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# Submission to the European Commission (EC) on Merger Guidelines

DAVID BOSCO
MARIE CARTAPANIS
JENNIFER PULLEN
ANOUK VAN DER VEER





#### **Dynamic Competition Initiative (DCI)**

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#### Introduction

The Dynamic Competition Initiative (DCI) is a research collaboration supported by University of California, Berkeley, and the European University Institute (EUI). Its mission is to advance competition policy that places innovation at the centre, recognising it as the primary driver of long-term prosperity, opportunity, and societal well-being. The DCI draws on insights from innovation and evolutionary economics, complexity theory, and the dynamic capabilities framework, emphasising an interdisciplinary and evidence-based approach.

The DCI convenes annual conferences, policy events, and workshops with leading scholars and practitioners, including Frédéric Jenny (Chairman OECD Competition Committee), Juliana Oliveira Domingues (Attorney General at CADE), and David Teece (UC Berkeley).

The DCI welcomes the opportunity to provide feedback on the consultation of the Horizontal Merger Guidelines (HMG) and the Non-Horizontal Merger Guidelines (NHMG) (together the 'Merger Guidelines') by the European Commission (Commission). Our contribution focuses on three areas most aligned with our expertise:

Topic C: Innovation and other dynamic elements in merger control;

Topic E: Digitalisation; and

Topic F: Efficiencies.

We would be pleased to further discuss our submission in the context of a stakeholder meeting with the Commission.

This submission was prepared by Prof. David Bosco (Aix-Marseille University), Prof. Marie Cartapanis (Aix-Marseille University) (Topic F), Jennifer Pullen (PhD Candidate at University of St.Gallen) (Topic E), and Anouk van der Veer (PhD Candidate at EUI) (Topic C). We are grateful to the DCI scholars who provided feedback on an earlier draft. The views expressed are solely those of the authors and do not represent the position of the DCI or its scholars.



#### Topic C: Innovation and other dynamic elements in merger control

We consider the Commission well equipped to analyse incremental innovation, both in terms of product and process improvements, particularly in situations wherein competition is the main driver of such innovation. There is room for improvement, however, in the analysis of radical innovation, and the situation wherein that innovation drives competition. Therefore, our responses focus on this latter case. Before addressing the Commission's questions, we offer a brief introduction to set the stage. Specifically, we outline our understanding of **dynamic competition**, **dynamic merger effects** and the **dynamic approach** to analysing these effects.

Let us illustrate the above through some examples. Competition often drives firms to innovate and release new generations of existing products (e.g., iPhone 15 following iPhone 16, or NVIDIA's RTX 50 series succeeding the RTX 40 series). These innovations introduce new features and enhance product performance but do not fundamentally change the competitive environment. Competitors can respond to these changes with incremental adjustments without needing to fundamentally transform their offerings.

The situation is very different when entirely new products are introduced. Some partially overlap with existing consumer needs (e.g., smartphones compared with mobile phones, Netflix compared with DVDs, and electric vehicles compared with gasoline vehicles), and others create entirely new demand by offering novel experiences (e.g., PCs, televisions, and fitness wearables). Such innovation can change the competitive environment to such an extent that, to remain competitive, competitors cannot merely adjust incrementally but must transform their offerings. Consequently, markets are transforming. In these situations, it is innovation that drives competition. To illustrate, Nokia dominated the mobile industry but failed to transform to smartphones, the launch of Netflix spurred competing streaming services like Disney+, Amazon Prime, and HBO, and most car manufactures now offer at least one electric vehicle model. This is how we understand dynamic competition: the competition that follows radical innovation, or in other words, the future competition driven by the introduction of new products and services.<sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> In the literature also referred to as breakthrough or drastic, see Alexandre de Streel and Pierre Larouche, 'Disruptive Innovation and Competition Policy Enforcement' (20 October 2015, OECD Roundtable) Background note, p. 2; Commission, 'Competition Policy Brief EU Merger Control and Innovation' (European Commission 2016) p. 2.

<sup>&</sup>lt;sup>2</sup> See on the innovation cycle (competition drives innovation, but, in turn, innovation drives competition) J Gregory Sidak and David Teece, 'Dynamic Competition in Antitrust Law' (2009) 5 Journal of Competition Law & Economics, p. 605; William J. Abernathy and James M. Utterback, 'Patterns of Industrial Innovation' (1978) 80 Technology Review. The OECD makes the same distinction between the i) incentive-based view, where competition drives innovation, and ii) the impact-based view, where innovation drives competition. See OECD, 'The Role of Innovation in Competition Enforcement' (2023, OECD Competition Policy Roundtable Background Note) DAF/COMP(2023)12, p. 6 <a href="https://www.oecd.org/daf/competition/the-role-of-innovation-incompetition-enforcement-2023.pdf">https://www.oecd.org/daf/competition/the-role-of-innovation-incompetition-enforcement-2023.pdf</a>>.

<sup>&</sup>lt;sup>3</sup> See e.g., Thomas M Jorde and David J Teece, Innovation, Dynamic Competition, and Antitrust Policy 100 Years of Antitrust' (1990) 13 Regulation, p. 35; David J Teece, 'The Dynamic Competition Paradigm: Insights and Implications' [2023] Columbia Business Law Review, p. 384. There is no uniform definition of the concept. For example, Nicolas Petit understands dynamic competition as the process whereby firms compete for new product, process or service creation through technology creation or diffusion.



Radical innovation can drive future competition in two ways: i) by creating a new product category that invites competition; and ii) by competing with existing products, with the potential to displace them. The release of ChatGPT illustrates both. The generative artificial intelligence (AI) chatbot opened a new product category, spurring competition from Google's Gemini (formerly Bard), Microsoft's Copilot, and Anthropic's Claude, while also competing with existing search engines like Google, Bing, and Ecosia.

