THE ECONOMICS AND REGULATION OF DIGITAL MARKETS

Edited by Frank Fagan
and James Langenfeld

RESEARCH IN LAW AND ECONOMICS

VOLUME 31

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Emerald Publishing Limited
Emerald Publishing, Floor 5, Northspring, 21-23 Wellington Street, Leeds LS1 4DL

First edition 2024

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-83797-644-7 (Print)
ISBN: 978-1-83797-643-0 (Online)
ISBN: 978-1-83797-645-4 (Epub)

ISSN: 0193-5895 (Series)

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CHAPTER 1

THE ECONOMICS AND REGULATION OF DIGITAL MARKETS

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The articles in Volume 31 of *Research in Law and Economics* address three critical areas of developing government policies. The first three contributions analyze digital markets and their regulation. Next is a discussion of the divergence of expert and public views on European democracy. The final contribution provides an analysis of the effects of firing notification procedures on wage growth. The functioning of digital markets, the state of democracy around the world and rules that affect wages raise questions about the proper roles of government rules, and this volume provides insights into these pressing and important issues.

The first two articles on digital markets, in particular, target the European Commission's (EC) recent effort to regulate digital platforms, the Digital Markets Act (DMA), for discussion. David J. Teece and Henry J. Kahwaty analyze the DMA in "Is the Proposed Digital Markets Act the Cure for Europe's Platform Ills? Evidence from the European Commission's Impact Assessment." Teece and Kahwaty highlight the differences between dynamic competition, which centers on innovation, and static competition, which centers on existing products and services. The authors explain that the digital economy is dynamic, and that in the digital economy, innovation-driven competition is critical. With that foundation laid, Teece and Kahwaty evaluate the EC's Impact Assessment released in support of the DMA, in which the EC presents the costs and benefits they see resulting from the DMA. The authors conclude that "[t]he Impact Assessment neither assesses the DMA's impact on dynamic competition in the digital economy nor evaluates the impacts of specific DMA prohibitions and obligations. Instead, it considers benefits in general and largely ignores costs." Teece and

The Economics and Regulation of Digital Markets
Research in Law and Economics, Volume 31, 1–3

ISSN: 0193-5895/doi:10.1108/S0193-589520240000031001

Kahwaty focus on methodologies and assumptions used in the Impact Assessment that they view as highly inappropriate. In addition to critiquing the Impact Assessment, the authors assess the DMA itself, and find that the DMA also prioritizes static competition rather than dynamic competition. Finding this, the authors conclude that the DMA has potential to harm the European economy. They conclude "[i]nstead of promoting dynamic competition between platforms, the DMA would reinforce existing market structures with regulation, ossify market boundaries, and stunt European innovation. The DMA is likely to chill R&D and innovation by encouraging free riding on the investments of others, which discourages making those investments. Avoiding harm to innovation is critical, because innovation delivers large, positive spillover benefits, driving increases in productivity, employment, wages, and prosperity."

Antonio Davola and Gianclaudio Malgieri provide quite a different perspective on the DMA in "Data, power and competition law: the (im)possible mission of the DMA?" Davola and Malgieri analyze the architecture of the DMA in terms of its identification of operators that it targets for regulation. The authors discuss the underlying concept behind the DMA's architecture as a power imbalance between platforms and other agents in digital markets, which could jeopardize the rights of these other agents and the competitive development of the digital market environment. The authors find that this power imbalance is clear, but that the DMA's assessment of that power may not be suited to effectively developing digital markets. For example, the authors highlight that the DMA relies heavily on traditional market power metrics such as size and the number of users. The authors argue that while the current DMA structure is not "radically unsuited" to identifying gatekeeping in digital markets, the DMA should instead define power based on "choice-architecture." That is, the DMA should include an "interdisciplinary legal (and socio-economical) analysis on the very nature of power in the digital environment," stressing network and lock-in effects that occur in digital markets.

