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Regulating Big Tech:

From Competition Policy to Sector Regulation?

Oliver Budzinski[*] & *Juliane Mendelsohn*[#~]

Abstract: The European Commission has proposed a new regulatory tool for the governance of digital markets. The Digital Markets Act (DMA) intents to limit the market behavior of so-called gatekeeper companies to ensure contestable and fair digital markets. We review the provisions of the DMA both from a legal and from an economics perspective. Notwithstanding a number of benefits, we identify several issues with the current proposal. When looking at the core provisions of the proposal from an economic perspective, five issues of contention arise: many of the provisions seem to be quite narrow in scope and it seems difficult to extrapolate more general rules from them; the economic harm of some of the provisions is both uncertain and in principle debatable; the alleged distinction between different types of obligations cannot be verified, and, last but not least, while the DMA seeks to control existing gatekeepers, the "tipping" of markets and the rise of further gatekeepers is not guaranteed by this proposal; this in turn leads to a larger critical analysis of the gatekeeper as DMA's norm addressee. From a legal perspective, the first hurdle is the lack of clarity pertaining to the nature and goals of the DMA, this is further compounded by procedural provisions and an enforcement regime with many uncertainties and loopholes – all of which tend to undermine the intended stringency of the regulation and its overall chances of making digital markets systemically more contestable and fairer. Thus, we think that a reform of the competition policy regime would better suit the need of regulating big tech.

Keywords: big tech, digital economy, digital ecosystems, GAFAM, competition policy, antitrust, Digital Markets Act (DMA), sector-specific regulation, law and economics

JEL-Codes: K21, K23, K24, L40, L50, L81, L86

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1. Introduction

In December 2020, the European Commission published the proposals for two new Acts seeking to govern the market behaviour of so-called big online services providers ("big tech")[1]: the Digital Markets Act (DMA; *European Commission* 2020a) und the Digital Services Act (DSA; *European Commission* 2020b). It is the intent of the Commission to pass these regulations during the French presidency in spring 2022. Both draft regulations claim to be sector-specific and asymmetric (i.e., they only address selected companies in the respective markets), and they propose a fundamental reform of the institutional framework of digital services markets. Both Acts taken together – the "DSA-package" – aim to regulate digital commerce by protecting their users (both consumers and business users), competitors, and digital rights holders – from a range of illegal and harmful content and practices as well as by keeping the power and potential entrenchment of big tech in check. According to the Commission the goals of the DSA-package are "to create a safer digital space in which the fundamental rights of all users of digital services are protected (and) to establish a level playing field to foster innovation, growth, and competitiveness, both in the European Single Market and globally".[2]

While the DSA proposes a comprehensive regulation of illegal and damaging content, transparent advertising, and disinformation, at its core revising the rules and mechanism of the e-commerce directive (Directive 2000/21/EC) from 2000, which has long been considered outdated (see on the DSA, inter alia, *Cappello* 2021, *Savin* 2021), the DMA addresses the business behaviour of online services and its effect on markets and welfare. The DMA is thus the market- rather than content-related branch of the regulatory package and shapes the focus of this paper. Its goals are to ensure the future contestability and fairness of digital services where so-called *gatekeepers* are present (Art. 1 (1), 12 DMA and Rec. 10 DMA). Despite its closeness to competition policy, on the face of it, the DMA can, thus, be described as sector-specific regulation with an asymmetric applicability targeted at so-called *gatekeepers* in the stipulated core platform services (Art. 2 (2) and 3 DMA; see also section 2.2), thus creating a trade-off between regulation and competition policy.

The DMA is closely aligned with the overall aims of EU competition law and policy because it seeks to address the ostensible deficits and shortcomings of competition policy to effectively deal with the challenges of digital competition. There is a widespread perception that competition law enforcement in the digital sphere has been too complex and too slow over the past decade – and the Commission appears to share this view (Rec. 5 DMA and prominently *Furman et al*. 2019; *Marsden* & *Podzsun* 2020).

[1] The DMA addresses so-called *core platform services* (Art. 3 (2) DMA) and the DSA so-called *very large online platforms* (Art. 25 DSA), which are not defined in the same manner but overlap (we will address details later).
[2] See https://ec.europa.eu/digital-single-market/en/digital-services-act-package.

In this paper, we provide an institutional law and economics analysis of the DMA proposal, contributing to answering the following questions:

(i) Is the DMA able to close the loophole in competition law enforcement against digital services?
(ii) Does the DMA as a policy tool belong in the sphere of the institutional framework of the competitive process or is it sector regulation?
(iii) Is an ex-ante approach more appropriate to deal with the anticompetitive challenges in digital ecosystems than an ex-post approach?

The paper is structured as follows: First, section 2 describes the content and the procedural rules of the DMA proposal in its current form before section 3.1 presents an analysis of the effectiveness of the core provisions from an economic perspective. Furthermore, we look into the law-and-economics nature of the DMA by critically reviewing the effectiveness and possible pitfalls of the proposed procedural and enforcement rules (section 3.2). Following a balancing of the ex ante and the ex post approach to regulating big tech (section 3.3), we conclude that while the DMA intends to be an (asymmetric) "rulebook" for the digital era, the current proposal contains a number of weaknesses and issues (section 4).

2. The EU Proposals for New Rules

2.1 How the Story Unfolded

Over the last five years, discontent with how competition policy deals with modern anticompetitive arrangements and conduct in the digital economy has grown significantly. This culminated in a number of expert studies in different jurisdictions, commissioned by various authorities.[3] Remarkably, and notwithstanding important differences, the studies identify several common concerns regarding the effectiveness of competition policy in the digital sector and, in particular, regarding digital online services (*Kerber* 2019):

- Network effects are omnipresent in these markets and frequently lead to "tipping" – they go from being competitive into being dominated by a quasi-monopolistic company (including its subsidiaries). For instance, data driven network effects are often seen as the key driver in digital market concentration (*Haucap* & *Schweitzer* 2021: 4). In particular, the combination of direct (*Farrell* & *Saloner* 1985; *Katz* & *Shapiro* 1985, 1994) and indirect (*Rochet* & *Tirole* 2003, 2006; *Caillaud* & *Jullien* 2003; *Armstrong* 2006) network effects with - natural or strategically created - incompatibilities and switching costs (*Klemperer* 1995) enhances the probability of tipping.

[3] See *ACCC* (2019); *AGCM-AGCOM-AGPDP* (2019); *Autoridade da Concurrencia* (2019); *Autorité de la concurrence* (2018); *Barreto* et al. (2019); *BMWi* (2019); *CMA* (2020); *Congressional Majority Staff Report* (2020); *Crémer* et al. (2019); *Ecorys* (2017); *EY* (2018); *Furman* et al. (2019); *Haucap* et al. (2019); *JFTC* (2019); *Schallbruch* et al. (2019); *Schweitzer* et al. (2018); *Schweitzer* & *Welker* (2019); *Ofcom* (2019); *Scott Morton* et al. (2019); *Steenbergen* et al. (2019).

- Advantages in the possession and procession of personalized data as well as regarding the access to large audiences create scope for non-horizontal anticompetitive arrangements and conduct, in particular by leveraging initial market power across different areas within a digital ecosystem (inter alia, *Farrell* & *Katz* 2000; *Zhu* & *Liu* 2018; *De Cornière* & *Taylor* 2019, 2020; *Hagíu* et al. 2020). Problematic strategies by gatekeepers with data and/or audience-access advantages include, self-preferencing, strategic withholding of relevant sales-related data by a marketplace provider towards suppliers with whom the marketplace provider competes on upstream markets (or elsewhere), exclusivity arrangements between marketplaces and operating systems (e.g. app stores), excessive taxes or cost-raising conditions on competitor's goods, and other dual role issues.
- The observed market power does not necessarily root in classical (single) market dominance. Instead, a growing importance of situations of "economic dependence" on certain online services can be observed (inter alia, *Bougette* et al. 2019) and enhanced concepts of market power are required (inter alia, *Budzinski*, *Gaenssle* & *Stöhr* 2020a).
- As a result, virtually all studies identify serious issues with the economic power of certain digital service providers (e.g., "GAFAM"[4]).

Despite the independence of the expert groups and their diverse jurisdictional backgrounds, the commonalities of these findings show a striking indication that action needs to be taken to combat anticompetitive arrangements and conduct in so-called digital ecosystems. These are often dominated by specific online services, such as the search engine markets as well as the markets for targeted online advertisement placing by Alphabet-Google, social network and messenger markets by Facebook and its subsidiaries or online marketplaces for smartphone apps by Apple and Alphabet-Google-Android within their respective ecosystems. The economic power of these big tech giants was not prevented by competition law and – so the common choir – cannot effectively be limited and controlled by how competition policy has been working so far (see alongside the commissioned studies mentioned above, inter alia, *Budzinski* 2016; *Budzinski* & *Stöhr* 2019; *Kerber* 2019; *Krämer* 2020; *Marsden* & *Podszun* 2020).