To remain competitive in both existing and future markets, firms need to innovate. Firms then engage in dynamic competition when developing the new product and competing for and in the future product market. Mergers and acquisitions allow those firms to acquire the resources and capabilities they lack but need to develop the new products and compete for and in future markets. When transactions take place in these competitive environments, or transforming markets, they give rise to dynamic merger effects. These effects capture the merger's impact on the development of the new product and competition for and in the future market. Assessing these effects accurately is essential, as innovation typically generates greater benefits for consumer welfare than allocative efficiency improvements alone.<sup>4</sup>

Dynamic merger effects differ from static merger effects.<sup>5</sup> While static merger effects concern the impact of a merger on a market assuming competitive conditions remain unchanged, dynamic merger effects comprise the impact of a merger on a market where competitive conditions change.<sup>6</sup> The critical distinction is this: the static approach assumes today's competitive environment still prevails tomorrow, whereas the dynamic approach accounts for how competitive conditions change, the environment evolves, and how the merger might impact that change. Evidently, the competitive environment in transforming markets change –new products emerge and threaten to displace existing ones– so dynamic merger effects must be assessed, or else there is the risk of missing the true impact on competition.

Importantly, dynamic merger effects are thus not synonymous with innovation effects, because not all innovation changes competitive conditions. Firms may invest significant R&D resources

<sup>&</sup>lt;sup>4</sup> Robert Solow won the Nobel Prize in economics for demonstrating that technological progress is the primary driver of long-term economic growth and gains in wealth. See Robert M Solow, 'A Contribution to the Theory of Economic Growth' (1956) 70/1 The Quarterly Journal of Economics; Robert M Solow, 'Technical Change and the Aggregate Production Function' (1957) 39/3 The Review of Economics & Statistics. See also 'Press Release: The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1987'

<sup>&</sup>lt;a href="https://www.nobelprize.org/prizes/economic-sciences/1987/press-release/">https://www.nobelprize.org/prizes/economic-sciences/1987/press-release/</a>>.

<sup>&</sup>lt;sup>5</sup> Nicolas Petit further distinguishes dynamic and static merger effects from dynamic competition effects. Static merger effects concern the impact of a merger on *economic* performance under unchanged competitive conduct conditions, dynamic merger effects comprise the impact of a merger on economic *performance* under changing competitive *conduct* conditions. Dynamic competition effects relate to the impact of a merger on the development of the capabilities relevant to the introduction of new products, processes and services in the long run.

<sup>&</sup>lt;sup>6</sup> The distinction between static and dynamic in economics is borrowed from theoretical mechanics, so the meaning has to be understood by analogy. Static in mechanics refers to rest, while dynamic refers to motion. By analogy, a static condition in economics is one in which the variable (price or quantity) does not change, and the market is in equilibrium, and a dynamic condition one in which the variable changes and the market is in motion. See John Hicks, *Methods of Dynamic Economics* (Oxford University Press 1985) p. 2; Frank Hyneman Knight, *The Ethics of Competition: And Other Essays* (1935, University of Chicago Press 1976).



in incremental product or process innovations, in which case an analysis of static merger effects may suffice. However, when product markets are transforming, competitive conditions are changing and firms are innovating to remain competitive in the future product market, an analysis of dynamic merger effects is indispensable.

The Commission's practice shows room for improvement in the assessment of dynamic merger effects. In *Nokia/Infinera*, the Commission noted that a new type of technology was "increasingly replacing" existing technologies and driving competition. While Nokia did not offer this new type of technology, the target Infinera did. This is a clear example where dynamic effects – specifically, the merger's potential impact on the transition to the new technology– required careful analysis. Yet, the decision reflected static merger effects and overlooked the dynamic dimension. By contrast, in *Microsoft/Activision Blizzard* and *Illumina/Grail*, the Commission explicitly sought to protect competition for and in future markets, placing dynamic effects at the centre of its reasoning. While such cases show encouraging progress, the overall picture remains inconsistent, creating legal uncertainty. Establishing a coherent legal framework for dynamic merger assessment is essential to address this.

#### Responses to questions

C.1. In your /your client's view, do the current Guidelines provide adequately clear, correct and comprehensive guidance on how the Commission considers dynamic criteria in its assessment of the impact of mergers on competition (dynamic merger effects are linked to firms' forward-looking behaviours, particularly their ability and incentives to invest and innovate, as well as to enter or exit a market in the mid-to-long term. Dynamic merger effects can be either positive, leading to efficiencies, or negative, leading to harm)? [One option possible]

- a. Yes
- b. Yes to some extent
- c. No, to an insufficient extent
- d. Not at all
- e. I do not know

We would like that add that our understanding of dynamic merger effects extends beyond the Commission's understanding as proposed here. While the Commission only considers the firm-level view, we consider dynamic merger effects to span a total of three dimensions of competition:

<sup>&</sup>lt;sup>7</sup> See Case M.11663 (Nokia/Infinera) (Commission Decision) [2025] C(2025) 1379 final, paras. 11 and 101-103.

<sup>&</sup>lt;sup>8</sup> ibid paras. 19-20.

<sup>&</sup>lt;sup>9</sup> See Case M.10646 (Microsoft/Activision Blizzard) (Commission Decision) [2023] C(2023) 3199 final.

<sup>&</sup>lt;sup>10</sup> See Case M.10188 (Illumina/Grail). Following ECJ ruling *Illumina*, *Inc. v. European Commission*, Joined Cases C-611/22 P & C-625/22 P, ECLI:EU:C:2024:667 (3 September 2024), the decisions have been withdrawn.



- i) the merging firms' ability and incentives to innovate, i.e. its innovation capability to develop the new product (aligned with the Commission's firm-level view);
- ii) innovation competition in today's existing market to develop the new product; and
- iii) competition for and in the future product market.

C.1.a Please explain and mention in particular which provisions of the current Guidelines (if any) do not provide adequately clear, correct and comprehensive guidance on dynamic criteria to assess the impact of mergers on competition.

