take measures to protect the security and integrity of its own hardware and software, so long as they are 'strictly necessary and proportionate'.⁵⁹

This might appear a purely technical assessment, but there may still be some role for economics to play. For example, there may be differing levels of security that can be achieved with different approaches to compliance, and there may be trade-offs to be made. For example, suppose that completely barring the side-loading of apps on a device generates the highest level of security but that security is only a little lower if side-loading is allowed but only for apps that have received pre-approval from the gatekeeper. Here, there might at least seem to be a *prima facie* case for accepting the slightly lower level of security. Thus, for the gatekeeper to argue for the very highest security level, it may be reasonable to require it to provide evidence on the incremental economic benefits to end-users of that solution.

C. Evidencing Compliance

Under the DMA, evidencing compliance will be an ongoing process. *Ex ante*, gatekeepers will need to show on an annual basis why they expect to be compliant, and the Commission may also require *ex post* evidence of actual compliance.⁶⁰ Since compliance with the obligations involves not only complying with their letter, but doing so in a way that is effective and proportionate in promoting contestability and fairness, the Commission may also wish to see empirical evidence relating to these objectives and collect this evidence at the very start of the implementation of the DMA.

Economic thinking, including behavioural economics, may well play a role in analyzing such evidence. It could also contribute towards the development and assessment of process or outcome indicators of compliance. For process indicators of compliance, for example, this might involve asking questions such as: Have algorithms been designed and audited to avoid self-preferencing by gatekeepers? Are the adopted ranking criteria objectively justified by economic evidence on end user preferences? For outcome indicators, it might involve asking for example how much switching of defaults is realistic and necessary for compliance.⁶¹

To support and encourage such economic analysis, the non-confidential summaries of the gatekeepers' annual compliance reports should be as detailed and open as possible so that third parties can advise the Commission on the DMA compliance.⁶² However, these reports alone are unlikely to provide the data required to enable independent researchers to seriously test compliance. The Commission can also require gatekeepers to provide, as far as it is possible, access to their data and algorithms, including information about testing. In this regard, it is useful that Article 26 also enables the Commission to appoint independent experts to assist it in analyzing any data and information provided by the parties in relation to compliance. However,

⁵⁹ The same applies to interoperability obligations in Articles 6(7) and 6(9).

⁶⁰ DMA Art. 11 and 21. The Commission has established on 9 October a first template for those compliance reports.

⁶¹ R. Feasey and A. de Streel, *DMA Output Indicators* (CERRE Issue paper, 2023).

⁶² See Section 4 of the Commission Template for the compliance report.

it is regrettable that it did not go as far in the DMA as it did in the Digital Services Act⁶³ (DSA) whereby, under Article 40, ‘vetted researchers’ can request data from very large online platforms and very large search engines in order to conduct research into systemic risks. Enabling outside researchers to analyze gatekeepers’ data would have had the potential to act as an important multiplier of the Commission’s efforts in assessing DMA compliance.

Economic analysis may also be a powerful tool for operationalizing Article 13 anti-circumvention measures, which extend the various DMA obligations by prohibiting measures that seek to circumvent them. If alternative conduct on the part of a gatekeeper can be shown to have a similar effect to the prohibited conduct, this may constitute circumvention.⁶⁴ Such research could usefully be actively encouraged by the Commission.

D. Commission Enforcement and Prioritization

Economics may also play a rather different role in enforcing the DMA than in standard competition law enforcement. Establishing an infringement will require the Commission to demonstrate that the available evidence supports its view that a gatekeeper has breached an obligation, but crucially it will not be required to show that this has generated any harmful economic effects. For some requirements, such breaches are indeed likely to be fairly self-evident, based on the facts, with little economic analysis required. There is still, nevertheless, likely to be a role for economics. The same sorts of issues highlighted above as being relevant to specification (where economic analysis may play a role) are likely also to be relevant for establishing whether or not an obligation has been breached or circumvented.

Economics may also be useful for the Commission to prioritize enforcement cases. Indeed, 6 firms and 22 services have already been designated, each of which has to comply with many rules. Analyzing each of these interactions and determining where there is an instance of non-compliance would take considerable resources. Because all issues cannot be investigated at once, it will be important to triage them in a manner that reflects the costs and benefits of launching an investigation. As we explained elsewhere,⁶⁵ economic principles can be used here too. On certain issues where enforcement would be counter-productive, economic thinking might lead the Commission not to prioritize those issues. Where there are genuine concerns, those that are likely to be quicker to resolve will be less costly, while those that impact more business and end users, generate learning that can be applied elsewhere, or encourage platforms to comply more effectively will have higher benefits. More contestability will be created more quickly if lower cost and higher benefit matters get priority. The national authorities may be able to assist in matters where they have expertise and thereby increase enforcement bandwidth. Some issues may also be left to private enforcement rather than require regulatory intervention.⁶⁶

Finally, the Commission also has a broad mandate under Article 47 of the DMA to enact Guidelines ‘on any of the aspects’ of the DMA, and here economics may well have a critical role to play. Indeed, the same may also be true for the Implementing Regulations under Article 46.