This has triggered reform activity on member state level within the EU. Germany, for instance, launched two reform packages to their competition law during the last five years. First, in 2017, the 9th amendment of the German Competition Act (Gesetz gegen Wettbewerbsbeschränkungen, GWB) added explicit reference to the peculiarities of platform economics which now must be considered when delineating a relevant market or when assessing market power (inter alia, *Budzinski* & *Stöhr* 2019). Following this, the 10th amendment from 2021 further extended the emphasis on platform effects and emphasized the crucial role of data in digital markets – both in the assessment of market power (e.g. introducing intermediation power as a relevant factor) and with respect to examples of abuses of this market

[4] This refers to the companies Google (Alphabet), Amazon, Facebook, Apple, and Microsoft.

power (inter alia, *Budzinski*, *Gaenssle & Stöhr* 2020a,b; *Haucap* 2020). In addition, the latest GWB-reform enhanced the term market power by introducing a new concept, complementing the traditional notions of single market dominance and collective dominance: the paramount significance within a digital ecosystem or outstanding relevance across markets ("ORAM"; see inter alia, *Budzinski*, *Gaenssle & Stöhr* 2020a; *Haucap* 2020; *Franck & Peitz* 2021a). Thus § 19a GWB now lays out the conditions for establishing such a systemic market power and the special responsibilities that companies enjoying such positions are due to comply with. Additionally, the rules against the abuse of relative (or superior) market power[5] were significantly enhanced with a view to online services (§ 20 GWB; inter alia, *Budzinski*, *Gaenssle & Stöhr* 2020a,b; *Haucap* 2020). Germany has thus enhanced the scope and the powers of its competition policy regime to better deal with the challenges originating from the digital world. This goes hand in hand with path-breaking decision of the the Federal Cartel Office (Bundeskartellamt) such as the German Facebook case which pioneers the idea that excessive collection of user data may represent and abuse of market power (inter alia on this case: *Podszun* 2019; *Kerber & Zolna* 2020; *Budzinski*, *Grusevaja & Noskova* 2021; *Buiten* 2021).

Parallel to the developments on individual member state level, the European Commission also initiated a reform process at EU level. The EU-commissioned expert study confirmed scope and need for reform and suggested additions to the competition law toolbox[6], thereby emphasizing faith in competition (as such) and defending the consumer welfare standard (*Crémer* et al. 2019). While the notion of a "fair and competitive digital economy" has been at the centre of the Commission's *European Digital Strategy* all along, the conceptualisation of the new regulations and their approach changed significantly during the legislative process. In February 2020, the Commission first announces the proposal of a DSA with two pillars (one content- and one market-based) in its communication "Shaping of Europe's Digital Future" (COM(2020) 67 final). This was accompanied by the suggestion to introduce a so-called *New Competition Tool* (NCT) to either address general structural problems (overall or limited to certain digital markets) or the competition concerns arising from unilateral conduct (of dominant undertakings) but without the prior finding of an actual abuse of market power. Regarding the debate between (i) *enhancing and empowering competition policy* and (ii) *implementing sector-specific regulation*, the UK's so-called Furman report (*Furman* et al. 2019) marked a turning point and proposed a set of ex-ante rules to be supervised by a digital regulator (*Furman* et al. 2019: 55). While the report does not conclusively deny the existence of competition *in and for* digital markets, it firmly asserts the necessity of supplementary ex-ante regulation (*Furman* et al. 2019: 52-53). This fuelled opinions that the current ex post enforcement has been far too complex and far too time consuming, so that next to enhanced rules, a switch from ex post to ex ante enforcement was increasingly advocated (inter alia,

[5] While this is not a new notion (see. German Federal Court (Bundesgerichtshof) BGH, Decision of 20.11.1975 - KZR 1/75, NJW 1976, 801) it has gained new traction in the digital economy.

[6] For instance, the report advocates more emphasis on digitization-related theories of harm as well as adjustments to the allocation of the burden of proof to disallow anticompetitive behaviour more easily.

ACCC 2019; *Marsden & Podszun* 2020: 31; see also *Kerber* 2019: 38-41). Following the responses from the public consultation, the Commission merged the second pillar of the former DSA with the NCT considering concerns about overlap and confusion of the two instruments (inter alia, *Larouche & de Streel* 2020; *Schweitzer* 2020). This ultimately led to the drafting of the DMA and the proposal of two different regulations (DSA and DMA) on 15 December 2020. Thus, the avenue of empowering competition policy was abandoned with the decision against the NCT, and the path towards sector-specific, ex ante regulation opened with the DMA.

2.2 The Content of the New Rules

While the DMA proposal acknowledges the considerable benefits that online services bring to social welfare and other social goals, it voices concern over the incontestable nature some online service markets have acquired and the unfair commercial practices of the incumbent players in these markets. These services are often characterized by multi-sided intermediation between business users and end users, being concentrated in the hands of "one or very few large digital platforms" that (i) dictate "the commercial conditions with considerable autonomy", (ii) "act as gateways for business users to reach their customers and vice versa", and (iii) "abuse their gatekeeper power by means of unfair behaviour vis-à-vis economically dependent business users and customers" (*European Commission* 2020a: 2). Therefore, the draft regulation does not plainly apply to all digital online services, but only to so-called *core platform services* that meet these concerns. Drafted as an asymmetric regulation, the act further narrows down the norm addressees using quantitative and qualitative criteria to establish their qualification as so-called *gatekeepers* to which the DMA ultimately applies."

Art. 2 (2) DMA lists eight types of core platform services: (i) online intermediation services (e.g., marketplaces and app stores), (ii) online search engines, (iii) online social networking services, (iv) video-sharing platform services, (v) number-independent interpersonal communication services, (vi) operating systems, (vii) cloud computing services, and (viii) advertising services. This list can be expanded by the Commission in future following a market investigation stipulated in Art. 17 DMA. Art. 3 (1-2) DMA stipulates that companies in these areas are classified as gatekeepers if they

(a) have a significant impact on the internal market, i.e., achieve an annual EEA turnover ≥ € 6.5 billion in the last three financial years or a market capitalization/value ≥ € 65 million in the last financial year,
(b) operate an important gateway for business users to reach end users, i.e., has on average more than 45 million monthly active end users and more than 10 000 yearly active business users in the EU during the last financial year, and
(c) enjoy or are expected to enjoy an entrenched and durable position in their operations, i.e., they reach the thresholds of (b) in each of the last three financial years.

Thus, the gatekeeper status is determined by matching the quantitative metrics ("as rebuttable presumptions"; *European Commission* 2020a: 2) or by a qualitative assessment based upon

several additional criteria (inter alia, entry barriers, network effects, access to data or analytics competencies, scale and scope effects, consumer lock-ins; Art. 3 (6) DMA). A designated gatekeeper status shall be reviewed every two years or in between upon request (Art. 4 DMA). The Commission must regularly publish an updated list of all companies which are given the status of a gatekeeper (Art. 4 (3) DMA).

The so-defined gatekeepers are obliged to refrain from a defined list of practices that are deemed to limit contestability or to be unfair. These obligations are divided into two lists, one headlined "obligations for gatekeepers" (Art. 5 DMA), the second qualified by the supplement "susceptible of being further specified" (Art. 6 DMA).

Art. 5 DMA prohibits designated gatekeepers to conduct the following seven strategies:

(a) *inter-source data-pooling*, i.e., combining personalized data extracted from the core platform service with data from other services of the same company or from third parties,
(b) *most-favoured-business-partner clauses* and *exclusive dealing*, i.e., the gatekeeper may not restrict business users in the way, price, and conditions they sell their good through other online channels,
(c) *platform exclusivity*, i.e., preventing or restricting business users and end users from concluding transactions outside the core platform service,
(d) *discouraging whistle-blowing*, i.e., preventing or restricting business users from raising issues with the gatekeeper's practices with any relevant public authority,
(e) *exclusivity of identification services*, i.e., mandating business users to use, offer or interoperate with an identification service provided by the gatekeeper,
(f) *bundling of core platform services*, i.e., requiring business users or end users to subscribe or to register with any other designated core platform service as a precondition of using one of the services,
(g) *strategic withholding of relevant advertising business information*, i.e., blocking relevant sales and price information towards advertisers and advertising-financed content providers that were intermediated through the core platform service.