#### Both Horizontal and Non-Horizontal Guidelines

Introduce a section Dynamic merger effects' or Protecting future competition':

The guidelines should include an assessment framework for dynamic merger effects, concerning the protection of future competition. While competition drives innovation today, once the new product, service, or technology is introduced, that innovation becomes the basis for competition in the future. This future competition also needs to be protected today. The examples of *Microsoft/Activision Blizzard* and *Illumina/Grail* mentioned in the introduction are illustrative. In both cases, the future markets (respectively cloud game streaming services and blood-based early cancer detection tests) were still emerging. Therefore, both the innovation today and the competition in the future market has to be protected.

The future market assessment is distinct from traditional potential competition or entry analysis, <sup>11</sup> because the core of the assessment is not the impact of potential entry into the merging parties' existing markets. Instead, merging firms may offer distinct products and innovate to enter and compete in the future product market, where none of them are active yet. For example, ChatGPT was not a potential competitor or entrant into the existing search engine market but created a new product category from which it competes with the existing product. In a sense, merging firms can be seen as mutual potential competitors in the future product market (see our response to C.9).

This framework should include a similar section to Section III on market shares and concentration levels but focused on estimating the future competitive importance of the merging parties and their competitors, including guidance on how to predict future market shares and how to interpret market share levels. Although the current guidelines allow the Commission to

Whereas potential competition and entry analysis typically focus on firms entering existing markets, dynamic competition concerns firms competing for future product markets. These firms may currently operate in different existing markets without any intention to enter each other's markets; they may engage in cross-market innovation competition. In its new Market Definition Notice, the Commission also distinguished 'structural market transitions', such as new products, or technological or regulatory changes, from market entry and potential competition, as it affects the overall dynamics of supply and demand within a market. See Communication from the Commission – Commission Notice on the definition of the relevant market for the purposes of Union competition law (C/2023/6789) OJ C, C/2024/1645, 22.2.2024, para. 21. On this topic, see also Anouk van der Veer, 'The new market definition notice misses the key to addressing transforming product markets' (2025) Journal of Antitrust Enforcement.



interpret market shares in light of market conditions like high dynamism or instability due to innovation and growth, the guidelines offer no guidance on how to take these changes into account.<sup>12</sup> The framework should also include a similar section to Section IV on possible anti-competitive effects but tailored to the future product market, such as those listed under C.3.b. In general, we recommend that the Commission outline all theories of harm relied upon since 2004, together with the corresponding assessment framework and conditions, in order to provide legal certainty.

For efficiencies, see our submission on Topic F.

The responses to the questions below will help in further developing this section.

#### Horizontal Guidelines

Para. 5: the application of the guidelines is limited to concentrations where "undertakings concerned are actual or potential competitors on the same relevant market". This does, however, not clearly capture all concentrations in which horizontal concerns arise. As described above, an extension to "future competitors" would be desirable.

Para. 8: by using "increased prices" as a shorthand for other competitive harm, the analysis equates harm to innovation with harm to price competition. However, innovation competition functions in a fundamentally different way and, therefore, deserves a separate analytical framework.

Para 9: see the response given to C.11.

IV. Possible anti-competitive effects of horizontal mergers: the guidelines should be expanded to include factors relevant to innovation competition. As mentioned above, innovation competition functions differently from price competition, so determinants of price competition are not directly transferable to innovation competition. In particular, para. 38 would benefit from an update to reflect recent developments in the literature. Relevant factors to highlight are, for example, the elimination of a potential competitor with disruptive technologies, suppression of complementary or ecosystem-based innovation, 'killer acquisitions', or overlapping innovation capabilities (as discussed under C.3).

#### Non-Horizontal Guidelines

Para. 20: see our response to C.11.

Para. 21: see our response to C.7.a.

IV. Vertical mergers & V conglomerate mergers: similar to the suggestions above for the Horizontal

<sup>&</sup>lt;sup>12</sup> European Commission, Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, Official Journal C 031, 05/02/2004 p. 0005-0018, para 15.



Guidelines, the Non-Horizontal Guidelines should also be expanded to include theories of harm, benchmarks, and assessment frameworks specific to innovation competition, given that it functions differently from price competition. For example, a paragraph alike para. 29 could explain when foreclosure in innovation competition is anti-competitive: when the abilities and incentives to innovate of either the merging firms or their competitors are negatively affected in a way that reduces future competition, ultimately to the detriment of future consumers. Para. 30 would likewise require revision, as the result of input foreclosure is not necessarily increased costs but rather obstruction of entry or expansion in future product markets.

Para. 93 footnote 1: the concept of 'leveraging' in competition law has evolved beyond the practice of traditional tying. Firms can leverage their strong market position in one market to gain a competitive advantage in another market, without formally tying or bundling products. For example, firms can leverage their loyal userbase, benefit from network effects, or self-preference to promote the adoption of a new product.

C.2. In your/your client's view, should the revised Guidelines better reflect dynamic criteria in the assessment of the impact of mergers on competition? Please select the areas that you believe the revised Guidelines should better address. [Multiple options possible]

- a. Innovation
- b. Investments
- c. Potential competition
- d. Entry as countervailing factor
- e. Counterfactual
- f. Failing firm defence
- g. Standard of proof and evidence on future market developments
- h. Other

#### Innovation and investments

C.3. In what circumstances can mergers negatively impact the ability and incentives of the merged company to innovate (e.g. a merger between strong innovators, acquisition of an innovator, acquisition of an input critical for other companies to innovate)? [Free Text]

The Commission is right to assess both the merged entity's *ability* and *incentive* to innovate. Incentives to innovate can be negatively impacted when a merger reduces the contestability of the market, especially that of the future product market. Currently, incentives to innovate are often assessed through structural proxies, such as the number of competitors. However, there is no conclusive evidence resolving the traditional debate on whether monopolies (Schumpeter)<sup>13</sup> or competitive markets (Arrow)<sup>14</sup> are most conducive for innovation. These theories, however,

<sup>&</sup>lt;sup>13</sup> Joseph A. Schumpeter, Capitalism, Socialism, and Democracy (2d ed. 1942) 85.