⁶³ Regulation 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services (Digital Services Act) and amending Directive 2000/31, OJ [2022] L 277/1.

⁶⁴ As an example, in the context of the prohibition on contractual retail price parity clauses under competition law, Hunold et al. (2020) use econometric techniques to investigate whether an online travel agent is demoting down its search rankings those hotels who price lower on other platforms. Such conduct would be expected to have the de facto effect of achieving price parities, even absent any contractual basis, and thus could be seen as a form of circumvention. As the paper shows, there can be thorny empirical and theoretical issues in this type of inquiries. See M. Hunold, R. Kesler and U. Laitenberger, ‘Rankings of Online Travel Agents, Channel Pricing, and Consumer Protection’ (2020) 39(1) *Marketing Science*, 92–116.

⁶⁵ J. Crémer, D. Dinielli, P. Heidhues, G. Kimmelman, G. Monti, R. Podszun, M. Schnitzer, F. Scott Morton and A. de Stree, ‘Enforcing the Digital Markets Act: Institutional Choices, Compliance, and Antitrust,’ (2023) *Journal of Antitrust Enforcement*.

⁶⁶ In antitrust law, one factor used by the Commission to decide whether to take up a complaint is whether or not the complainant can solve this issue directly by litigation. The Court has accepted this as a legitimate criterion, for example in *Automec Srl v Commission*, Case T-24/90, ECLI:EU:T:1992:97.

While these are currently very procedural, they could arguably profit from economic insights as well, for example in relation to the form and content required within the gatekeeper's compliance reports.

We note that such Guidelines and Implementing Regulations are not only useful for the firms themselves, but also can help to foster fairness and contestability by helping business users and rival platforms understand the rules and apply their instructions. However, it may be premature to release guidelines until some experience has been gained about how gatekeepers comply and with what effects. For example, guidelines on designing choice screens can probably only be deployed after having observed how these work in practice.

E. Assessing Impact and Revising the DMA

Article 53 requires that the Commission evaluate, every 3 years, the success of the DMA in achieving its objectives and its impact on business users and end users. This will provide an important opportunity to utilize relevant economic analysis, including in many of the contexts described above. To carry out this work, the Commission should give early thought to the process for such evaluation,⁶⁷ and also the data that are likely to be required. While some relevant data may be available retrospectively, there may be other evidence that will need to be collected proactively if it is to be available for future evaluations. Early economic thinking may play a role in identifying options and also prioritizing such evidence collection.⁶⁸

Of course, while the Commission will be eager to see evidence of improved contestability and fairness in these markets, it should also be ready to consider the drawbacks or unintended consequences of this first attempt at comprehensive gatekeeper platform regulation. Of particular interest may be the analysis of the combined effect of the different DMA obligations and their impact on the business models of the designated gatekeepers. The views of independent economic experts are likely to be especially valuable here, and there may be merit in the Commission seeking their input proactively, collecting its own data, and perhaps even commissioning external work in this area.

This is important because the current DMA should not be seen as set in stone. EU regulations may be changed as market circumstances and regulatory experience develop. Revising the DMA does not necessarily even require new legislation: built into the DMA at Article 12 is a mechanism for certain updating of obligations to be made by 'delegated act,' following a 'market investigation.' Additionally, EU legislation is constantly being updated, and the DMA specifically highlights the Commission's ability to propose legislative changes after a market investigation or after a triennial Article 53 review. Again, economic analysis should be highly relevant to any such revisions.⁶⁹ And it is not only empirical analysis that is relevant. Existing economic theory of regulation⁷⁰ was influential in the development of utility regulation, but desperately needs further development to capture the incentives and tools at play in digital platform regulation. This work is underway in the academic literature, and will only grow and become more robust and useful over time.

⁶⁷ We have written elsewhere about the need for the Commission to set out upfront a plan for the independent evaluation of the DMA. This is important both for democratic legitimacy of the legislation and for the improvement of the law and its enforcement: J. Cremer et al. (footnote 65).

⁶⁸ Commission Better Regulation Guidelines of 3 November 2021, COM(2021) 305, pp. 29–40.

⁶⁹ Beyond the reasons discussed above, economists will continue to develop useful analyses of gatekeeper platform markets by contributing to antitrust cases outside the EU. Empirical insights from these cases could prove relevant to the assessment and revision of the DMA, even if the economists in question do not intend to influence this legislation.

⁷⁰ As compiled in the influential book by J.J. Laffont and J. Tirole, *A Theory of Incentives in Procurement and Regulation* (MIT Press, 1993).