Subject to further specification, Art. 6 DMA bans a further eleven strategies for gatekeepers of core platform services:

(a) *exploiting asymmetric data-based information*, i.e., using non-public data generated through the activities of business users (and in the interaction with their end users) on the core platform service (e.g., a marketplace service) to compete (for instance upstream) with these business users,
(b) *bundling of software*, i.e., restraining the un-installation of any pre-installed software applications unless they are essential for the functioning of the service and cannot technically be offered by third-parties,

(c) *exclusivity clauses of software and software application stores*, i.e., preventing the effective provision and use (supply and demand) of third-party software applications or app stores,
(d) *self-preferencing in ranking services*, i.e., positioning its own goods (or those from related companies) more favourably than competing goods (or handicap the latter); fair and non-discriminatory conditions must be applied to rankings,
(e) *strategic incompatibilities*, i.e., artificially restricting the ability of users to switch between service providers,
(f) *blocking interoperability of ancillary services*,
(g) *denying access to business-relevant advertising-related data*, i.e., refusing advertisers and content providers request to get access to performance measuring tools of the gatekeeper (free of charge) and other information necessary to conduct an independent verification,
(h) *hampering data portability* for business users and end users with respect to data generated through their activities,
(i) *denying access to business-relevant data*, i.e., gatekeepers shall provide business users free of charge with effective, high-quality, continuous and real-time access to aggregated or non-aggregated data generated in the context of their and their customers' activities,
(j) *refusal of data-sharing*, i.e., gatekeepers of online search services must provide third party providers of online search engines with access on fair, reasonable and non-discriminatory terms to its ranking, query, click and view data in relation to free and paid search generated by end users,
(k) *unfair and discriminatory conditions* of access for business users to software application stores.

These obligations apply exclusively to designated gatekeepers in the defined core platform services (see above) and not to any other online services (asymmetric regulation). Exemptions for designated gatekeepers are possible on the grounds of overriding reasons of public interest, namely *public morality*, *public health*, and *public security* (Art. 9 DMA).

The DMA empowers the Commission to update the obligations found in Art. 5 and 6 DMA through delegated acts addressing additional practices – based on a market investigation (see section 2.3.1) – that limit the contestability of core platform services or are unfair in the same way as the incumbent practices. Furthermore, designated gatekeepers shall inform the Commission about any intended merger or acquisition involving any other service provider in the digital economy (Art. 12 (1) DMA). However, no merger control competencies conclude from this notification obligation.

2.3 Procedures and Enforcement

Many things about the procedure currently laid out in the DMA proposal are novel and still open to further changes and development. At this point there is, however, also a sense that some of the complexities and inconsistencies of the current draft could undermine its overall strife for more effective and time efficiency enforcement.

The procedure begins with the identification of the norm addressees or economic entities that fall within the scope of the DMA. Rather than establishing a market definition or looking at the activities of an undertaking, the DMA applies only to so-called gatekeepers in core platform services, identified and designated in a two-step process (see above, section 2.2). Importantly, providers of core platform services themselves are required to notify the Commission within three months after the thresholds for becoming a gatekeeper are reached (Art. 3 (3) DMA). The Commission has the power to designate further providers of core platform services as gatekeepers, following a market investigation conducted in accordance with Art. 15 DMA – a procedure that should be concluded within 12 months (Art. 3 (6) DMA). According to Art. 4 (2) Nr. 3 DMA, the Commission then publishes (and updates) a list of designated gatekeepers and their relevant core platform services that need to comply with the obligations laid out in Art. 5 and Art. 6 DMA.

Insofar as they are relevant to the services of the gatekeeper, the obligations in Art. 5 apply without further specification or implementation. The obligations listed in Art. 6 require further specification and thus cooperation with the Commission. While both the gatekeepers and the Commission enjoy considerable scope in developing and specifying the "right" measures, the DMA does set some boundaries. Art. 11 contains a strict non-circumvention rule for any practices that undermine the effectiveness of the measures and Art. 7 (6) requires the Commission to assess that no undue advantages for the gatekeeper or disadvantages for business users result from specifying the obligations under Art. 6 (1) (j) and (k). On the other hand, there are substantial possible public policy exemptions that can be brought forward by both the gatekeeper and the Commission (Art. 9, see section 2.2).

Art. 7 sets out three levels of compliance with these obligations and possible remedies to be imposed by the Commission.

- First, Art. 7 (1) DMA leaves compliance with Art. 5 and 6 up to the gatekeepers. They are required to design and introduce measures that are "effective in achieving the objective of the relevant obligation". The Commission imagines that most of these measures will be technical in nature and integrated into the systems and designs used by the gatekeepers (Rec. 58). If, however, the Commission feels that the measures taken by the gatekeepers are insufficient to meet these obligations, it may specify and amend these measures by decision. This decision is to be passed within 6 months of opening these proceedings (Art. 7 (2), 18 DMA). During these 6-month proceedings, the Commission will communicate its preliminary findings to the gatekeeper and may

"explain" the measures it thinks should be taken. While the Commission disfavours commitment decisions at this stage of the procedure, since they would prolong and add complexity to the procedure, there is some confusion about this form of intended preliminary communication and why commitments would not be allowed at this point (*Monti* 2021: 9). In addition, the gatekeeper itself may request an opening of these proceedings if it wishes to establish whether the measures it has implemented or intends to implement to meet the obligations of Art. 6 are effective. Here the gatekeeper may provide a reasoned submission explaining the sufficiency of its (intended) measure.

- Second, the Commission may open non-compliance proceedings that result in a decision if the gatekeeper breaches the obligations laid out in Art. 5 or 6 or those established by the proceedings in Art. 7 DMA. This is laid out in Art. 25 DMA. Here again, the Commission will communicate its preliminary findings as well as the logic behind the measures it plans to impose. At this point in the procedure, the gatekeepers are, however, allowed to offer commitments (Art. 23 DMA). The Commission may monitor implementation and compliance, as well as impose fines for non-compliance at this stage (Art. 26 DMA).
- Third, the Commission may open a full market investigation into systemic non-compliance and pass a decision to that effect. According to Art. 16 (1) systemic non-compliance entails a systematic or repeated infringement of the obligations laid out in Art. 5 and 6 (further defined in Art. 16 (3) DMA) and that this has further strengthened or extended the gatekeeper position, leading to a negative impact on the internal market (Art. 16 (4) DMA). Systemic non-compliance can be met with behavioural and structural remedies, as well as substantial fines. Remedies are to be proportionate to the infringement committed, including the impact on the internal market and necessary to ensure compliance with the DMA. It thus appears that they can be targeted not only at meeting the obligation laid out in Art. 5 and 6 but also at remedying the entrenchment of the gatekeeper position caused by systemic non-compliance. While Art. 16 DMA must be seen as the ultima ratio of the DMA, it is not clear how such remedies will look like and what they should entail, in particular, if they are to go beyond the compliance with Art. 5 and 6 DMA and remedy larger systemic or structural shortcomings. Indeed, it may also be difficult to find a yardstick for such remedies since ex post competition law remedies are targeted at redressing a specific abuse and ex ante merger control measures protect markets from becoming "incontestable" in the first place. While many authors (*Franck* & *Peitz* 2021b; *Podszun, Bongartz* & *Langenstein* 2021; *de Streel* et al. 2021; *Monti* 2021) and the Commission itself (*European Commission* 2020c: Rec. 172) have pointed out that structural remedies are envisioned as the ultima ratio for these cases, the Commission's impact assessment also points out that structural remedies have never been used to remedy repeated infringements in the context of competition law enforcement, i.e., in the context of Regulation 1/2003 (*European Commission* 2020c: Rec. 172). In addition, structural measures have a reputation of being notoriously difficult, raising the question whether this may be a toothless tiger (*Marsden* 2008).

> Thus, while the DMA desperately needs a viable ultima ratio, just reversing the privilege that places behavioural before structural remedies (as proposed by *Podszun, Bongartz & Langenstein* 2021: 10) may not be enough and additional tailor-made solutions (to similar effect, see *Altmeier* et al. 2021) or the development of a more rigorous enforcement regime may be in order.

Art. 36 DMA makes it clear that the Commission is the sole implementor of the relevant measures found in the proposal. While it is unclear which EU entity will enforce the DMA and to what extent it will build on the experience of the Directorate General (DG) competition or DG internal market, the proposal opts for an enforcement model using only one centralised, unified EU body of the Commission. It leaves little scope for the involvement of national authorities or other entities of the member states and to date contains no provisions about private enforcement. All these questions and decision are highly contentious (see, for instance, in favour of an involvement of national authorities *Podzsun*, *Bongartz & Langenstein* 2021; *Altmeier* et al. 2021; *ECN* 2021, advocating a centralised approach *Monti* 2021, and addressing greater private enforcement *Schweitzer* 2021). The DMA in its current form can thus be seen as a return to institutional design and division of power that existed before the introduction of Regulation 1/2003 (*Basedow* 2021). The involvement of the member states, and their relevant authorities is thus insubstantial and limited to requests to open proceedings and an assistance of the Commission. Art. 32 DMA, however, also establishes a Digital Markets Advisory Committee – a comitology committee within the meaning of Regulation 182/2011, consisting of representative of the member states, with whom the Commission will consult before taking certain decisions.