<sup>&</sup>lt;sup>14</sup> Kenneth J. Arrow, 'Economic Welfare and the Allocation of Resource to Invention' in Nelson R. R. (ed.) The



are not necessarily mutually exclusive but can be reconciled in the contestability framework, according to which large firms innovate to defend their market share, while small firms innovate to capture market share. This framework recognises that incentives to innovate arise not only from existing competition (which may be absent in the future product market) but also from whether the market is contestable. Accordingly, the focus in the assessment should shift from market structure to whether the future product market remains contestable. In other words, assessing the merged entity's incentive to innovate should include whether the future market remains open to innovation and new entrants, rather than relying on concentration or firm size. In other words, the current and forecasted entry and expansion conditions for firms that will attempt to supply future products need to be assessed. The assessment should also include the merging parties' willingness to cannibalise current or past investments, given that the innovation transforms the product trajectory.

Unlike price competition, where the incentive to lower prices is usually sufficient, innovation competition also requires the *ability* to act upon such incentives. A firm's ability to innovate ultimately determines its performance in the future product market. Assessing a firm's ability to innovate requires a shift in perspective: from the market-based view to the resource-based view. The market-based view is common in economics and treats firms as homogenous supply functions, or "black boxes", whose performance is analysed based on external factors, such as the number of competitors and environmental opportunities and threats. This view can be useful for understanding a firm's incentives. However, it is less effective for analysing a firm's ability to innovate, since that depends on the firm's internal attributes. These include input resources, such as R&D expenditure and infrastructure, talented personnel, deployed technologies (in-house or licensed), innovation experience etc. They also include less tangible factors, such as an innovation-oriented culture, visionary leadership, and the ability to identify opportunities. An example innovation capability framework is provided in Appendix A.

Mergers and acquisitions allow firms to acquire the resources and capabilities they lack but need to develop the new products and compete for and in future markets. In this way, mergers can strengthen a firm's innovation capability. In fact, the innovation capability provides a more reliable foundation for assessing a firm's future strength relative to its rivals than a purely product-based approach. The exact products and future markets firms will compete in are subject to prediction, whereas the firms' innovation capabilities exist at the time of the assessment. Accordingly, prominent economic and legal scholars have been advocating for an internal

Rate and Direction of Economic Activity (Princeton University Press) p. 609-626.

<sup>&</sup>lt;sup>15</sup> Carl Shapiro, 'Competition and Innovation: Did Arrow Hit the Bull's Eye?', *The Rate and Direction of Inventive Activity Revisited* (University of Chicago Press 2011) p. 363. For more on the contestable market theory, see W.J. Baumol, J.C. Panzar and R.D. Willig, *Contestable Markets and the Theory of Industry Structure* (1982); W.J. Baumol, 'Contestable Markets: An Uprising in the Theory of Industry Structure (1982) 72 American Economics Review; Tony Curzon Price and Mike Walker, 'Incentives to Innovate v Short-Term Price Effects in Antitrust Analysis' (2016) 7 Journal of European Competition Law & Practice.

<sup>&</sup>lt;sup>16</sup> Rajesh K Chandy and Gerard J Tellis, 'Organizing for Radical Product Innovation: The Overlooked Role of Willingness to Cannibalize' (1998) 35 Journal of Marketing Research, p. 477.



assessment of the firm in competition law.<sup>17</sup>

This internal view of the firm has been developed in strategic management research over the past 30 years, 18 so it is relatively new and its discussion in the context of competition policy is even more recent. 19 Consequently, specific studies examining firms' internal attributes and their analysis under competition policy are limited,<sup>20</sup> though we will discuss one such working paper on the impact of mergers below. We, therefore, suggest the Commission to invite management scholars to conduct further research into the relevant firm attributes that shape a firm's ability to innovate and how these can be assessed within competition policy.

A recent working paper modelled the effects of mergers on firm resources,<sup>21</sup> albeit not specifically innovation capabilities.<sup>22</sup> The paper concludes that mergers between firms with overlapping resources/capabilities are more likely to be anti-competitive.<sup>23</sup> Competition authorities should thus "be more way of mergers when [resources/]capabilities are more overlapping, particularly if the overlapping [resources/]capabilities are scarce".24 This does not mean that overlapping

<sup>&</sup>lt;sup>17</sup> Early calls primarily emphasised using capabilities to identify competitors in defining markets instead of focusing on specific products. See Richard J. Gilbert and Steven C. Sunshine, Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use of Innovation Markets' (1995) 63 Antitrust Law Journal, p. 589; Michael L. Katz and Howard A. Shelanski, 'Mergers and Innovation' (2007) 74 Antitrust Law Journal, p. 43; Gregory Sidak and David J. Teece, 'Dynamic competition in antitrust law' (2009) 5 Journal of Competition Law & Economics, p. 614. More recently, proponents favour integrating a capabilities assessment throughout the various steps of antitrust analysis. See Wolfgang Kerber, 'Competition, Innovation, and Competition Law: Dissecting the Interplay' in Damien Gerard (ed.), Dynamic Markets and Dynamic Enforcement – The Impact of the Digital Revolution and Globalisation on the Enforcement of Competition Law in Europe (Bruylant 2018) p. 6; Nicolas Petit and David J. Teece, Innovating Big Tech Firms and competition policy: favoring dynamic over static competition' (2021) 30/5 Industrial and Corporate Change 1168, para. 3; David J. Teece, 'Big Tech and Strategic Management: How Management Scholars Can Inform Competition Policy' (2023) 37 Academy of Management Perspectives, p. 7.

<sup>&</sup>lt;sup>18</sup> For an overview, see Constance E Helfat and others, 'Renewing the Resource-Based View: New Contexts, New Concepts, and New Methods' (2023) 44 Strategic Management Journal; Oliver et al. 'Quo Vadis, Dynamic Capabilities? A Content-Analytic Review of the Current State of Knowledge and Recommendations for Future Research' (2018) 12/1 Academy of Management Annals; Everaldo Luis Daronco and others, 'A New Framework of Firm-Level Innovation Capability: A Propensity-Ability Perspective' (2023) 41 European Management Journal.

