

# A Dynamic Formulation for the AEC Test

## Comments of the Dynamic Competition Initiative (“DCI”)

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### Introduction

The more economic approach of European Union (“EU”) competition law has served its stated purpose. Under the more economic approach, the application of EU competition law has pursued efficiency and legal certainty.<sup>1</sup> Today, a new threshold in the more economic approach can be reached by making EU competition law more dynamic. Given that innovation and technical progress are the main drivers of economic growth,<sup>2</sup> the application of EU competition law can be improved to tackle practices that hamper business dynamism. Through that prism, the recent initiative of the European Commission (“EC”) to reform the guidance underpinning the enforcement of unilateral conduct rules (“the Draft”) constitutes a welcome opportunity.<sup>3</sup>

As the EC’s call for evidence suggests a possible adaptation of the as-efficient competitor (“AEC”) test, the present submission supports the introduction of a dynamically-as-efficient-competitor (“DAEC”) test. A DAEC would empower competition agencies and courts to protect entrants capable to meet, or even surpass, the level of efficiency of dominant incumbents in the future. The idea is not only intuitive. It enjoys support in case law.<sup>4</sup>

A DAEC test can improve competition enforcement in several ways. First, a DAEC test supplies an effective tool to counteract capital markets’ preference for growth of incumbents over new entrants. The concern about weak (private) funding of innovation by capital markets is a well-documented problem of the EU, compared to the US. Second, a DAEC test can shake up markets tipped towards inefficient incumbents by providing a sound and affordable procedure for

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<sup>1</sup> Case C-52/09 *TeliaSonera Sverige AB* [2011], para 22.

<sup>2</sup> See, e.g., Paul Romer, ‘Endogenous Technological Change’ (1990) 98 (5) *Journal of Political Economy* 71. For a recent study exploring the nexus between innovation and economic growth, see Ross Levine, Chen Lin, Lai Wei, & Wensi Xie, ‘Competition Laws and Corporate Innovation’ (2020) NBER Working Paper No. 27253 <https://www.nber.org/papers/w27253>.

<sup>3</sup> The proposed amendments are accompanied by a policy brief, which expounds on the rationale behind the initiative. See, Linsey McCallum et al., ‘A dynamic and workable effects-based approach to abuse of dominance’ (*Competition Policy Brief Issue 1, March 2023*) [https://competition-policy.ec.europa.eu/system/files/2023-03/kdak23001enn\\_competition\\_policy\\_brief\\_1\\_2023\\_Article102\\_0.pdf](https://competition-policy.ec.europa.eu/system/files/2023-03/kdak23001enn_competition_policy_brief_1_2023_Article102_0.pdf).

<sup>4</sup> See, e.g., Case C-680/20 *Unilever Italia* [2023]; Case C-23/14 *Post Danmark II* [2015]; Case C-214/99 *Neste* [2000] ECR I-11121; Case COMP/35.141 *Deutsche Post AG* [2001]; see Thibault Schrepel, ‘The Making of An Antitrust API: Proof of Concept’ (2023) 3 *Stanford Computational Antitrust* 22, 33.

developing competition law enforcement in cases of increasing returns, path dependence, and lock-in.<sup>5</sup>

However, an underspecified DAEC test risks falling victim to the predicament of arbitrary competition law enforcement that the more economic approach sought to avoid. The purpose of this submission is to offer a framework for a DAEC test. Focusing on costs and capabilities, the present submission aims to introduce a *workable* DAEC test.

## The Dynamically As-Efficient Competitor Test

A dominant firm enjoys the power to exclude competition. However, not all exclusionary conduct by a dominant firm is economically inefficient. How to draw the line between pro- and anti-competitive exclusion remains a hotly debated issue in competition law scholarship.

With the more economic approach, EU competition law has adopted the AEC test as its filter of choice for good and bad exclusion. Under the AEC test, a dominant firm's conduct only infringes Article 102 TFEU if it forecloses equally (or more) efficient competitors. The Guidance Paper that introduced the AEC test embedded limited exceptions, leading to concerns of under-enforcement.

The Draft considers that a further relaxation of the AEC test is required in specific circumstances. However, it is not entirely clear what these specific circumstances can be. This submission considers that a clear case for relaxing the AEC test exists where an *identifiable* less efficient competitor today can *predictably* become a more efficient competitor tomorrow. A fictional example can help the discussion.

