I. Introduction

1. Whether to continue relying on existing competition rules in the digital sector, or instead seek new competences and dedicated legislation, is the question for competition authorities in Europe. Several prominent reports (some at the request of those authorities) have posited this as the natural “evolution” of competition law. Germany has forged ahead with a proposed amendment to its legislation that, among others, would allow the competition authority to impose measures on undertakings with “paramount significance for competition across markets” including with regard to discrimination and access to data. A joint memorandum by the Belgian, Dutch, and Luxembourg competition authorities also pushes for an ex ante tool enabling them to impose remedies without having to establish a competition law infringement. Perhaps most significantly, the combination of the portfolios for digital policy and competition authorities in Europe. Several prominent reports (some at the request of those authorities) have posited this as the natural “evolution” of competition law. Germany has forged ahead with a proposed amendment to its legislation that, among others, would allow the competition authority to impose measures on undertakings with “paramount significance for competition across markets” including with regard to discrimination and access to data. A joint memorandum by the Belgian, Dutch, and Luxembourg competition authorities also pushes for an ex ante tool enabling them to impose remedies without having to establish a competition law infringement. Perhaps most significantly, the combination of the portfolios for digital policy and competition enforcement under the newly reappointed Commissioner Vestager indicates the possibility that legislation may be introduced to tackle concerns in digital markets expressed throughout her preceding tenure as competition commissioner. At this point, it may therefore be tempting to prepare for regulation and shuffle off the uncertainty that currently surrounds competition enforcement.

2. This paper nevertheless asks if we should pause before overhauling a system that has served the EU well for many decades—even if only for the digital sector. Theory holds that principle-based rules are best suited to face novel situations, and that characterisation fits the open-ended prohibitions of Articles 101 and 102 TFEU and merger control’s standard of “significant impediment to effective competition.” The current discussion therefore shows a lack of trust in principle-based rules rather than a proved substantive gap. We suggest this is due to two factors: stepping outside the comfort of the Commission guidance, which has for long specified those principles to some degree, and the relatively early stage of the process of administrative and case law refinement of such principles to the digital context.

3. Since the “modernisation” of its enforcement, the Commission has used numerous instruments to fill in the gaps of a principle-based competition law. The result has been an increase of legal certainty and economic sophistication at the cost of some inflexibility. The main
problem concerns the static approach adopted in the Commission guidance,7 which has proven unsuited to the characteristics of the digital sector. As will be discussed, this guidance is tailored for market power in defined markets, cost-based competition, and price-centric consumer harm, while the digital sector involves cross-market strategies, innovation competition, and services typically provided free of monetary charge. Nonetheless, principle-based rules remain available, and enforcement has availed of them when stepping outside the Commission’s guidance. Recent Commission decisions and some case law precedents so far indicate that such principles are flexible enough to adapt to the digital context.

4. The paper will show that, despite promising signs, it will take some time until competition principles are fleshed out for the digital sector. This path is more uncertain than regulation, and particularly dependent on the outcome of the judicial review of Commission decisions. It does, however, have the advantage of a tried-and-tested method to achieve administrative and judicial coherence. Importantly, our purpose is not to reject regulation that could complement this enforcement, in particular when it would serve public interests like the creation of a level-playing field or the protection of plurality and diversity. It may also be necessary to draw new remedies or even overarching principles for those public interests and competition law. The key—for either regulation or case law—is to rely on dynamic insights. This would imply that an approach built on the experience with public utilities, with which technology firms are often compared, risks being unfit for purpose due to the static regulation of those services. Without dismissing off-hand that ex ante regulation is necessary, it would certainly be preferable for legitimate expectations and preserving the horizontal application of the competition regime to continue operating under current rules. By analysing the role of as-efficient competitors and innovation competition, we show how proactive competition enforcement can capture the specificities of digital markets.

II. As-efficient competitors

5. Recent key competition investigations in the digital sector have targeted relatively new types of anti-competitive behaviour. The Google Shopping case involved self-preferencing behaviour by Google in the form of more prominent placement of its own comparison shopping service versus rival comparison shopping services that were demoted in Google’s general search results.8 The Google Android case addressed the restrictions Google imposed on Android device manufacturers and mobile network operators in order to entrench its dominance in general internet search.9 The ongoing Amazon Marketplace investigation focuses on Amazon’s dual role as retailer and marketplace, and explores whether Amazon’s use of data from independent retailers is anti-competitive.10 These cases, different as they are, nevertheless all deal with the extent to which the ability of rivals to compete with a dominant firm deserves protection under competition law.