<sup>&</sup>lt;sup>19</sup> Hillary Greene and Dennis A Yao, 'The Influences of Strategic Management on Antitrust Discourse' (2014) 59 The Antitrust Bulletin.

<sup>&</sup>lt;sup>20</sup> See e.g., Nicolas Petit and David J. Teece, 'Capabilities: The Next Step For The Economic Construction Of Competition Law '(2024) SSRN; Nicolas Petit and David J. Teece, 'Capabilities Checklist for Mergers with Nascent Competitors (2023) 14/4 Journal of European Competition Law & Practice.

<sup>&</sup>lt;sup>21</sup> Strategic management theories make a distinction between resources and capabilities. Resources are the assets owned or controlled by firms, such as physical and human resources) and capabilities refer to the abilities or processes to deploy those assets. See Raphael Amit and Paul JH Schoemaker, 'Strategic Assets and Organizational Rent' (1993) 14 Strategic Management Journal, p. 35; Ilídio Barreto, 'Dynamic Capabilities: A Review of Past Research and an Agenda for the Future' (2010) 36 Journal of Management, p. 258-259.

<sup>&</sup>lt;sup>22</sup> Iain Boa et al., 'A Capability Approach to Merger Review' (2023) Cambridge Working Papers in Economics No. 2312, Janeway Institute Working Papers No. 2303. A caveat in relying on this working paper is that it models capabilities in terms of product attributes, such as product quality. This approach is feasible when analysing marketed products but may not be directly applicable to future product markets. However, we do not expect the paper's conclusions to differ per context, as the underlying logic remains valid.

<sup>&</sup>lt;sup>23</sup> ibid.

<sup>&</sup>lt;sup>24</sup> ibid at 13.



resources/capabilities are per se anti-competitive, as the study necessarily simplifies. Rather, they warrant closer scrutiny, particularly in light of findings from business and management literature that resources/capabilities effective in one firm may not necessarily transfer successfully to another following a merger.

The paper explains that firms with different resources/capabilities can benefit from each other's expertise and realise synergies that improve products for consumers (see response to C.7.) In contrast, when firms' resources/capabilities overlap, the opportunities to realise synergies are limited, so any loss of competition and reduction of consumer welfare is less likely to be offset by efficiency gains. The paper demonstrated a consumer welfare loss of over 12% when resources/capabilities were too similar.<sup>25</sup> The negative impact is amplified if the overlapping resource/capability is scarce, i.e., held by the merging firms but few others. In particular, overlapping resource/capabilities:

- a) Reduce opportunities to enhance competition in non-overlapping product markets because the merged entity does not acquire anything it did not already have (Proposition 1);
- b) Cause a loss in competition that cannot be offset by efficiency gains that lower market prices because opportunities to realise synergies are limited (proposition 2);
- c) Constrain future competition if resources/capabilities are not deployed, especially if they are scarce (Proposition 3); and
- d) Reduce future innovation opportunities by lowering the aggregate number of innovation opportunities (Proposition 4).

As noted in our introduction, the assessment should extend to competition in the future product market. Competition in this market is driven by innovation. Therefore, any reduction of the merged entity's or rivals' ability and incentive to innovate may harm future competition. For example, a merger could harm future competition (as in situation c above) if it results in duplicate resources/capabilities that the merged entity holds onto (hoards) rather than releasing to the market, thereby reducing the threat of future competition.<sup>26</sup>

A reduction of the merged entity's ability to innovate can also negatively affect competitors' incentives to innovate. An innovator with declining or low innovation capabilities may exert less competitive pressure to innovate, thus reducing others' incentives to innovate. As with the merging parties, an analysis of the competitors' innovation capability is also needed,<sup>27</sup> instead of a pure product-based approach wherein the exact products and future markets in which firms will compete have to be predicted. More specific theories of harm are listed in the table under

<sup>&</sup>lt;sup>25</sup> ibid at 3.

<sup>&</sup>lt;sup>26</sup> ibid at 9.

<sup>&</sup>lt;sup>27</sup> Johann Peter Murmann and Fabian Vogt, 'A Capabilities Framework for Dynamic Competition: Assessing the Relative Chances of Incumbents, Start-Ups, and Diversifying Entrants' (2023) 19 Management and Organization Review.



C.3.b.

C.3.a What theory/theories of harm could the Commission consider (i.e. that would impede a company's innovation post-merger, including due to the reduction of the incentives to innovate going forward or reduce access to IP licences)? Please distinguish between theories of harm applicable to mergers between head-to-head competitors (horizontal mergers) and mergers between companies active in related markets (vertical or conglomerate mergers). [Free Text]

The question is whether consumers will benefit from a competitive market in the future. As outlined in the introduction, when a merger takes place in a transforming product market, it must be assessed for its impact on the development of future products and on future competition. Given that harm to innovation today can harm competition in the future product market, it is essential to protect innovation for that future market now. The assessment of a merger must thus ensure that the merger does not negatively affect the merged entity's ability and incentives to innovate, nor those of its competitors, and that entry into the future product market remains open (i.e., the market remains contestable). The focus thus shifts from protecting consumer welfare today to protecting future consumer welfare, as harm to innovation and future competition is not felt by consumers today but can ultimately limit their choices and benefits.<sup>28</sup> To prevent over-enforcement and ensure legal certainty and predictability, a robust and well-defined legal framework is essential. For specific theories of harm, see the table under C.3.b.

## C.3.b Under which conditions could this theory/these theories of harm materialise? [Free Text]

The theories of harm identified focus on the development of future products and competition in the future market

Horizontal mergers	Conditions
Theory of harm	
Reduced ability to innovate of the merged	· Overlapping innovation capabilities or
entity, potentially harming innovation	at least insufficient complementary
competition today and future competition,	innovation capabilities (see C.3.1)
also by reducing innovation competitive pressure	· Capabilities are scarce, so insufficient number of firms with

 $<sup>^{28}</sup>$  Jason Potts, 'Future Markets and the Social Discount Rate: A New Approach to Dynamic Competition Policy' (2024) Network Law Review.