3. An Economic and Legal Assessment

3.1 Does the DMA Effectively Address the Relevant Underlying Economic Issues?

The provisions of the DMA proposal address many of the notorious competition problems that are the result of a single company dominating a digital ecosystem (see the overview in section 1). These include the creation of strategic/artificial incompatibilities (Art. 6 (e) (f) (h) DMA), self-preferencing (Art. 6 (d) DMA), strategic withholding of relevant business information from a marketplace service in dual role situations (i.e. in order to create anticompetitive advantages against competitors upstream or elsewhere within a digital ecosystem) (Art. 5 (g) and 6 (a) (g) (i) DMA), discriminatory access conditions to services with marketplace character (Art. 6 (k) DMA), and exclusivity arrangements as well as various bundling and tying strategies (Art. 5 (b) (c) (e) (f) and 6 (b) (c) DMA).[7] In line with assessments by other economic experts (*Cabral* et al. 2021)[8], this can be welcomed from an economic perspective since the state of economic

[7] *Monti* (2021: 2) classifies the obligations into four theories of harm: (i) addressing a lack of transparency in the advertising market; (ii) preventing platform envelopment; (iii) facilitating the mobility of business users and clients; (iv) preventing practices that are unfair.

[8] And in line with general literature on anticompetitive concerns within digital ecosystems (inter alia, *Kerber* 2019, 2021; *Krämer* 2020; *Marsden & Podszun* 2020).

theory renders it implausible that such strategies when performed by a company with outstanding or paramount relevance within a digital ecosystem can be beneficial for welfare and/or the competitive process.

3.1.1 An Economic View on the Behavioural Provisions

Notwithstanding the pertinence of many obligations, the scope of some provisions seems to be unnecessary narrow and, thus, may fail to capture relevant anticompetitive conduct and arrangements. For instance, the prohibition of unfair and discriminatory conditions regarding the access to marketplace services is limited to a specific type of marketplace, namely app stores (Art. 6 (k) DMA). Although non-discriminatory access to app stores represents an urgent and current competition problem (*Geradin* & *Katsifis* 2021; *Marty* & *Pillot* 2021), from an economic point of view, there is no significant difference to access conditions to other marketplace services, including goods marketplaces à la Amazon Marketplace but also marketplace services for audio and video streaming (like Netflix, Apple Music, Spotify, YouTube and co): if these marketplaces and their related ecosystems become dominated by a vertically-integrated service provider, the same dual role issues as in the app store case are likely to arise. The focus of this provision solely on app stores appears to be driven by current case pressure rather than by economic considerations. Also, an emphasis on advertising markets and the concerns of advertisers can be observed with two provisions explicitly targeting platform practices that advertisers face (Art. 5 (g) and 6 (g) DMA). Given the ambiguous welfare effects of advertising (inter alia, *Grossman* & *Shapiro* 1984; *Becker* & *Murphy* 1993; *Johnson* & *Myatt* 2006; *Bagwell* 2007), this emphasis is somewhat surprising. It may be a result of loudly voiced concerns by and/or intensive lobbying from the advertising industry during the public consultations – seeing, for instance, that advertising organizations are amongst the largest lobbying groups in Brussels and advertising has become a policy focus recently (*Bank* et al. 2021: 14; *Jeon* 2021). Altogether, the provisions and obligations would benefit from a more general phrasing instead of – apparently – being tailor-made to some currently observable practices in some specific digital markets.

From an economic perspective, three of the eighteen provisions address less definitively anticompetitive conduct than the others. Pooling data from different sources (prohibited by Art. 5 (a) DMA) may indeed increase the data advantage of bigger competitors. However, if the different datasets are complementary, it may also enable the provision of better and innovative services. While this provision may be driven by data protection and privacy considerations (which may be better addressed in the DSA), the economic harm of pooling available data even if it is done by ecosystem dominators ("gatekeepers" in the notion of the DMA) is not so clear and ambivalent at best (inter alia, *Krämer* & *Schnurr* 2021). This is even more true for the obligation for so-called gatekeepers to share its own (search) data with competitors (Art. 6 (j) DMA). Due to the reproducible character of personalized search data and the decreasing returns to scale that are most likely also prevalent for the search engines, combined with the size of data already collected by competing search services, the necessity of forcing a "gatekeeper" to

share its own data, and doing so free of charge, seems overly harsh. Eventually, the obligation to refrain from preventing business users from complaints to public authorities (Art. 5 (d) DMA) seems to be sensible, even though it may not be at the heart of economic analyses of anticompetitive concerns in digital ecosystems.

With respect to the identified harmful strategies, the record of the DMA proposal is not too bad. Of course, one relevant question is whether the prescription of harmful strategies on such a blacklist is sensible at all compared to a general clause "simply" prohibiting all kinds of abuses of a defined ecosystem position. Either way, the categorization put forward by the DMA, meaning both the order of the provisions and obligations, and, more pertinently, their separation into the two articles (5 and 6) does not appear to be straightforward or coherent from an economic perspective (*Cabral* et al. 2021). In particular, it is not always clear why the obligations codified in Art. 6 DMA shall be "susceptible of being further specified" – in contrast to those of Art. 5 DMA. From an economic perspective, Art. 6-conduct and the underlying theories of harm are neither less relevant/less anticompetitive nor more ambivalent than Art. 5-conduct and underlying theories of harm (similarly: *Cabral* et al. 2021). This may be issues than can be sorted out in the law-making and implementation process, though.

However, there is a relevant blind spot of DMA-proposal. Both the expert studies as well as the academic literature (see section 2.1) identified the tipping of a competitive market as the core concern in relation to digital ecosystems. Crucially, the *prevention* of tipping is also the main area where other instruments, e.g. competition law, have failed to deliver so far. Since the DMA in its current form does not mitigate this problem (as it only intervenes once a "gatekeeper" has been established and designated), it kicks in when the stable door is closed after the horse has bolted, at least from a competition-perspective. This has two important implications: On the one hand, it may be viewed as insight to the fact that the market power of GAFAM and the likes cannot be prevented or resolved. This would imply to give up on competition to a certain extent. On the other hand, it implies that the DMA is limited in preventing further digital markets from tipping – at least if no current "gatekeeper" is involved in the tipping. By restricting the anticompetitive leveraging options of "gatekeepers", the DMA limits their ability to tip additional markets within their digital ecosystem, but the DMA neither relieves existing within-ecosystem market power, nor reduces economic dependence. And, most crucially, it does nothing to prevent new the rise of new "gatekeepers".

3.1.2 The Concept of Gatekeepers

This leads to the question whether the concept of designated "gatekeepers" in the defined "core platform services" is adequate and can serve as a good norm addressee from an economic perspective.

- Looking first at the list of core platform services, from which the gatekeepers are derived, the question arises whether this list is rooted in a market-based approach, i.e., that it distinguishes and delineates services by the economic goods they are providing

(*Kerber* 2021). In some cases, services providing similar goods to consumers and standing in horizontal competition with each other are only partly covered by the DMA. For instance, so-called video-sharing platform services (à la YouTube) are on the list of the DMA's core platform services, whereas other types of video-on-demand and streaming services are not on the list – and thus according to leading opinions not covered by the DMA (inter alia, *Cappello* 2021). Such other types of services include subscription-based video and audio streaming services like Netflix, Amazon Prime, Apple Music, Spotify, etc. However, both theoretical reasoning and empirical evidence strongly suggests that services like YouTube are in competition with services like Netflix and co. (*Budzinski*, *Gaenssle* & *Lindstädt-Dreusicke* 2021a). Thus, a different treatment of competing services may arise based upon business models: if you run your provision of video content on demand as a (advertised-financed) video-sharing platform, you may get on the "gatekeeper" list, if you do so by employing a (subscription-based) retail model, you will not (for now). This in turn means that special responsibilities may not always be assigned due to (superior) market power – as is the case in competition law – but solely based on choice of the business model (platform versus retail model). The possibility to extend the list of so-called core platform services opens scope for both correcting unfortunate service denominations and the addition of services that may become "core" in the future. However, the focus on the business model "platform" (intermediating between different customer groups) appears to be somewhat set-in stone, meaning that a dominant digital retailer (within a vertical supply-chain of suppliers and customers) cannot become a "gatekeeper", only a marketplace service provider can.

- The DMA uses the term "gatekeeper" to denominate the companies that dominate the digital ecosystem of the core platform service in question. This term may be somewhat confusing as there is a gatekeeping theory in media economics and this theory only partly correlates with the way how the term is used in the DMA (see *Budzinski* 2021a for a detailed discussion). Anticompetitive gatekeeping power relates to the ability to bias information flows (in our context: within a digital ecosystem) and the incentives to do so. While it seems very plausible that virtually all companies that fall within the scope of the DMA (such as GAFAM) enjoy anticompetitive gatekeeping power, there may be several more gatekeepers in digital markets that do not fulfil its criteria – be it because their service/service model is missing from the list or be it because they do not match the quantitative and qualitative criteria. A case in question are all services that run a – usually algorithm-based – ranking system (as search and/or as recommendation rankings), like online marketplace service providers naturally do. Here, the combination of (i) bounded-rational and imperfectly informed users and (ii) the presence of vertical integration (or comparable vertical contractual relations with e.g. upstream suppliers) is already sufficient to create anticompetitive gatekeeping power (*Budzinski* 2021a, b; *Budzinski*, *Gaenssle* & *Lindstädt-Dreusicke* 2021b). The thus generated dual role is likely to be exploited, for instance, through purposefully biasing the algorithm-based

ranking in a way that not only seeks to provide a ranking matching based on individual preferences of the users, but also includes self-preferencing – i.e., ranking its own upstream goods systematically better than those of the closest competitors. Since real-world users are imperfectly-informed and not perfectly sensitive against marginal biases, the ability to engage in anticompetitive self-preferencing requires only moderate size and the incentive to do so is generated by any degree of vertical integration.