6. Although attributing a consumer welfare goal to EU competition law is the subject of constant debate,11 the Court of Justice has stated that competition rules protect consumers directly as well as indirectly by safeguarding the process of competition.12 This has been connected with the view that is not the aim of competition law to keep competitors on the market, a sentiment given support by the statement in Post Danmark I that “[c]ompetition on the merits may, by definition, lead to the departure from the market or the marginalisation of competitors that are less efficient and so less attractive to consumers from the point of view of, among other things, price, choice, quality or innovation.”13 This mirrors the Commission’s definition of competitive harm based on market power in its Article 102 TFEU Enforcement Guidance—namely, the ability to affect price, choice, quality or innovation to the detriment of consumers.14 As such, the Commission has read the notion of an “as-efficient competitor” into the assessment of several categories of abuse.15

7. The as-efficient competitor test does indeed have some support in the case law. According to the Bronner judgment, the indispensability of the dominant firm’s input in a refusal to deal scenario has to be assessed not with reference to the scope of the access seeker’s own downstream activities but with reference to a scale of business comparable to that of the dominant firm.16 Prompted by the Commission’s opening to examining effects, and the dominant undertaking’s arguments that this should include an as-efficient competitor test, the Court in Intel annulled the Commission decision for failure “to assess the possible existence of a strategy aiming to exclude competitors that are at least as efficient

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8 Case AT.39740 – Google Shopping, 27 June 2017.
13 Case C-209/10, Post Danmark I, ECLI:EU:C:2012:172, para. 22.
14 Article 102 TFEU Enforcement Guidance, para. 11.
15 See Article 102 TFEU Enforcement Guidance para. 23–25 in relation to price-based exclusionary conduct.
as the dominant undertaking from the market.”17 More clearly, in the context of margin squeezes, the Court stated in TeliaSonera that it is sufficient for such an abuse “that there is an anti-competitive effect which may potentially exclude competitors who are at least as efficient as the dominant undertaking.”18

8. A relevant question, therefore, is whether focusing on protecting as-efficient competitors would be adequate for the advancement of competition law for the digital era. In the online platform economy particularly, a few firms dominate various market segments and benefit from economies of scope across them.19 Is it still appropriate in these circumstances to only ban behaviour that would exclude rivals as efficient as these “digital champions” under the competition rules? Even though the as-efficient-competitor test was developed for price-related behaviour and margin squeezes in particular, it can in principle also be applied to non-price behaviour. This could be the case with the self-preferencing at issue in Google Shopping; instead of taking costs as the benchmark, as one would do for a pricing abuse, one could simulate whether the dominant undertaking’s downstream business would be able to compete if it had to operate under the same conditions as those applied to rivals, in this case be downgraded in the search ranking. Because the dominant firm’s own downstream service is used as the basis for the analysis, the anti-competitive foreclosure is established from the perspective of an as-efficient competitor who is, however, now subject to the conditions as they apply to regular, non-affiliated businesses.20

9. The question remains whether such an application of the as-efficient competitor test still puts the threshold for intervention in digital markets too high, tilting the balance of interests of consumers and competitors too much to the benefit of dominant digital firms. The dependence of a rival on services of digital platforms is not a sign of lesser efficiency, but inherent to the functioning of today’s digital economy. We do not suggest going as far as the national regimes on abuse of economic dependence, which aim at protecting businesses in a weaker bargaining position irrespective of the impact on consumers.21 Instead, we refer to a dynamic interpretation wherein rivals are allowed to improve their efficiency in order to grant them a stronger bargaining position vis-à-vis the platform, or perhaps the ability to leave for other platforms or to set one up independently—even if they are not at that stage yet.22 In particular, one could envisage behaviour whereby dominant firms pre-emptively chill the success of rivals by denying access to indispensable data or by engaging in self-preferencing. These have been the main targets for suggested regulation, but the balance with an as-efficient competitor test warrants more case-by-case exploration.