Delay or discontinuation of development of future product, potentially harming innovation competition today and future competition, or even prevent the emergence of the future market	<ul> <li>The merged entity has both the incentive and ability to delay or discontinue innovation</li> <li>The innovation by the merged entity is critical to competition in the future product market</li> </ul>
Vertical and conglomerate  Theory of harm	
Withholding an input/component/technology for the future product market, potentially harming innovation competition today and future competition	<ul> <li>The input/component/technology is critical to enter/grow in the future product market</li> <li>The input/component/technology is not easily replicable by rivals</li> </ul>
No strict distinction Theory of harm	
Reducing the contestability of the future market, potentially harming innovation competition today and future competition	E.g., increasing barriers to entry, exclusive partnerships or licensing, acquisition of critical assets to enter and/or compete, network effects, etc.
Preventing a rival from becoming an innovative force, potentially harming innovation competition today and future competition	The future competitor has the ability and incentive to enter and compete in the future market, which are reduced by the merger
Entrenching market position from existing market into future product market, potentially harming innovation competition today and future competition	<ul> <li>Merging firm(s) have a strong position in an existing market</li> <li>Merging firm(s) can leverage (e.g., via data, IP, user base) that position to gain dominance in the future product market</li> </ul>

C.3.c What are the elements, including relevant factors, evidence and metrics, that the Commission could use to assess the potential reduction of the companies' ability and incentives to innovate post-merger? Please explain in particular whether metrics such as



patent portfolio (patents' share and citations), R&D spending, R&D staff and contribution to industry standards can be relevant, and whether metrics should apply at firm level or market level. [Free Text]

To assess whether a merger may reduce the merged entity's ability and incentives to innovate, the Commission should begin by identifying the critical resources and capabilities required to develop the future product and compete in the future market. While the shape of the future product and the product market may be uncertain, these capabilities exist at the time of the assessment and can thus form the foundation of the assessment (as outlined in C.3. and in Appendix A).

During the market investigation, in particular in the pre-notification phase, the Commission should consult merging firms and market participants (competitors, customers, suppliers and other third parties) to determine which resources and capabilities are essential for innovation and competition in the future product market. Independent third-party market reports also offer valuable evidence. Once these critical capabilities are identified, the merging parties' capabilities should be analysed for overlap or complementarity. The merging firms should provide a detailed breakdown of the R&D budget, personnel, facilities, along with evidence from internal documents of the normal course of business containing plans, prioritisation, and forecasts. The Commission's Chief Economist team can then quantify the capabilities overlap.

Further evidence can be obtained from consultations, requests for information, and surveys on the views of market participants. Even when expressed in hypothetical scenarios and reflecting subjective elements, these views offer valuable evidence, albeit with a lower probative value.<sup>29</sup> In particular, the views of competitors on whether they possess the essential capabilities are important to assess the scarcity.

To be meaningful in assessing the merger's impact on future product development and future competition, the metrics should capture innovation disaggregated per product or innovation stream, rather than aggregated innovation at firm level. For example, R&D spending and staff should be disaggregated to analyse the merging firms' efforts to innovate, and accordingly, understand its future strength and analyse the potential overlap of capabilities to assess the harm to competition. Metrics should also analyse both the firm and market level so that the competitive importance of the merging parties in the market can be analysed.

C.4. In what circumstances can mergers negatively impact the ability and incentives of the merged company to invest? Based on which evidence and metrics can the Commission conclude that a merger will likely harm investment?

C.5 How should the Commission account for the incentives to invest and innovate postmerger depending on the specific market features? Please explain which market

<sup>&</sup>lt;sup>29</sup> Fernando Castillo de la Torre, 'Predicting the Future: Evidential Basis for Prospective Assessments in EU Merger Control' Forthcoming in Judging & (Re) Thinking European Union Law-Liber Amicorum in Honour of Nils Wahl, L. Prete, L. Rezki (eds.), Springer 2025, p. 6.



characteristics are relevant and should be considered when assessing the companies' incentives to invest and innovate. Please also explain the type of investments and the type or location of assets that can give rise to efficiencies.

Market features are essential to assessing incentives to innovate post-merger. While some features are sector-specific, such as network effects for digital platforms, we consider that dynamic competition occurs across many markets, so our response is not confined to any one sector. Instead, we highlight examples of features that generally shape future competition. These relate to the transformation of the product market, how firms innovate, and how easily firms can enter or expand in the future market.

The extent, pace and phase of market transformation are important. An early stage, complete and fast-paced transformation of existing product markets, especially when such transformation risks rendering current products obsolete, strongly influences incentives to innovate; innovation is critical to firm survival. Related to this is whether the existing market is novel or more mature, given that the cannibalisation risk is considered larger with incumbents in more mature markets. The next feature concerns how firms innovate, so whether through internal efforts, collaborative approaches such as investments or partnerships, or is ecosystem based. This helps determine which incentives are relevant to assess, for example, reductions in independent innovation paths, risks of foreclosing access to key assets, or possible increased incentives to innovate. Finally, and most importantly, incentives to innovate can be most obstructed by barriers to entry and expansion into the future market. These may include customer lock-in, network effects, or proprietary technologies needed for innovation.

## C.6. In what circumstances can the elimination of a (small) but particularly innovative player with a large competitive potential (e.g., in the case of nascent and emerging market or rapidly developing sectors) harm competition? [Free Text]

We refer to our response to C.3 to C.3.c wherein we outlined the assessment of incentives to innovate and innovation capabilities and corresponding theories of harm. A particularly innovative firm with a large competitive potential, whether small or large, may be the innovator behind the future product with the potential to transform existing product markets and stimulate competition in the future product market. The elimination of such a player can be detrimental for the emergence of or competition in that future market, particularly if that firm is uniquely positioned due to specific assets or network effects, and if alternative drivers of innovation are limited. However, in some cases, for example if the target lacks specific capabilities, the merger may be essential to advance the innovation and promote future competition.