- Alongside the possible confusion around the term "gatekeeper", a further question arises, as to whether the conduct prohibited by the DMA is only harmful when it is performed by "gatekeepers" in the selected core platform services as defined by the DMA. Reasoning from modern economic theory indicates that many arrangements and much of the conduct tackled by the DMA, in particular, self-preferencing and strategic withholding of data from business users, and especially when vertically somewhat integrated companies are performing this conduct, generate anticompetitive and welfare-decreasing effects far below the thresholds of becoming a DMA-defined "gatekeeper" (inter alia, *Bourreau* & *Gaudin* 2018; *De Cornière* & *Taylor* 2019; *Hagiu*, *Teh* & *Wright* 2020; *Padilla*, *Perkins* & *Piccolo* 2020). Similarly, it can be critically discussed how appropriate turnover-based and user-number-centric criteria are for identifying "gatekeepers" and whether the alternative qualitative assessment is offering a lot of deliberation for whoever does the assessment (*Caffarra* & *Scott Morton* 2021).

3.1.3 A Good Substitute for Empowering Competition Policy?

Altogether, it needs to be kept in mind that the DMA is not meant to replace competition law but to complement it (DMA Rec. 10). However, if it is true that competition policy in its current shape is in effect too lenient because of enforcement deficits (which is also argued in the academic literature, inter alia, *Budzinski* 2010; *Valletti* 2021) and too slow to effectively address anticompetitive conduct and arrangements within digital ecosystems, then the DMA in its current form, albeit dealing with companies that slipped through the antitrust instruments designed to preventing such market power in the past, has a relevant shortcoming and a blind spot in the sense that it does not contribute to making competition policy more effective for future cases and developments. Thus, an accompanying reform of European competition law and policy – empowering enforcement that prevents the emergence of "gatekeepers" – remains to be urgently required.

3.2 What Is the Legal Nature of DMA?

The interrelation of the DMA proposal and the existing body of competition law also intrigues the legal debate. To what extent is the DMA a novel and unique instrument that serves autonomous legal interests or is it instead closely aligned with competition law and part of the Commission's competition policy for the single digital market? While the intent of the Commission appears to be to create a novel regulatory instrument that sets itself apart from competition law (see Art. 1 (1) and Rec. 10 DMA), the past failings of competition law

enforcement (its "slowness and lack of teeth"; *Monti* 2021) as its raison d'être as well as the competition law cases and controversies that have informed the obligations in Art. 5 and Art. 6 DMA are undeniably ingrained in the DNA of the DMA. To assess the DMA at this stage of its development, it seems prudent to try to establish its nature based on a) what the Commission has set out and intends it to be, b) its goals and overall intention, c) its procedural design, and d) the underlying message that runs through its obligations. Such an analysis must, however, still be critically of these intentions, the clarity which they are formulated, as well as the likelihood of their success or failure.

3.2.1 The DMA's Remarks on its Legal Nature

The DMA itself is unambiguous about its intent to create a novel regulatory instrument, albeit complementary to competition law, that is targeted at gatekeepers and their impact on the digital economy. It seeks to ensure that the sector remains contestable and that fair practices prevail in and around core platform services, despite the presence of large gatekeepers, thus setting two goals that are related to, but, according to the draft (only) complementary to competition law (Rec. 11). While there is agreement that the DMA attempts to mitigate characteristics of digital markets that the current competition toolbox struggles to capture (see section 2.1. as well as *Altmeier* et al. 2021: 8), the necessity of an instrument that is by its nature novel and distinct from competition law – which is also concerned with competitive constraints arising from the presence of economic power and features of (digital) markets – is not entirely clear. While the content of the obligations as well as the procedural design define the DMA as a regulatory instrument, is ultimately decided by its goals (thus see below section 3.2.4). Only they can delineate it from competition law.

3.2.2 Some Remarks on the Legal Basis

The legal basis of the DMA is Art. 114 (1) TFEU. This provision confers onto the European Union the competence to introduce legislation that leads to a greater level of harmonization, thereby completing or guaranteeing the functioning of the common market – in this case the single digital market. While the wording of Art. 114 (1) TFEU is still strongly focussed on the harmonisation of existing legal provisions in the member states – "*(...) adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market*" –), Art. 114 TFEU has become more than just a tool for the harmonisation of national legislation and the completion of a common market (*Chalmers*, *Davies* & *Monti* 2014). With the creation of larger legal frameworks such as the energy and banking union but also with the expansive harmonisation of product regulation and consumer protection (for example the Tobacco Products Directive 2014/40/EU), it is now the very widely used, primary legal foundation that allows the Commission to shape and define the single market.

While basing the DMA on Art. 114 (1) TFEU is far from uncontentious (in particular, *Basedow* 2021), it does correspond with the intent to of creating a novel regulatory instrument that

complements rather than merely enhances or supports the effectiveness of competition law enforcement – in this regard Rec. 10 of the DMA is instructive and unambiguous. And yet while the Commission's intentions to create a novel instrument and the problems it wishes to address are clear, it is not clear how the DMA will be delineated from competition law. Due to this strong correlation and likely overlap, several scholars – especially those leaning towards an interpretation of the DMA that is closely aligned to competition policy and the goals of competition law – have argued that Art. 103 TFEU would have been a better fit (in particular, *Basedow* 2021; *Schweitzer* 2021). While Art. 114 TFEU strives for the completion of the internal market through harmonisation and the creation of unified legal frameworks, Art. 103 serves as a legal basis for regulations and directives that enable the effective enforcement competition law and the principles laid down in Art. 101 and Art. 102 TFEU. Proponents of the latter legal basis argue that contestability at its core it is a guiding legal principle of competition law or at least larger competition policy.

Some argue that the DMA seems to use a broader notion of contestability that goes beyond a narrow concept of market competition and includes competition on, for and across markets (*Monti* 2021; *Schweitzer* 2021).[9] Since, however the DMA's notion of contestability is not entirely clear, or defined, simply stipulating, as the DMA itself does, that the DMA serves a different or unique legal interest, without further specifying, delineating, or limiting it, creates significant amounts of uncertainty and may lead to tensions between the DMA and competition law but also to uncertainties relating to the limitations and the (correct) scope of the DMA in future. And while the wording and powers of Art. 114 TFEU are broad, the function of legal bases in EU law is not only to enable but also to limit legislation (see *CJEU* 1991, Rs. C-300/89 – Titandioxid, Summary 10: "(…) *the choice of the legal basis for a measure may not depend simply on an institution's conviction as to the objective pursued but must be based on objective factors which are amenable to judicial review"*. If the aims of the DMA are only *different* from competition policy, but this relationship is not further explored, it is hard to detect where the endpoint or the limitations of the DMA are and what the yardstick is for designing and enforcing specific obligation stemming from Art. 6 DMA. Thus, such uncertainty creates two types of legal risks: (i) that of overregulation, but (ii) it also makes it easier to undercut the regulation by questioning its scope and legitimacy. A different or additional legal basis may have provided some clarity here and pre-empted unnecessary and burdensome litigation that may only undermine the important objectives of the DMA.

3.2.3 The Central Goals of the DMA and its Substantive Provisions

Perhaps the core ailment of this proposal is the ambiguity of its goals. At this point in time, the scope and the meaning of both "contestability" and "fairness" are not entirely clear. While there is a strong sense of an underlying theme that runs through the obligations – to enhance

[9] This does not preclude that the concept of market power in competition law could also be enhanced to embrace economic power across markets within a digital ecosystem – for instance, towards concepts of systemic market power (*Budzinski*, *Gaenssle* & *Stöhr* 2020a).

competition both and for the relevant markets (i.e., to create a level-playing field) and to make sure that bottlenecks are governed by rules that are fair, neutral, and transparent – the precise meaning and scope of the goals remains puzzling. While "fairness" has baffled much of the literature[10], there seems to be an overall acceptance of its virtues – i.e., that enhancing fairness cannot be a bad thing. However, at the end of the day, this will depend on what fairness is operationally meant to be and on which of the many (conflicting and mutually contradicting) fairness theories it will be based upon. On the other hand, "contestability" has been interpreted in a number of ways – ranging from an interpretation that is entirely aligned with effective competition[11], one that is sector-specific[12], to one that is broader and encompasses competition *on* and *for* the market (*Schweitzer* 2021), and one that is entirely distinct from competition law (*Ryna* 2021). As such, it remains also unclear how close the contestability goal of the proposal is meant to follow the rather narrow original economic theory of contestable markets (*Baumol* 1982).