10. It is important to point out that current competition rules can, to a significant extent, already address such practices. The essential facilities doctrine can in principle be applied to open up datasets held by dominant firms, even if precedent has still not clarified how the conditions of the essential facilities doctrine will or should be applied to data.23 In addition, merger decisions like Facebook/WhatsApp, Microsoft/LinkedIn,24 and Apple/Shazam25 have already outlined that access to data can lead to competition concerns. Even though these decisions have not yet found a dataset unique enough to raise such concerns, they do show a development in the Commission’s principles and framework for assessing data-related mergers that opens up intervention in future cases. However, until the Commission makes significant use of these enforcement possibilities, support for ex ante tools to facilitate data access will continue to grow. While these tools may offer an attractive additional regulatory mechanism, they will still have to solve the same problem of the threshold for intervention.

11. As such, the problem seems to lie in the lack of adequate precedent rather than in the inadequacy of competition rules themselves. A clarification of the conditions for abusive refusals to give access to data or its use to hamper rivals, such as in the ongoing Amazon Marketplace investigation, or judicial confirmation that enforcement may protect rivals that depend on a digital platform, as in the filed appeals of the Google decisions, would do much to address this uncertainty. Once there is sufficient decisional ground, soft law guidance can build on it. Moreover, as stated at the outset, where data sharing is considered desirable as a policy objective in and of itself regulation can be undertaken. In line with the actions of the Commission within its European Data Economy initiative, a horizontal regulatory approach coupled with a case-by-case application of competition rules can be envisaged to level the digital playing field.26

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17 Case C-413/14 P Intel, ECLI:EU:C:2017:632, para. 139.
18 TeliaSonera, para. 64. The Court has only expressly connected the as-efficient competitor standard with the pricing abuses of predatory pricing, rebates, and the referred margin squeeze (Case C-23/14 Post Danmark II, ECLI:EU:C:2015:635, para. 15).
19 Expert Report to the Commission, p. 33.
21 A number of Member States have regimes on abuse of economic dependence in place, including France (Article L. 420-2 Code de commerce), Germany (§ 201(1) and (2) Gesetz gegen Wettbewerbsbeschränkungen) and, since April 2019 also Belgium (Wet van 4 april 2019 houdende wijziging van het Wetboek van Economisch Recht met betrekking tot misbruiken van economische afhankelijkheid, onrechtmatige bedingen en oneerlijke marktprijzen tussen ondernemingen, Belgisch Staatsblad, 24 May 2019).
22 Preventing an increase in efficiency is a viable strategy against disruptive innovation, see F. Costa-Crabal, Innovation in EU Competition Law: The Resource-Based View and Disruption 37 Yearbook of European Law 2018, pp. 331–333, at https://doi.org/10.1093/yel/yey019.
24 Case M.7217 – Facebook/WhatsApp, 3 October 2014.
25 Case M.8124 – Microsoft/LinkedIn, 6 December 2016.
26 Case M.8788 – Apple/Shazam, 6 September 2018.
III. Innovation competition

12. The main concern about competition in the digital sector is loss of innovation: from a passing reference in Google Shopping, harm to innovation has taken central stage in Google Android. We argue that the Commission’s recent enforcement, and whether regulation is needed to address innovation concerns, should be understood in conjunction with the practice in merger control. Due to the relatively lower level of judicial review, merger control has provided a testing ground for dealing with innovation. The Commission would have it that it is the notion of market power in its guidance, applying interchangeably to price and other competitive parameters, which has allowed its practice to frame innovation. In reality, as will be detailed, the Commission has moved away from the static approach of its guidance through trial-and-error. Innovation is thus currently addressed separately from structural concerns and as an autonomous kind of harm. Enforcement against anti-competitive behaviour, and to some extent the regulation proposals themselves, are catching up to this evolution.

13. It is worth starting by the Commission’s Horizontal and Non-Horizontal Merger Guidelines reference to market power as the standard for competitive harm. Defined as the ability to influence competitive parameters to the detriment of consumers, these guidelines refer to price, quality, choice, and innovation; nonetheless, it is “price increase” that is used as shorthand for exercising market power. This implies that innovation is interchangeable with, and therefore equivalent to, a product’s price-quality relationship: the same way that an under-takers losing incentive to compete on price and quality as it gains market power, it would also lose incentive to invest in innovation. Market power is also the standard for harm in the Article 102 Enforcement Guidance, as already stated, opening the way for the very same inference. However, it is well known that a straightforward relationship between market power and innovation is theoretically flawed, since economics has not settled whether monopolies or competitive markets are better for innovation and attempts at conciliation are focused on identifying the particular conditions that lead to harm to innovation.