In "Rethinking Remedies for the Attention Economy," Francesco Parisi and Elvira Caterina Parisi do not directly address the DMA, but instead focus on the nature of market power on social media platforms and discuss potential antitrust instruments that could address the exercise of market power. The authors highlight the uniqueness of social media platform market power, which is exercised "not by charging higher prices to users, but by 'tying' larger amounts of advertising to their content." The authors then discuss structural, behavioral, and market-based remedies for the exercise of market power by social medial platforms. The authors argue that "[m]arket-based solutions are the least explored in the literature, despite being the most promising instruments to lower the attention costs imposed on users, while preserving the economies of scope in production and the network effects in consumption, and possibly maintaining free access to social media, as we know it today." Such market-based solutions include "auctioning off the ownership of the social media network" or alternatively maintaining a "periodical or continual auction mechanism, in which the management of every social media network is periodically or constantly auctioned."

Kamil Jonski and Wojciech Rogowski address a different timely topic in "With the Naked Eye – Diverging Perspectives on the Evaluation of Democracy

in the EU." This article highlights the "substantial divergence" between experts and the general public in these groups' perspectives on the strength of democracy in Europe and democracy's successes and failures. The authors begin by recapping academic and mainstream press "consensus" that, in particular, Central and Eastern European democracies are backsliding. The authors note that this consensus is much less apparent in the general public. Jonski and Rogowski support these conclusions with econometric analysis demonstrating that "perception of the democratic performance could be explained by a combination of (i) perceived economic situation and (ii) the factors summarized by indexes of the quality of democracy." They elaborate "[t]his finding suggests that the general public evaluates the democratic performance using a broader range of criteria than the expert-provided indexes, including, among others, the system's ability to deliver expected living standards. Problematic as it sounds, if the expert community fails to address this reality, its warnings on democratic backsliding are likely to fall on the dead ears of the dissatisfied public." The authors find that as the press and academics found democracy backsliding, metrics related to the general public's satisfaction with democracy provided "a very different set of democratic ups and downs." The authors conclude that this divergence in evaluating democracies has made debate on democracy unproductive and hampers correcting the systems, while populists exploit the divergence as the "elite" being detached from "ordinary people".

Nicolae Stef and Anthony Terriau address another important issue in "Firing notification procedures and wage growth". The authors provide background on firing notification procedures in 33 countries. For example, when deciding whether to fire an employee, employers may be required to notify or receive approval from a third party such as a national employment agency. As such, firing notifications can serve as legal safeguards against unfair dismissals. At the same time, such requirements can increase administrative firing costs, reduce unemployment inflows and outflows. Stef and Terriau discuss the different incentives created by worker protection laws and requirements for firing notifications. They explain "On the one hand, worker protection legislation reduces job destruction and generates longer employment duration, which increases the incentives of employers to provide training. Workers can initially accept a wage reduction to pay for training and then benefit from higher wages in the long term. On the other hand, firing notification procedures may affect the bargaining position of workers: firing restrictions reduce employment opportunities, which can not only lower workers' bargaining power but also increase firing costs, which strengthens the bargaining position of current employees." The authors provide a discussion and econometric analysis that find "administrative requirements in cases of dismissal have a positive and significant effect on wage growth." The authors conclude that their "result is robust even after controlling for the endogeneity of the firing notification restrictions, the involvement of third parties in the wage bargaining process, the minimum wage, the firms' training policy, and the composition of employment. These findings suggest that firing notification procedures foster the growth of wages by increasing the bargaining power of incumbent workers."

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CHAPTER 2

IS THE DIGITAL MARKETS ACT THE CURE FOR EUROPE'S PLATFORM ILLS? EVIDENCE FROM THE EUROPEAN COMMISSION'S IMPACT ASSESSMENT

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ABSTRACT

The European Union's Digital Markets Act (DMA) calls for far-reaching changes to the way economic activity will occur in EU digital markets. Before its remedies are imposed, it is critical to assess their impacts on individual markets, the digital sector, and the overall European economy. The European Commission (EC) released an Impact Assessment in support of the DMA that purports to evaluate it using cost/benefit analysis.