F. Coordination among Legal Instruments across the EU and beyond

Finally, economic analysis may also be a useful and powerful mechanism to ensure consistency among different instruments of EU laws, in particular among the DMA and competition law.⁷¹ As has been noted elsewhere, many DMA obligations seek to address issues that have been identified in ongoing EU antitrust cases.⁷² It appears likely that the Commission will close some of these cases (with or without commitments) and continue investigating these issues using DMA framework. However, the Commission will continue to utilize competition law to investigate anticompetitive conduct that lies outside the remit of the DMA. Where this occurs, there may well be benefit from the DMA and competition law being applied in a mutually supportive manner, so far as is consistent with the different legal frameworks. Using the same economic methodologies may contribute to such coherence. The deep understanding that the Commission and Member State authorities will gain through the DMA is likely to enhance the application of wider competition law in digital markets too, including merger review.⁷³

Moreover, within the EU, economic principles may also help to ensure the coherent and complementary application of the DMA and other EU laws that will regulate the designated gatekeepers and whose obligations are complementary to those of the DMA. For instance, this is the case of some obligations of the Digital Services Act, in relation to rankings and recommender systems or to online targeted advertising.⁷⁴ This is also the case for the Data Act in relation to B2B data access rules or cloud switching and interoperability rules.⁷⁵

Economic analysis may be a useful mechanism to ensure consistency in the regulation of digital platforms across jurisdictions too. Indeed, several jurisdictions have already recognized the policy issues raised by the strong, enduring, and expanding market positions in the platform economy and they are considering the imposition of obligations that are similar to those of the DMA, such as the preventing of anti-competitive leverage or the imposition of diverse forms of interoperability.⁷⁶ These include the UK's forthcoming Digital Markets, Competition and Consumers Act and the German Section 19a of the Competition law, but there are also relevant proposals among other G7 countries⁷⁷ and beyond such as in China. Given the fact that most of the biggest digital platforms have a nearly global reach, there are clear benefits to be achieved from broad consistency across those digital regulations. This will not only reduce costs for gatekeepers, but also provide greater clarity for business users and rival firms who are seeking to compete and grow on this global stage. Having clear economic principles and methodologies supporting the goals, design, and enforcement of such regulations would greatly contribute to such consistency.

⁷¹ As explained in P. Larouche and A. de Stree, 'The integration of wide and narrow market investigations in EU economic law', in M. Motta, M. Peitz and H. Schweitzer (eds.) *Market Investigations: A New Competition Tool for Europe?* (Cambridge University Press, 2022), 164–215.

⁷² See footnote 65.

⁷³ The existence of the DMA does not, in itself, provide a justification for weakening the merger review process. It is typically better to address anticompetitive concerns at their root (for example, through prohibiting a merger) than to seek to control them through inherently resource-intensive and imperfect regulation. For the need to explore theories of harm in mergers involving digital markets in light of the DMA, see A.C. Witt, 'The Digital Markets Act: Regulating the Wild West' (2023) 60(3) *Common Market Law Review*, 625.

⁷⁴ DSA, Arts. 26–27 and 38–39.

⁷⁵ Regulation of the European Parliament and of the Council on harmonized rules on fair access to and use of data and amending Regulation 2017/2394 and Directive 2020/1828 (Data Act).

⁷⁶ A. Fletcher, 'Pro-Competition Regulation of Digital Platforms: Are Divergent Approaches Healthy Experimentation or Dangerous Fragmentation?' (2023) 39 *Oxford Review of Economic Policy*, 12 A. de Stree, 'Towards a Global Governance of Online Platforms' (CERRE Report, 2022).

⁷⁷ G7 Compendium of approaches to improving competition in digital markets, Hiroshima Summit (2023).

IV. CONCLUSION

The design of the DMA reflects a very deliberate and reasonable intention to enhance clarity, speed, administrability, and enforceability. In the process, it has omitted several elements of competition law enforcement where economic analysis is key. The DMA has drawn on the extensive existing economic thinking to determine *ex ante* a set of pro-competitive measures, and consequently focuses *ex post* economic enquiry on a narrower set of questions.⁷⁸

This more regulatory approach to the use of economics in promoting competition should have benefits for consumers, business users, rivals and even the platforms themselves. Hopefully, over time, the DMA will enable fairer access to platforms and create competition on those platforms in terms of price, quality, and—critically—innovation. Over time, innovative platform entrants will face lower barriers to entry and expansion, and end users will obtain the benefits of such competition. Dominant platforms themselves will obtain more certainty around the rules of engagement, rather than face extensive drawn-out competition litigation as we see in many jurisdictions today.

Economic analysis—including behavioural economics—has a key role to play in helping to achieve these ambitious and laudable goals. The challenge for the economics profession will be to provide this input in an environment that places a strong emphasis on clarity, administrability and enforceability. If allowing for more economic analysis in relation to compliance with the DMA leads to thousands of pages of platform-generated advocacy and long, drawn-out procedures, this version of the DMA will likely be perceived as a failure and the next version of this law may give less weight to economic analysis. The challenge is thus to deploy economic analysis in the most productive ways possible without compromising the Commission's ability to enforce, or the gatekeepers' fundamental rights to defend themselves. This will surely be a delicate balancing act, but an important one.

FUNDING

Paul Heidhues thanks the German Science Foundation (DFG) for funding under project number 462020252. Jacques Crémer acknowledges support from ANR under grant ANR-17-EURE-0010 (Investissements d'Avenir program).

⁷⁸ We note that other frameworks seeking to improve fairness and contestability in these markets may be designed somewhat differently, such as the UK's forthcoming Digital Markets, Competition and Consumers Act or the German Section 19a of the Competition law.