In legal theory, in general, the role that overarching goals or principles play in the interpretation of acts is a contentious matter (*Dworkin* 1977; *Shapiro* 2007) and indeed, while the goals are not defined by the DMA, the obligations themselves, when bundled together as either contestability- or fairness-enhancing (most illustratively: *Podszun, Bongartz & Langestein* 2021), do give some insights into the underlying meaning and perhaps even a "coherent message" (*Monti* 2021). Since, however, the DMA is a) meant to be a highly functional ad-hoc regulation and b) leaves an significant amount of leeway and room for development, it seems essential that the core aims are clear and serve as a yardstick for future development. In fact, the lack of more than a disguised "coherent message" and undefined goals, makes the eighteen obligations set out in Art. 5 and 6 DMA seem like a haphazard set of rules of an incomplete rule book, which is uncertain of its own end-goal (see also *Petit* 2021, who writes that the obligations are under-specified and at least require a common statement of purpose). If the proposal passes in this or a similar form, it will be left to the Commission and the gatekeepers themselves, both of whom have significant normative leeway (*Colomo* 2021), to define these terms more closely and also find a yardstick with which to evaluate the compliance with the obligations (see also section 3.2.4). This may lead to significant tensions, legal disputes and prolonged dialogues and commitment decisions and harm the overall effectiveness and trustworthiness of the regulation.

One of the largest mysteries of the DMA in its current form seems to be that by the very logic of the proposal, the sheer existence of gatekeepers (and the structural features, such as concentration and network effects that caused them) is the core problem of the digital sector. It

[10] "While (competition) lawyers might be more familiar with 'fairness' terminology, measuring it is somewhat difficult to reconcile with economic jargon" (*Cabral* et al. 2021: 30).
[11] "[T]he regime is not designed to regulate infrastructure monopolies, but rather to create competition as well as to redistribute some rents" (*Caffara & Scott Morton* 2021).
[12] "Contestability refers to decreasing entry barriers to digital markets and to levelling the playing field among existing gatekeepers and other firms offering substitute or complementary digital services" (*Franck* et al. 2021: 8).

would then follow that its contestability and fairness can only truly be guaranteed by preventing "tipping" or the emergence of new gatekeepers. In sections 2.3 and 3.1 we have discussed how problematic the definition of the norm addressee ("gatekeepers") is, how the DMA fails to prevent the rise of future gatekeepers (or other forms on concentration) and that it does not provide a plausible mechanism for tackling underlying structural or systemic issues. A similar problem rises, when trying to analyse the full scope of the goals of the DMA. While a sector specific regulation, by its nature, should aim to govern the entire digital sector, there is little evidence of this overarching aim in the proposal, making both contestability and fairness seem more like guiding principles for future conduct. Only once does the DMA proposal mention that its systemic objective is "*to ensure a contestable and fair digital sector in general…*" (Rec. 79), but without any further exploration. It is not clear how the regulation plans to get from imposing a set of, at times seemingly sporadic, ad hoc obligations to a fundamental change in the structures and dynamics of the digital sector. While the proposal does include far-reaching behavioral and even structural remedies (see section 2.3), these too are only set to remedy systemic non-compliance of "*one or several of the obligations laid down in the Regulation, which has further strengthened its gatekeeper position*" (Rec. 64). The DMA thus envisions a better digital sector – one that is contestable and fuelled by fair conduct – but gives little evidence as to what this means in detail and how it will ultimately be achieved. All of this is further reflected in provisions on procedure and enforcement.

3.2.4 Procedure and Enforcement

As outlined above, the procedure of the DMA, does two things: it establishes the norm addressees and enforces the obligations laid out in Art. 5 and 6 DMA. While the gatekeeper criterion seems unnecessary narrow at times (see above section 3.1) and some have suggested the definition of an addressee from which the harm seems to be more immanent (such as the theories of harm based on the concept of the "ecosystem"; *Monopolkommission* 2021), the intention of the Commission seems to capture the behaviour of the large GAFAM-companies and any other undertakings only where analogous structures and concerns emerge (*Caffarra & Scott-Morton* 2021). Yet, there is still some uncertainty as to whether criteria set out in the DMA are specific enough to capture (only) the right entities in practice and what its margin of error will be (see above 3.1). This may lead to inconsistent enforcement on the side of the Commission but also to uncertainty regarding the notification requirement. Because this may be a careful balancing act; the DMA leaves some room for development and further expansion of the gatekeeper-criterion by means of the procedure laid out in Art. 18-26 DMA. Paradoxically, the length (and complexity) of this procedure may, however, diminish some of the claim that the DMA will be an effective and speedy ad-hoc tool that holds none of the problems of competition law procedure (*Kerber* 2021). Thus, the enforcement of the obligations set out in Art. 5 and 6, the DMA seems to have two faces:

- On the one hand it is clearly targeted towards the specific services of a hand-full of undertakings and, very much like a clear-cut utility regulation, has managed to define

specific self-executing obligations that these entities must fulfil within a number of months, or be faced with different gradients of fines and penalties, the ultima ratio being structural separation. It could thus be a considered a stringent and complete regulatory instrument, the likes of which took nearly a decade of trial and error to establish for the energy sector.

- On the other hand, however, the DMA is also riddled with possible exemptions and options to expand its scope. In addition to self-executing obligations, primarily set out in Art. 5 DMA, the obligations in Art. 6 are designed to be subject to further interpretation and specification (for a critique of this distinction, see above section 3.1). The DMA also makes several referrals to market investigations that could take months to conclude and would not only stifle the effectiveness of the DMA as an instrument but seem far more closely aligned with an ex-post examination and control of markets.
- Some have suggested (inter alia, *van Cleynenbruegel* 2020; *Monti* 2021) that the DMA is well-suited for novel regulatory tools such as coordinative and cooperative regulation or for regulatory dialogues, which enable involvement of several stakeholders. This, however, could come at the cost of regulatory arbitrage and regulatory capture and at the risk of inconsistent enforcement. Due to both the complexity and lack of regulatory precedent, cooperative specifications of Art. 6 obligations could easily lead to a collusive equilibrium between the regulator and the regulated service provider, consisting of a regulatory solution (a "deal") that suits their mutual interests but comes at the expense of third parties – private and commercial users and overall welfare considerations (*Budzinski & Kuchinke* 2012). Even the idea to further "proceduralise" such regulatory solutions to make them more akin to competition law's commitment procedures (Art. 9 Reg. 1/2009) does not mitigate this risk as commitment procedures themselves have been subject to such criticism[13] (inter alia, *Wagner-von Papp* 2021; *von Kalben* 2018: 134-143, who also emphasizes that such procedures have prolonged the duration of proceeding in tech cases). In fact, the self-interested regulator, who aims to settle rather than aggravate disputes, seems to favour solutions that are complex (and therefore demonstrate regulatory effort) but non-transparent and comparatively ineffective (inter alia, *Budzinski & Haucap* 2020; *Heimeshoff* 2020). This could weaken the strengths of the DMA and "erode" core principles, not long after it comes into force (on the idea or regulatory "erosion" in the context of financial market regulation *Mendelsohn* 2018: 250).
- While any regulation of dynamic tech markets must be forward-looking and leave room for adaptation, the current draft seems to breathe the spirit of today's world (see section 3.3) and loses much of its rigor in terms of quick and immediate effectiveness when and where it attempts to create flexibility and open scope for adapting rules to unknown or not yet sufficiently defined harms. Furthermore, the rather long and complex procedure

[13] „[T]here is vital danger that competition authorities and anticompetitive companies become ‚partners in crime'" (*Budzinski & Kuchinke* 2012: 281).

in cases of systematic non-compliance – which are also the only procedures aimed at fundamental structural changes – raise doubts about advantages of this tool vis-à-vis competition law enforcement. Like several regulatory efforts of the past, the DMA may ultimately be doomed to becoming an act that over-promises and under-delivers, and the fear of tighter regulatory grip may not be enough to free the digital economy from the chains of big tech.