An economic evaluation of the DMA should consider its full impacts on dynamic competition. The Impact Assessment neither assesses the DMA's impact on dynamic competition in the digital economy nor evaluates the impacts of specific DMA prohibitions and obligations. Instead, it considers benefits in general and largely ignores costs. We study its benefit assessments and find they are based on highly inappropriate methodologies and assumptions. A cost/benefit study using inappropriate methodologies and largely ignoring costs cannot provide a sound policy assessment.

Instead of promoting dynamic competition between platforms, the DMA will likely reinforce existing market structures, ossify market boundaries, and stunt European innovation. The DMA is likely to chill R&D by encouraging free riding on the investments of others, which discourages making those

The Economics and Regulation of Digital Markets
Research in Law and Economics, Volume 31, 5–52

ISSN: 0193-5895/doi:10.1108/S0193-589520240000031002

investments. Avoiding harm to innovation is critical because innovation delivers large, positive spillover benefits, driving increases in productivity, employment, wages, and prosperity.

The DMA prioritizes static over dynamic competition, with the potential to harm the European economy. Given this, the Impact Assessment does not demonstrate that the DMA will be beneficial overall, and its implementation must be carefully tailored to alleviate or lessen its potential to harm Europe's economic performance.

Keywords: Competition policy; cost/benefit analysis; dynamic competition; innovation; platforms; regulation; technology

JEL Codes: D04; D61; K21; L40; O38

1. INTRODUCTION

In December 2020, the European Commission (EC) presented its Digital Markets Act (DMA) legislative proposal ("DMA Proposal", European Commission, 2020a). On December 15, 2021, the European Parliament approved an amended version of the DMA by an overwhelming majority vote of 642 to 8 with 46 abstentions, giving a mandate for negotiations with EU governments on the proposed legislation. The DMA was ultimately signed into law by the European Parliament and the Council of the EU in September 2022. According to the EC, the DMA addresses several perceived ills: "inefficient outcomes in the digital sector in terms of higher prices, lower quality, as well as less choice and innovation to the detriment of European consumers" (DMA Proposal, p. 1). These purported ills stem from a certain mindset from the context of industrial markets: concentration is bad for consumers, and choice – meaning a large number of substitutable suppliers competing against each other – leads to lower prices and innovation.

To increase choice and remedy perceived ills, the DMA calls for far-reaching changes to the way economic activity can or will occur in EU digital markets. To show the benefits of the DMA proposals, the EC quantified the expected effects in a formal Impact Assessment that also was published in December 2020 ("Impact Assessment", European Commission, 2020b). The EC's Impact Assessment states that the DMA's provisions are aimed at increasing choice, fairness, and contestability in digital markets to improve consumer welfare (Impact Assessment, Part 1, ¶¶ 108–109).[2] The Impact Assessment accepts the EC's diagnosis, considers the possible side effects of the DMA as prescribed, and predicts a healthy future.

We evaluate the EC's Impact Assessment in order to provide a "second opinion." Our goal is not to support or encourage the modification of specific parts of the DMA. Indeed, we do not focus in detail on the effects of any specific obligations in the DMA. Rather, we note that the DMA calls for far-reaching changes in the conduct of economic activity in digital markets. Before such remedies are administered, it is critical to assess their potential impacts on individual markets, the digital sector more broadly, and the overall European economy. Will the proposed remedy heal or exacerbate the underlying problems identified by the EC? In our view, the EC's

diagnosis is based on industrial era economic tools and assumptions ill-suited for the realities of today's digital, innovation-driven marketplaces.

An economic assessment of the DMA should begin with an analysis of the European digital economy. This would include an understanding of the competition that exists in the digital economy. In the digital sector, marginal costs are low, network effects can create positive and negative feedback loops, and in many areas innovation-driven competition leads to the constant obliteration and redefinition of market boundaries. A rival's innovation can cause market dynamics to change significantly.

After understanding the competition that exists, an assessment should identify areas where high prices, low quality, reduced output, or a lack of innovation are symptomatic, and explain how a lack of competition has caused these ills. The assessment would evaluate the economic impact of the specific prohibitions and obligations in the DMA, and it would show how the DMA's obligations are a proportionate prescriptive remedy to address Europe's ills. The Impact Assessment does not do this. It does not assess the impact of dynamic competition in the digital economy nor does it evaluate the economic impact of the specific prohibitions and obligations contained in the DMA.