A recently published paper by DCI scholars studies the empirical relevance of 'killer acquisitions' in the ICT sector in the context of European merger control.<sup>30</sup> Killer acquisitions are understood as transactions in which a dominant incumbent acquires a nascent or potential competitor with

<sup>&</sup>lt;sup>30</sup> Marc Ivaldi, Nicolas Petit, and Selcukhan Unekbas, 'Killer Acquisitions: Evidence from EC Merger Cases in Digital Industries' (2023) Forthcoming in Antitrust Law Journal, TSE Working Paper No. 13-1420.



the purpose —or effect— of discontinuing its products, thereby suppressing future competition. While the theory has gained prominence in antitrust discourse, particularly in digital markets, it remains largely theoretical and unverified through systematic ex-post analysis, the authors argue. They aim to address this evidentiary gap by conducting a retrospective case study analysis of 12 mergers involving major technology firms, as reviewed by the Commission.

The study analyses three necessary conditions that would validate the killer acquisition narrative: (1) discontinuation of the target's product, (2) weakening of rival firms post-merger, and (3) a reduction in entry or innovation in the relevant market. The study found that in the majority of the cases, competitors continued to perceive either the target, the acquirer or both as rivals, so the target remained its competitive function. Moreover, in the majority of the cases, rivals' revenues either grew or shifted dynamically post-merger, suggesting the acquisition coincided with greater –not lesser– competitive pressure. Finally, in the majority of the cases, the post-merger environment remained dynamic and innovative, as new products were introduced and rivals expanded.

Given that no transaction in the dataset unambiguously satisfies all three criteria, the authors conclude limited empirical support for the killer acquisition thesis within the Commission's ICT merger practice. On the contrary, the evidence often points towards post-merger continuity of target operations, expansion of rival firms, and sustained market dynamism. Although the killer acquisition theory has theoretical merit and should remain a relevant concern in merger enforcement, it does not warrant any systemic changes to the existing legal framework.

## C.6.a How should the Commission account for the ability and incentives of nascent innovative companies to scale up when assessing the impact of a merger on competition? [Free Text]

In a similar way as outlined in our response to C.3.c, the Commission should first identify which resources and capabilities are required for a firm to scale. Market participants, in particular competitors and customers, will know what is needed to scale and can estimate whether the innovative company has the ability and incentives to do so. The survey could include a prioritisation of key factors question, such as i) financial capital, such as the backing of investors, ii) human capital, including leadership and skilled personnel, iii) deployment of enabling technologies, such as data analytics, iv) significance and size of customers etc. The incentives to scale up will depend on whether the likely rewards of expansion outweigh the associated risks and costs. For example, if expansion is restricted in any way through expansion barriers, these risks may deter growth, limiting the firm's future competitive impact.

C.6.b What theory/theories of harm could the Commission consider (i.e. that would impede a company's scaling up post-merger, e.g. due to the downgrading or discontinuation of its activities - so called "killer acquisition"; or that would erect barriers to entry and expansion or entrench a dominant position preventing other nascent competitors to scale-up)? [Free Text]



See table under C.3.b.

C.6.c Under which conditions could this/these theory/theories of harm materialise? [Free Text]

See table under C.3.b.

C.6.d What are the elements, including relevant factors, evidence and metrics, that the Commission could use to assess the potential reduction of the nascent innovative companies' ability and incentives to scale-up post-merger? Please consider the evidence and metrics for assessment of innovation in different industries, for instance pharma, digital and tech etc. [Free Text]

See our response to C.3.c.

C.7 In what circumstances can mergers positively impact the ability and incentives of the merged company to innovate? Based on which evidence and metrics can the Commission conclude that a merger advances innovation? Please distinguish between mergers creating or strengthening market power, and those that do not, as relevant. [Free Text]

As noted in our responds to C.3., mergers and acquisitions allow a firm to acquire the resources and capabilities it lacks but needs to develop the future products and compete in the future market. Firms operating in transforming markets, in particular, can thus benefit from such transactions. Whereas incumbents are often seen as change-averse, continuing with established practices to avoid cannibalising existing revenues, mergers may reflect an effort to transform and catch up with market evolution. For supporting evidence and metrics, see our responses to C.3., C.3.c. and Appendix A.

It is intuitive that when one firm has something another needs to innovate and compete and vice versa, a merger can improve their ability to innovate. As responded to C.3., firms with different resources/capabilities can benefit from each other's expertise and realise synergies that improve products for consumers.<sup>31</sup> According to the cited working paper, a merger between firms with complementary resources/capabilities can increase consumer surplus by over 25%, whereas a merger between firms with too similar resources/capabilities may reduce surplus by over 12%.<sup>32</sup> The paper concludes that mergers between firms with fewer overlapping resources/capabilities are more pro-competitive, as they can increase a) immediate competition in overlapping product markets; b) immediate competition in other markets; and c) long-run competition and innovation. For this to happen, a caveat in the paper is that the firms "need to genuinely integrate the composite business".<sup>33</sup>

<sup>&</sup>lt;sup>31</sup> Iain Boa et al., 'A Capability Approach to Merger Review' (2023) Cambridge Working Papers in Economics No. 2312, Janeway Institute Working Papers No. 2303, p. 3-4.

<sup>&</sup>lt;sup>32</sup> ibid 3.

<sup>&</sup>lt;sup>33</sup> ibid 14.



For innovation in particular, the paper observes that not all combinations of resources/capabilities enhance innovation equally. For example, combining a strong engineering team with good supply relationships is more likely to support innovation opportunities because both feed into to production and product quality, compared to a combination of good customer support and a strong engineering team.<sup>34</sup>

As with our response to C.3., the impact on competition in the future product market should also be assessed. A merger between firms with complementary resources/capabilities that enhances their innovation capability can have a positive effect on competition in the future product market. A stronger innovator also exerts more competitive pressure to innovate, thereby incentivising competitors to innovate as well. Accordingly, as with the merged entity's ability to innovate, an analysis of the competitors' innovation capability is needed.<sup>35</sup>

C.7.a What elements, evidence and metrics can the Commission consider when balancing the potential positive benefits and spillovers of enhanced R&D capabilities against the potentially anticompetitive effects of a merger? [Free Text]

We refer to our response to C.3.c.