When looking at another crucial aspect – the institutional design – a similar dichotomy can also be observed when looking at the question of competence:

- On the one hand, there is the argument for establishing a centralized and uniform unit for effective and coherent ex ante enforcement. While such a structure seems to run counter to European values of federalism, diversity, and coordination, it does not exclude the involvement of the member states in an institutional body like the Body of European Regulators for Electronic Communications (BEREC) and has also been favoured to guarantee unified and effective enforcement and the avoidance of systemic risks in the context of the Banking Unions' Single Supervisory Mechanism (SSM). In addition, any harsh, structural remedies or obligation may require the force and design by a single (larger) authority cannot risk fragmentation or the loss of political bargaining power or economies of scope (also: *Monti* 2021). As mentioned above, this design seems coherent with what the Commission wants to achieve in so far as the self-executing obligation or Art. 5 are involved.
- On the other hand, several aspects of the draft DMA – such as the obligations laid out in Art. 6 – require further refinement. As a result, even when the DMA passes, it may still be in a phase of development – with numerous substantive and procedural questions requiring work and definitional clarity in the years to come. In addition, the DMA is set to regulate a sector that is dynamic and whose development is currently still unpredictable. Hence, it does so without sound evidence of where the journey may lead or a regulatory theory of digital competition. In this regard, the DMA cannot really afford to cut itself off from the "marketplace of ideas" and the plethora of regulatory ideas and approaches that are currently being developed in the different member states, their digital and competition authorities, as well as in parliaments and courts (on the virtues of regulatory competition and the challenges of coordination in the digital era, see: *Budzinski* 2020). Shrinking the role of the member states undermines the expertise that several national competition authorities (NCAs) and national lawmakers have in combating the most pressing economic questions in the digital age (see also *ECN* 2021). While much is to be said for the centralised enforcement of the European merger control regulation (EUMR) or the Banking Union's single supervisory mechanism (SSM), the direction, scope and aims of the regulation of the digital economy is still too much in the phase of development and construction to be able to claim to the benefits of a centralised enforcement without contention and a high risk of the development divergent standards. There is of course the possibility to involve the member states on

other levels in a regulatory dialogue, their level of input may, however, strongly differ if such agencies have "skin in the game" (on the overall benefits of greater global competition coordination, inter alia, *Fox* 2000; *Budzinski* 2004; *Budzinski* 2008; on the role of NCAs in the DMA, *ECN* 2021).

3.3 Ex Ante versus Ex Post – What Is the Adequate Institutional Framework for Digital Markets?

A definitive part of the DMA-initiative is to shift the governance of large digital ecosystems' market behavior away from an ex post control to an ex ante regulation (*Botta* 2021; *Petit* 2021). This is based upon the ostensible experience that competition policy, more precisely abuse control, as an ex post tool is too slow and not effective enough to secure the goals of contestable markets and fair (effective) competition (*Marsden* & *Podszun* 2020; *Altmeier* et al. 2021; *Cabral* et al. 2021; *Monti* 2021). This section critically reviews this assumption and also looks at the benefits of an ex ante regulation in contrast to ex ante and ex post competition remedies.

First, this seemingly dichotomous choice, cannot be compounded with the classical "ex post competition policy" versus "ex ante regulation" debate. Competition policy includes ex post as well as ex ante tools. With respect to market power, merger control represents an ex ante tool which is designed to prevent the manifestation of market power through the external growth of companies (i.e. through mergers and acquisitions). Other ways of attaining market power are scrutinized ex ante since this would either harm social welfare (like market power through path-breaking innovations) and/or it would be difficult to exercise (like market power emerging through internal company growth). Cartel policy too may include ex ante as well as ex post elements, but the control of market behavior that abuses market power is usually designed as an ex post tool.

A standard difference between ex ante and ex post intervention into anticompetitive practices and arrangements, however, is about the negative effects themselves and to what extent they can be predicted and avoided. Ex ante regulation can prevent competitive harm before it happens; whereas ex post intervention reacts to harm that is already taking place and shows negative effects. An ex post policy can only hope to remedy the harm (via damage compensation), however, this only works if the damage to competition is reversible, otherwise even damage compensation will fail to restore the original situation. This major advantage of ex ante regulation corresponds with an inherent weakness: ex ante regulation requires detailed and near-certain knowledge about which conduct and arrangements will cause harm to competition in future. But since regulation often meet and must enhance dynamic competition processes (as knowledge-generating processes; *Hayek* 1968), ex ante regulation entails a certain "pretense of knowledge" (*Hayek* 1975), i.e., the regulators are "pretending" to know the effects of certain conduct and arrangements, whereas only competition as a discovery procedure can generate this knowledge. Now, obviously, it is possible to assess the harm of conduct and

arrangements in competition ex ante by empirically supported economic theory – the cartel prohibition as well as merger control are based on such assessments – (although maybe not perfectly), but an ex ante regulation does take away the option for judgment based on case-specific empirical evidence and the benefit of analysing actual market information/data through observing the behavior in question (*Cabral* et al. 2021). This, in turn, is an advantage of an ex post regime. When addressing the digital economy, the issues of dynamics and change are particularly relevant. The DMA regulation addresses markets characterized by high dynamics and innovation. In such markets, it is particularly difficult to define harmful conduct in advance and to foresee the welfare benefits of novel changes and modes of conduct. Our discussion of the economic adequacy of the proposed rules of the DMA (see section 3.1) shows that regarding some of the proposed rules there is already (albeit often brand new) economic knowledge about anticompetitive harm, but that in regard to other proposed rules the picture is unclear. Altogether, highly dynamic and innovative markets are the most difficult and challenging object for setting ex ante regulation and often more fitting for an ex post regime, which is generally less disturbing of creative market forces (*Franck* & *Peitz* 2021b).

This is further supported by the effects that the proposed rules in the DMA will have on the overall conduct of the regulated companies and the extent to which these can be anticipated. From a law-and-economics perspective, prohibiting a certain conduct or arrangement means to devalue the choice of this strategy for the company in question – if sanctions and enforcement probability are high enough, the company will abandon its previously employed and now regulated conduct. However, this creates the incentive to replace the devalued option with a strategy that achieves similar goals through different ways. In other words, the regulated companies experience incentives to innovate on anticompetitive behavior and create new ways of (ab-)using their market power and reaching their respective anticompetitive goals. Ex ante regulation cannot anticipate these new conduct and arrangements (*Caffarra* & *Scott Morton* 2021) since they are not known before the regulation kicks in (*Hayek* 1945) and thus fails to regulate them. Furthermore, the DMA's definition of types of services ("core platform services") breathes the spirit of today's world of digital services – but tomorrow's world may look very different. This means that (i) core services of tomorrow may be overlooked and (ii) outdated services may be regulated beyond the necessary time. Ex post intervention, on the other hand, can observe the effects of new ways of anticompetitive behavior or from new types of services as they display on the market and subsequently address them. Again, if the scope for innovations on anticompetitive conduct and arrangements is low in an industry, such incentives and effects can be negligible, but this is not the case in the digital economy, where we would suggest that the scope for finding and creating new ways of abusive behavior is rather high.

Another common justification for ex ante regulation arises if markets are said to be characterised by inherent market failure. In platform markets this may take the shape of the formation or non-competitive bottlenecks (*Gerardin* 2021) or of markets characterized by extreme returns to scale (*Colomo* 2021). Economic research, however, does not necessarily

support an inevitable market failure here: First, competition among platforms is possible and generally superior (inter alia, *Evans* & *Schmalensee* 2007; *Haucap* & *Stühmeier* 2016; *Budzinski* & *Kuchinke* 2020). Second, not all digital markets display the characteristics of platform economics – and in many cases the platform character is a choice of business model rather than a natural element of the market in question (*Budzinski* 2016, 2021a). Notwithstanding, the digital economy may require different rules than other parts of the economy (inter alia, *Schweitzer* et al. 2018; *Marsden* & *Podszun* 2020; *Budzinski*, *Gaenssle* & *Stöhr* 2020a) – and particularly an enhanced and advanced notion (and standard) of market power. Yet, it is not clear whether more adequate rules require ex ante regulation or may also (or better) be achieved by reforming the ex post regime of abuse control. If the dominant reason for the DMA, however, was to target exclusively a predefined set of companies (GAFAM) and limit the scope of their entrepreneurial activity, this would favor ex ante regulation (*Caffarra* & *Scott Morton* 2021).

While much of the debate on the appropriate rules and remedies for the digital economy cannot be characterized solely as a tension between ex ante or ex post measures, a significant portion of it will be a question of the correct design of either an ex ante or an ex post remedy. One prominent reason that is often listed in favor of an ex ante regulation and has clearly been a key motivation for the DMA (see Rec. 5: "while enforcement occurs ex post and requires an extensive investigation of often very complex facts on a case by case basis"), but is actually a matter of design rather than of ex ante versus ex post, is the idea that ex ante instruments will be both a quicker form of intervention and face lower enforcement hurdles (inter alia, *Colomo* 2021; *Monti* 2021*; Furman et. al.* 2019*; Congressional Majority Staff Report* 2020; *Podszun* et al. 2021). However, first, it is not so clear that DMA-procedures will be quicker and more efficient (see section 3.2). And, second, a reform of the abuse control rules in competition policy – enhancing the concept of market power, lowering the barriers for intervention, re-allocating the burden of proof and the re-adjusting the standards for evidence, enhancing and complementing the list of per se abusive behavior in the case of market power, etc., – may serve and achieve the same needs and goals. Thus, with respect to this major motivation, the issue is rather the adequate design of institutions and not a switch from ex post to ex ante. At the end of the day, key challenges with the enforcement of abuse control measure – including exploitative rather than exclusionary abuse cases (*Geradin* 2021) – are a consequence of political shifts and concepts that may have been (in hindsight) overly critical and reluctant of enforcing special obligations for powerful companies (*Bougette* et al. 2019). Similarly, the quest for unambiguous rules offering clear guidance and avoiding legal uncertainty (*Colomo* 2021; *Monti* 2021; *Vezzoso* 2021), problems of under- or over-inclusiveness of norm addressees (*Geradin* 2021; *Monopolkommission* 2021), the reliance on business models rather than market factors (*Basedow* 2021; *Rodríguez* 2021; see also section 3.1) or the inclusion of procompetitive effects and efficiency defenses (*Schweitzer* 2021) all represent important aspects that also are rather a matter of design and not so much a matter of ex ante versus ex post. To some degree, this may also be true with respect to concerns about inconsistencies of an ex ante regulation

with existing legal institutions (*Graef* 2021*; Basedow* 2021*; Vezzoso* 2021) as well as with national competition policies (*Budzinski*, *Gaenssle* & *Stöhr* 2020b; *Basedow* 2021), although there may be more issues here that cannot be easily reconciled with an ex ante regulation – and thus favor a reformed ex post solution. Eventually, the likelihood of regulatory capture increases with ex ante regulation as does the danger of overflowing administration and its self-reinforcing dynamics (see also section 3.2.3).