Large technology firms competing in the European Union are not lazy monopolists enjoying an easy life; they are themselves facing brutal competitive battles fought using new digital technologies to develop new services that address ever-evolving business and consumer needs. They are investing considerable resources annually in research and development (R&D) not only to improve their core platform services but also to stimulate competition in their ecosystems. Consumers, business users, and many others gain enormously from these efforts, as can be seen by comparing the functionality provided by current products and services available to consumers to those available even only a few years ago. Given its basis in industrial-era models of competition, the Impact Assessment openly struggles to address realities such as these.

The fields of economics, strategic management, and entrepreneurship have advanced our understanding of the management and economics of innovation in many ways. These disciplines and others can help our understanding of innovation and digital competition, allowing one to diagnose potential concerns and analyze potential remedies. If market or competition concerns are misdiagnosed, the remedy prescribed is not likely to cure the problem and may end up causing significant and harmful side effects for the European economy.

In 1942, Joseph Schumpeter characterized innovation-driven competition as coming "from the new commodity, the new technology, the new source of supply, the new type of organization ... competition which ... strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives. This kind of competition is as much more effective than the other as a bombardment is in comparison with forcing a door. . .." (Schumpeter, 1942) In short, Schumpeter was reminding us of the obvious: innovation-driven competition is the strongest and most galvanizing form of competition. It redefines markets and animates the competitive process. It has come to characterize competition in the digital sector of most advanced economies. Competition not

animated by innovation is weak in comparison, but this is what the DMA is promoting and indeed, in our view, prioritizing over innovation-driven competition.

Economists have long recognized the importance of innovation for economic advancement, growth, and increases in per capita income. Innovation can take many forms. One can identify "core," fundamental, or systemic innovation and peripheral, add-on innovation. Innovation can result in cost reductions or improving the existing products or services available to consumers. It also can lead to the development of new products and services and the combination of assets in new ways to meet consumer demand using innovative new business models. Innovation driven by competition can create significant benefits, but competition driven by innovation can redefine markets and invigorate entire sectors of the economy. The automobile did not just replace horse-drawn carriages, it redefined cities.

Search engines, online marketplaces, social networking services, media-sharing platform services, interpersonal communication services, and many other platform services bear little resemblance now to the services they were just a few short years ago. They are responsive to voice commands, optimized for mobile, and flooded with features and functionalities, and they continue to evolve. To impact the status quo, innovating firms accept high risk and uncertain payoffs, often far into the future.

Businesses that innovate can overturn existing market structures completely and redefine historic market boundaries. The emergence of turbine jet engines completely overturned the structure of the civilian passenger aircraft industry; autonomous cars likewise are likely to upset the structure of the automobile industry, just as the entertainment industry has been upset by Spotify, Netflix, Amazon, and others. While innovation can dramatically cramp incumbents unwilling to adapt (e.g., Kodak and digital film), in other cases, incumbents appear to adapt successfully (e.g., Disney+).

Instead of allowing for dynamic competition to continue between platforms, the DMA may reinforce existing market structures with regulation, ossify market boundaries, and stunt innovation in Europe. The DMA's implementation should be carefully tailored to alleviate or lessen its potential to harm Europe's economic performance.

Instead of focusing on and prioritizing this kind of dynamic, innovation-based competition, the Impact Assessment, through its quantification of costs and benefits and its associated assumptions, reveals a preference for industrial-era static competition, where the benefits of network effects, big data, and extreme economies of scale and scope are lost. This can be seen in many aspects of the Impact Assessment's analysis.

First, the Impact Assessment assumes that the business models utilized by platforms and the functionality and cost of the services available from platforms in the European Union will be unchanged by the DMA. This is a static view of the world, where the products and services available in the market are taken as given instead of being responsive to policy and market factors.

Second, the Impact Assessment focuses on redirecting or channeling competition from being "for" the market to being "in" the market. This devalues innovation-based competition leading to new products and services, and