14. The Horizontal Merger Guidelines acknowledge the ambivalent effects of market power by stating that a merger could increase the ability and incentive to innovate but, “alternatively,” competition could also be impeded by a merger of important innovators—namely “two companies with ‘pipeline’ products related to a specific product market.” These guidelines have led to an established decisional practice, mostly in the pharmaceutical sector, forcing the divestiture of pipeline products that would compete with other pipeline or current products of one of the merging parties. All of this did not prevent the Commission from seeking, and obtaining in Deutsche Börse, the judicial confirmation of its general market power standard: the General Court accepted that loss of innovation could be presumed (like price increases would) from a less competitive market structure. However, while innovation may indeed be harmed by market power, it may also be harmed independently of market structure.

15. Even before the Commission guidance, the case law on abusive refusal to license under Article 102 TFEU had already indicated that safeguarding innovation had a separate competitive importance. Starting from an application of the essential facilities doctrine—namely, an indispensable input allowing the exclusion of all competition downstream—the Court of Justice added the condition of preventing the appearance of a new product with consumer demand. Thus, the increase in market power was not enough in and of itself to trigger the abuse. The “new product” condition was expanded in Microsoft to cover an impediment to technical development, namely refusing to license interoperability information. The importance of the step taken in Microsoft was to consider that, instead of completely excluding competition (as the refusal of an indispensable input would), it was sufficient that an asset granted a competitive advantage in innovating—in other words, harm to innovation would now trigger the abuse. When it came time to codify its guidance on Article 102 TFEU, however, the Commission did not recognise a new product condition to be different from the (price-based) consumer harm resulting from vertical foreclosure.

16. As such, it was merger control that picked up where the case law on abuse left innovation off. Intel/ McAfee transposed Microsoft’s reasoning of imposing a competitive disadvantage on rival innovation, in this case through access to chip technology that could affect the development of anti-virus software, further advancing an autonomous notion of harm to innovation by not...
requiring indispensability or even a vertical relation (since the chips were not an input for the software). This kind of harm immediately superseded the Commission’s Non-Horizontal Merger Guidelines, which did not foresee such concerns in conglomerate mergers.\textsuperscript{42} \textit{Intel v. McAfee} came under criticism for using harm to innovation to overcome the lack of concerns over market power.\textsuperscript{43} However, Facebook/WhatsApp would show the problem of relying on market power in the digital sector, with the absence of market overlaps leading to an unconditional approval without opening an in-depth merger investigation.\textsuperscript{44} It was already clear at the time to industry analysts that Facebook was engaging in an acquisition spree of possible social network rivals and to gain access to personal data.\textsuperscript{45} The Commission nevertheless stuck close to its guidance and, in addition to dismissing horizontal effects, rejected vertical foreclosure as the parties were considered not to have market power over personal data or its use in advertising.\textsuperscript{46}

\section*{17. Because of these experiences, merger control is presently much better equipped to deal with harm to innovation. The approach in Facebook/WhatsApp was corrected in Microsoft/LinkedIn and Apple/Shazam, which examined how data could be used to innovate beyond existing product markets even if, as already stated, the data sets ended up not raising such issues.\textsuperscript{47} One striking possibility of a more propositive enforcement in digital markets is to adapt the theory of harm formulated for agrochemical mergers in Dow/Dupont and Bayer/Monsanto, which indeed lead to substantial divertissements of pipeline products and lines of research.\textsuperscript{48} The analysis of innovation in these cases was completely separated from static competition in defined markets, settling on “innovation spaces”—research targets which may overlap several products.\textsuperscript{49} Although nominally based on the reference to pipeline products in the Horizontal Merger Guidelines, the guidance was upended by the methodology that the Commission set out in an annex.\textsuperscript{50} While some question whether this R&D-heavy analysis is applicable to fast-moving digital services,\textsuperscript{51} certain elements are clearly replicable: innovation capabilities (notably IP and personal data assets), targeted developments instead of markets, and strategic prevention of overlaps.\textsuperscript{52} In any event, it is clear that merger control was flexible enough to accommodate innovation’s drift away from market structure.