In summary, ex ante regulation is recommendable when (i) harm is likely to be irreversible, (ii) the economic theory of what causes harm in which way is well-developed, (iii) the employed company strategies are not subject to dynamic innovation, and (iv) the risk of collusive equilibria between ex ante regulators and norm addressees is low. In the case of the digital economy, or more precisely, large digital online services, (i) is likely to be given regarding some of the regulated conduct, (ii) is only partly given at best, (iii) is clearly and significantly failed, and (iv) not matched as well. This leads us to the following assessment: While we see urgent need to reform the competition rules against an abuse of market power (re-invigorating enforcement, broadening the scope to include systemic market power, adding examples of conduct that is a per se abuse of power, etc.), we are highly skeptical of the merits of an ex ante regulation as proposed with the DMA.

4. Conclusion

The DMA proposal is obviously driven by the insight that economic power has become a core concern in digital markets and that emerging large concentrations of power have been difficult to remedy with the traditional competition law toolkit in a timely manner. In order to tackle these issues, the DMA proposal chooses an ex ante approach to complement the existing competition law regime. The DMA is ambitious and novel in its goals – focusing the contestability and fairness of the entire digital sector – as well as its design – its core provisions are a set of obligations, thereby creating a "rulebook" for the digital era – and its asymmetric applicability to only designated large "gatekeepers". It also includes a range of further tools that allow for specification, extension, and further development of the regulatory obligations. Along with the majority of the literature, we support the project to re-invigorate the powers of authorities against the economic power of companies dominating digital ecosystems. Anticompetitive conduct and arrangements by these companies have escalated in recent years and (competition) authorities – despite some successes – have found it difficult to effectively protect competition within the affected ecosystems.

However, the merits of the proposal – in its current shape – come along with a number of concerns and weaknesses both from an economic and from a legal perspective:

- several aspects of the constructed norm addressee (the "gatekeepers") seem to be too narrow at times and too focused on certain business models,
- at times, the 18 obligations (the operative or substantive part of the DMA), while targeting the right anticompetitive conduct, seem unnecessary detailed in description

and focused on specific current cases, thus unnecessarily narrowing down the scope for their future application,

- other times, they include practices that are (at worst) economically ambivalent,
- the differentiation between the obligations in Art. 5 and Art. 6 DMA is not always entirely clear, here further clarification and categorization may be helpful; indeed, and as proposed by many, a further level of abstraction and the formulation or the core theories of harm could be necessary to guarantee the functioning of the regulation in future; the two goals (contestability and fairness) not being clearly defined or illustratively described are barely helpful in this respect,
- the DMA is set to achieve two novel, insightful, and at first glance important goals – contestability and fairness; in this respect, however, the lack of a cogent regulatory theory, as well as a closer development of these goals and their delineation from competition law and larger competition policy is due to create significant definitional and enforcement challenges,
- the lack of clarity regarding the goals and their delineation from competition law also makes it difficult to identify the nature of the DMA; while its is the Commission's explicit aim to create a novel tool that complements competition law, much of the DMA cannot clearly be distinguished from larger competition policy and the lack of a concise regulatory theory for the digital economy makes this distinction hard to grasp, for the time being an ex ante regulatory tool will have to be somewhat of a hybrid,
- the DMA attempts to create a stringent and simple enforcement regime, but contains far too many uncertainties and exemption and alternative routes for this to be altogether plausible, at the end of the day, procedures may be far lengthier and more complex than originally envisioned,
- digital markets as being comparatively dynamic with regulatory knowledge still evolving and thus not exactly suitable for ex ante instruments of regulation,
- substantial leeway and regulatory discretion as well as room for regulatory dialogues and commitments makes the DMA a flexible tool, but also bears the risk of capture and "deals" that fall short of the DMA's regulatory potential,
- both an ultima ratio and a structural relief are essential to achieve the systemic and long-term goals of the DMA, from both a legal and economic perspective the remedies for systemic noncompliance require far more specification,
- ultimately the DMA barely seems capable of remedying systemic noncompliance or underlying structural concerns; this means that while gatekeepers can be targeted, they cannot be prevented by the DMA alone,
- while there are substantial benefits deriving from the Commission's approach to enforcing the DMA through only one centralized authority, it seems critical to bear in mind that many aspect of the digital economy and the regulation thereof remain unexplored and the future development of this sector is far from certain; given these uncertainties it doesn't seem sensible to isolate regulatory approaches from the "marketplace of ideas" and that ultimately a unified approach and more coordination –

between the Commission, national competition and regulatory authorities and even other jurisdictions – should be striven for.

Answering our introductory research questions, we conclude regarding our first question that while the DMA is likely to reduce (some of) the currently known anticompetitive conduct and arrangements by GAFAM-style companies, it is unlikely to close the loophole in competition law enforcement against digital services for predominantly two reasons. First, due to its ex ante character, it fails to quickly and effectively address new anticompetitive conduct and arrangements that the regulated companies will most probably create in response to their previous tools being taken away by regulation. Second, it fails to address the emergence of new gatekeepers and merely seeks to control them once they have eroded effective competition. With respect to our second research questions, we conclude that while the DMA clearly aims to be sector regulation, its relation to competition law remains unclear and the suspicion that it represents a second-best solution to – perceived – competition policy failure keeps looming. Eventually, regarding our third research question, we conclude that there is no convincing reasoning to rely either only on an ex ante approach or solely on ex post instruments. Effectively combating economic power in digital ecosystems requires a smart combination of both approaches.

Overall, we think that the balancing of ex ante and ex post instruments can better be designed within the competition policy regime rather than outside of it as a sector regulation. The perceived failure of competition policy instruments in recent years significantly results from institutional and political enforcement problems of merger control and a politics-driven lenient approach towards abuse control. These "home-made" issues are then aggravated by the nature of competition within and between digital ecosystems, requiring an enhanced notion of market power that is less restricted by market delineation and more open to vertical and conglomerate effects.[14] Introducing a concept of systemic market power – for instance, as in the German competition policy regime – in all areas of competition policy (abuse control *and* merger control[15]) would address the notorious gatekeeper issues in digital industries in two ways: (i) abuse control could more easily establish an abuse of market power and enforce remedies, thus limiting the anticompetitive exercise of economic power in digital ecosystems, and (ii) merger control would prevent the emergence of new forms of economic power of this type, thus preventing new gatekeepers from tipping more digital markets. This would re-invigorate the interplay between merger control – as an ex ante instrument to prevent potentially harmful economic power – and abuse control – as an ex post instrument dealing with the economic

[14] The nature of competition in digital markets reverses the old economic wisdom from traditional industries that vertical and conglomerate effects are rarely and only exceptionally harmful to effective competition. Therefore, a re-activation of all competition policy instruments regarding vertical and conglomerate conduct and arrangements – reversing the pre-digital trend to merely ignore non-horizontal issues – is urgently required.

[15] The vast ignorance of (the role of) merger control both in the previous and ongoing reform activities as well as in the DMA proposal have been economically criticised (inter alia, *Budzinski*, *Gaenssle* & *Stöhr* 2020a,b; *Cabral* et al. 2021) and are now also explored in a legal opinion for the German Federal Ministry for Economic Affairs and Energy on the extension of merger control power (*Franck* et al. 2021).

power that could not be prevented (because it resulted from internal company growth, e.g. through innovation or superior efficiency). If you were to add an enhanced and modernized list of types of conduct and arrangement that are per se prohibited in case of market power, thus accounting for the digital-driven ways of anticompetitive harm, as well as a smarter allocation of the burden of proof and more appropriate evidentiary thresholds – and it is difficult to see why a reformed competition policy regime should not be able to reach the goals that are set for the DMA without the pitfalls of ex ante regulation.

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