Consider a market where a dominant firm (**A**) in a taxi market incurs fixed costs of EUR 100 000 for its fleet of vehicles and variable costs that depend on the number of hours worked by drivers (*e.g.*, EUR 10 for fuel for each additional hour of urban consumption + EUR 1 in compensation for each additional hour worked). Suppose that **A** faces competition from **B**, a new entrant that relies on autonomous vehicles. Since **B** does not use human drivers, it only incurs fuel costs (*i.e.*, EUR 10 per hour). The fixed cost of the fleet of autonomous vehicles is EUR 150 000.

In this case, **B** becomes more efficient in the long run. However, **A**, which is dominant, can delay or prevent **B** from becoming efficient by foreclosing the portion of the market necessary for **B** to achieve scale.<sup>6</sup> For example, if **B** needs 55% market share to become efficient, and **A** forecloses 55% of the market by adopting business conduct that ties demand to its service, the entrant cannot reach its higher efficiency potential. A competition inquiry that ignores **B**'s higher efficiency potential by focusing only on the level of efficiency achieved by market participants *at the prevailing scale of production* risks exonerating anti-competitive exclusion, leading to a false negative.

## A Framework for the DAEC Test

A DAEC test requires an administrable framework. The proper focus of the inquiry should be on costs and capabilities.

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<sup>5</sup> Nicolas Petit & Thibault Schrepel, 'Complexity-minded antitrust' (2023) *Journal of Evolutionary Economics*.

<sup>6</sup> Preventing rivals from achieving minimum efficient scale is an established antitrust abuse, as illustrated by, *e.g.*, Case T-155/06 *Tomra Systems ASA and others* [2010] II-0436. See also, Case C-165/19 P *Slovak Telekom* [2021], para 109.

A DAEC test first requires a comparison of the costs of the dominant firm and its competitors. A thorough economic analysis of the mid to long-term cost curves of the market participants should make it possible to determine whether the present lower efficiency of a competitor is due to a temporary lack of economies of scale. In turn, a finding that an actual competitor can reach its minimum efficient scale (MES) at a scale of production equal to or smaller than that currently held by the dominant firm provides a strong basis for a theory of harm according to which the exclusion of an actual competitor harms *both* levels of *efficiency* and *rivalry* in the future. It harms efficiency because costs could be lower. And it harms rivalry because the market share tied to reaching superior levels of efficiency could be lower too.

Economic evidence regarding cost comparisons might entail forecasting. Where the actual competitor is a new firm, the business plan might contain useful information. Agencies and courts can combine such documents with *ad hoc* economic studies to test a theory of harm whereby an incumbent dynamically impedes more efficient competition.

Capabilities are the second prong of the test. A focus on capabilities requires asking whether actual competitors enjoy the managerial, technological, and organizational resources necessary to achieve cost efficiencies in the mid to long-term.<sup>7</sup> In other words, if demonstrated cost efficiencies in the first prong are observable, are they predictable? Or, more prosaically, if there is a firm that looks dynamically more efficient, can it pull it off? A focus on capabilities can allow the agency or court to establish a strong case that the less efficient rival can credibly bring significant competition to the dominant firm in the future.<sup>8</sup>

Economic evidence on capabilities is less well known from competition law. Often, the type of determination needed will entail qualitative evaluations, which in turn creates a risk of excessive discretion. That said, a rich literature in economics and management science is developing that can help design checklists, metrics, and tests of capabilities.<sup>9</sup>

## Economic and Legal Justification for a DAEC Test

A DAEC test responds to both economic and legal concerns. First, as Clayton Christensen's pioneering work has demonstrated, disruptive entrants in technology markets often display lower (productive) efficiencies, at least initially.<sup>10</sup> As the entrant's market foothold gradually increases, the incumbent's competitive advantage erodes. Worse, incumbents are often stuck in an obsolete paradigm of chasing customer satisfaction, often to futile ends. The risk is that, in the absence of a credible threat of competitive intervention, dominant firms can use their practices to nip disruption in the bud.

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<sup>7</sup> See, *e.g.*, David Teece, Gary Pisano, & Amy Shuen, 'Dynamic Capabilities and Strategic Management' (1997) 18 (7) Strategic Management Journal 509.

<sup>8</sup> If desired, literature can yield a checklist for ease of use and foreseeability. See, *e.g.*, Nicolas Petit & David Teece, 'A Capabilities Checklist for Mergers with Nascent Competitors' (2023) Journal of European Competition Law & Practice.

<sup>9</sup> Constance E. Helfat & Margaret A. Peteraf, 'Understanding dynamic capabilities: progress along a developmental path' (2009) 7 Strategic Organization 91; Murmann, Johann Peter, and Fabian Vogt. "A capabilities framework for dynamic competition: Assessing the relative chances of incumbents, start-ups, and diversifying entrants." Management and Organization Review 19.1 (2023): 141-156.