\section*{18. The experience in merger decisions may in turn serve as inspiration for assessing anti-competitive practices, as abuse of dominance cases leave the Commission guidance behind and once more explore harm to innovation. Google Shopping pairs loss of innovation with other effects of exclusion, but it also does not require indispensability and relies on the advantages granted by an asset (self-preferencing in the search engine)—similarly to the step taken in \textit{Intel v. McAfee}. The same happens in relation to the abuse of preventing new operating system versions in Google Android, but that case goes further in framing its three abuses under an overall strategy to prevent Google’s search engine from being overtaken by mobile internet\textsuperscript{53}—in other words, preventing disruptive innovation.\textsuperscript{54} These cases therefore operate at a level where shaping markets is more important than excluding rivals to gain market power. Indeed, the incorporation of rivals is beneficial if they are kept at arm’s length, be it by acquisition as in Facebook/WhatsApp or under a platform (as seems to be the question) in Amazon Marketplace. One is hard-pressed to find orientations for these cases in the Article 102 TFEU Enforcement Guidance, but judicial appeals may again fit innovation under the broader concept of abuse. If this is so, updated guidance might dispense with regulatory intervention.

\textsuperscript{42} The guidance being concerned mainly with tying regarding conglomerate mergers, see Non-Horizontal Merger Guidelines, para. 93.
\textsuperscript{44} See, in summary, the press release at https://ec.europa.eu/commission/presscorner/detail/en/IP_14_1088.
\textsuperscript{46} Facebook would end up using personal data gathered by WhatsApp, contrary to what it stated, but because the Commission did not consider this a competitive concern it could only apply a fine for misleading information.
\textsuperscript{49} Dow/DuPont, para. 350–351, and Bayer/Monsanto, fn. 23.
\textsuperscript{50} Annex 4 to Dow/DuPont.
\textsuperscript{51} Expert Report to the Commission, p. 120.
\textsuperscript{52} Ibid., p. 122.
\textsuperscript{53} Google Android, Section 14.2 (applying the requirement for a single continuous infringement).
\textsuperscript{54} See Costa-Cabral, p. 340.
IV. Conclusion

19. This paper gave an account of how competition rules can be interpreted and applied in relation to as-efficient competitors and innovation competition, straying from the Commission guidance’s static approach and seeking to adapt competition principles to the context of the digital sector. The relevant decisions have attracted controversy, but it is ultimately up to the Courts of the EU to endorse or annul them. In our opinion, this will provide the litmus test if principles are flexible enough or if regulation is needed. Judicial confirmation may even open the doors for regulation, as Continental Can did for merger control, if it emboldens the review of certain practices systematically and ex ante. Nevertheless, when proposals of regulation include the reversal of the burden of proving an infringement, they seem to prepare for a failure by the Commission to uphold its decisions. The impression that competition rules are harder or impossible to enforce in a digital context would very likely also lead to legislative adjustments.

20. If this application of principle-based competition rules receives judicial validation, however, the best interpretation is that the system of competition enforcement continues to function well (regardless of being complemented by regulation protecting other interests). Some may question if this method is timely, systematic, or certain enough. After all, merger control did not seem to prevent concentration in technology markets and competition investigations are case specific, with final decisions usually being issued long after the facts—as far as Google Android dates from the change to mobile internet. However, the recent interim measures in the Broadcom investigation illustrate the opportunities of proactive enforcement adjusted to the dynamic nature of the digital sector. Moreover, regulation’s alleged potential to create certain desired results on the market might turn unpredictable once initial legislative proposals reach the process of political bargaining. There is no guarantee that the legislative process will outpace judicial developments. As for their effectiveness, judicial decisions do not only provide clarity to the undertakings involved but also send a powerful signal about the boundaries of competition rules to all economic actors. While their outcome is uncertain to a degree, we may put some faith in them not going unnoticed.


56 The Report to the Commission proposes to reverse the burden of proof and let dominant firms provide evidence that self-preferencing has no adverse effects on competition, see Expert Report to the Commission, pp. 66–67.