<sup>10</sup> Clayton M. Christensen, *The Innovator's Dilemma* (HarperCollins 2003).

Second, the case law of the EU courts insists that the AEC framework applies in both pricing and non-pricing cases.<sup>11</sup> This judicial proposition has puzzled early observers of recent case law. It should not. Through a DAEC lens, it makes perfect sense to evaluate both types of dominant firm conduct under the AEC framework. In particular, application of the DAEC test shows a trajectory for the development of the AEC framework in non-pricing cases. For example, the DAEC test could be applied in a case in which a search engine or a social network refuses to grant access to training data to a large language model company. In this example, there is no pricing conduct involved. Analysis under the DAEC test will consist in asking whether the rival's costs and capabilities can more efficiently serve the demand directed to the search engine or social network.<sup>12</sup>

## Context

Like all fields of law, competition law operates within limits.<sup>13</sup> The development of a DAEC test is no exception. Legal certainty, administrability, and economic efficiency require that the DAEC test be applied in a specific set of circumstances.

First, the DAEC test can only work in an *ex-post* context. A test based on costs and capabilities can only work where there is a risk of actual competitors being foreclosed. It would be too broad a license to apply Article 102 TFEU on the mere speculation that 'somewhere, someday, in a garage', a hypothetical firm could be more efficient (or that competition is one click away).<sup>14</sup> This conforms with the well-established case law stipulating that competition law cannot be animated by purely hypothetical scenarios.<sup>15</sup>

Second, the DAEC test will be most appropriate in cases where timely intervention is crucial. To be concrete, actual competitors with limited access to capital markets – likely, the more recent firms – might be more of a priority for its application than actual competitors with substantial access to financial markets or political clout – likely, more established firms. It may be also reasonable for the agencies and courts to consider imposing interim measures to ensure the effectiveness of the DAEC test.<sup>16</sup>

Lastly, a DAEC test cannot work with fines. Under a DAEC test, the dominant firm cannot know the information on a (potentially) more cost-efficient rival, and since exclusion can happen at prices above costs, it cannot presume exclusion by reviewing the effect of its prices on itself. In such cases, imposing fines may be irreconcilable with the quasi-criminal nature of competition laws.<sup>17</sup>

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<sup>11</sup> Recent cases demonstrate that the AEC concept is applicable to non-price competition as well. See, *e.g.*, C-377/20 *Servizio Elettrico Nazionale SpA* [2022]. See also, Germain Gaudin & Despoina Mantzari, 'Google Shopping and the As-Efficient-Competitor Test: Taking Stock and Looking Ahead' (2022) 13 (2) *Journal of European Competition Law & Practice* 125.

<sup>12</sup> Nico Grant, 'Google Devising Radical Search Changes to Beat Back A.I. Rivals' (*The New York Times*, 16 April 2023) <https://www.nytimes.com/2023/04/16/technology/google-search-engine-ai.html>.

<sup>13</sup> Nicolas Petit, 'A Theory of Antitrust Limits' (2021) 28 *George Mason Law Review* 1939.

<sup>14</sup> Harold Demsetz, 'Information and Efficiency: Another Viewpoint' (1969) 12 *The Journal of Law & Economics* 1.

<sup>15</sup> See, *e.g.*, Case C-525/16 *MEO* [2018].

<sup>16</sup> The EC has recently reinvigorated the use of interim measures. See, Massimiliano Kadar, 'The Use of Interim Measures and Commitments in the European Commission's Broadcom Case' (2021) 12 (6) *Journal of European Competition Law & Practice* 443.

<sup>17</sup> Magali Eben, 'Fining Google: A Missed Opportunity for Legal Certainty?' (2018) 14 *European Competition Journal* 129.

This is different from the current AEC test, which gives dominant firms the ability to know prospectively whether their price is likely to exclude as efficient firms.<sup>18</sup>

## Conclusion

A DAEC test can strengthen the application of competition law by promoting economic innovation, without undermining legal certainty.

A DAEC test requires a model of administrative regulation or judicial intervention focused on cases of foreclosure of actual competitors and as little adversarial as possible.

The main challenge for competition law is to invest in the development of capabilities audits and costs forecasts.

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<sup>18</sup> See, e.g., Case No. IV/30.178 *Napier Brown – British Sugar* [1988]. For a criticism of this feature, see Marios Iacovides & Chris Vrettos, ‘Radical for Whom? Unsustainable Business Practices as Abuses of Dominance’ in Holmes, Middelschulte, & Snoep (eds), *Competition Law, Climate Change, & Environmental Sustainability* (Concurrences 2021).