C.8 In what circumstances can mergers positively impact the ability and incentives of the merged company to invest? Based on which evidence and metrics can the Commission conclude that a merger advances investment? Please distinguish between mergers creating or strengthening market power, and those that do not, as relevant.

Considering our response to C.4, we refer to our responses to question C.7.

Elimination of potential competition and potential entry as a countervailing factor

C.9. In what circumstances can the elimination of a potential competitor (that is likely to enter the market in a near future or already exert competitive constraints even if not in the market) harm competition? [Free Text]

The traditional understanding of a potential competitor concerns a firm that is likely to enter or already exerts competitive constraints on an incumbent's market. As described under C.1.a., this differs from future competition, where the merging firms may be innovating in different transforming markets and may not yet be active in the future product market. Given this consultation focuses on the development of future products and future competition, an analysis of potential competition goes in principle beyond the scope of this consultation.

That said, potential competition can still serve as a useful analytical framework if understood in a

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<sup>&</sup>lt;sup>34</sup> ibid fn 5.

<sup>&</sup>lt;sup>35</sup> Johann Peter Murmann and Fabian Vogt, 'A Capabilities Framework for Dynamic Competition: Assessing the Relative Chances of Incumbents, Start-Ups, and Diversifying Entrants' (2023) 19 Management and Organization Review.



broader context. In the context of future product markets, potential competitors may include two firms that are developing future products. The elimination of one such potential competitor can harm or enhance competition, depending on the circumstances. Harm to competition could arise in several scenarios, including: i) a limited number of firms developing the future product, leading to reduced innovation pressure; ii) a merging firm being the primary driver of innovation transforming the existing product market, leading to reduced market dynamism; iii) a merging firm controlling critical inputs or complementary assets essential for entry into the future market, leading to foreclosure risks; iv) when firms are competing to become the default option in the future market and elimination by a firm that is shaping the future market can stifle this competitive innovation; or v) merging firms with overlapping innovation capabilities, particularly where such capabilities are scarce, reducing future innovation opportunities and limiting efficiency gains.

C.9.a How should the Commission assess competition risks linked to situations where a merger eliminates a potential competitor, i.e., the target is likely to enter in a foreseeable future and become a competitor, or despite not yet being in the market already exerts competitive constraints due to its capabilities to enter? What theory/theories of harm could the Commission consider? [Free Text]

The Commission should recognise cases where firms are developing a future product and are potential competitors in the future product market. For those cases, an additional leg should be added to the assessment wherein the firms' innovation capabilities are analysed to determine whether they are able to develop the future product and enter the future market (for more on the innovation capability, see the response to C.3.). This step precedes the assessment of the firms' competitive importance, as it addresses the prior question of whether the firms have the capabilities to carry out the required innovation to compete in the future product market.

Examples of theories of harm can be drawn from the circumstances described above under C.9., such as stifling innovation competition for the future product market or foreclosing input to enter that market. In these assessments, the Commission should pay close attention to the firms' incentives and abilities to innovate. For additional theories of harm, see the response to C.3.b.

C.9.b Under which conditions could this theory/these theories of harm occur? In particular, (a) do the conditions for the elimination of potential competition vary depending on whether the potential competitor is threatening to enter into (i) a new product market or (ii) a new geographic market, and (b) can the first leg of the legal test as described at paragraph 60 of the HMG (the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force) be fulfilled by the mere threat of potential competition, whether real or perceived by the incumbent? Which factual elements would be required for such finding? [Free Text]

We focus our responses solely on potential competition in the future product market, i.e., (i) entry into a new product market. We consider that, in the context of competition for the future market,



the first leg of the legal test can be fulfilled by the mere threat of potential competition, whether real or perceived. Economic literature, most famously by Joseph Schumpeter, emphasises that innovation competition is effective not only when there are actual competitors but also when there is merely the threat of competition, for example, in neighbouring fields.<sup>36</sup> In particular, Schumpeter underscored that competition from new things poses "an ever-present threat", and "disciplines before it attacks".<sup>37</sup> This type of competition strikes at existing firms' "foundations and their very lives." Firms are forced to respond in order to survive. Accordingly, he argues, even a monopolist "feels himself to be in a competitive situation".<sup>39</sup>

A factual element to support such a finding is that firms are actively responding to these threats. Evidence can be found in internal documents, such as firms' strategic plans, changes in product development priorities and shifts in R&D expenditure. Moreover, independent third-party industry reports and surveys of competitors can provide evidence. Surveys of customers, however, are unlikely to offer evidence, as the threat has not yet materialised and therefore no observable changes in market outcomes are expected. Instead of the demand side, the focus should be on the strategic and anticipatory responses by firms.

C.9.c What are the elements, including evidence and metrics, that the Commission could use to assess the competition risks linked to the elimination of potential competition? [Free Text]

See responses to C.9.b and C.3.c.

C.10. How should the Commission assess situations where the presence of a potential competitor (i.e., a company likely to enter in a foreseeable future and become a competitor of sufficient scope or magnitude) will exert sufficient competitive constraints to countervail the merging parties' market power? [Free text]

As explained under C.1.a., this consultation focuses on the development of future products and future competition, so an analysis of entry into any existing product market is beyond the scope of this consultation.

C.10.a Under which conditions could this countervailing factor be sufficient? Please explain in particular how the likelihood, timeliness and sufficiency of such entry should be assessed, and based on which evidence and metrics. [Free Text]

C.10.b What are the elements, including evidence and metrics, that the Commission could use to alleviate the competition risks due to the existence of potential competition? [Free Text]

C.10.c Should the conditions for entry as a countervailing factor be the same as the

<sup>&</sup>lt;sup>36</sup> Joseph A Schumpeter, *Capitalism, Socialism and Democracy* (4th ed, Unwin University Books 1954) 85.

<sup>&</sup>lt;sup>37</sup> ibid.

<sup>&</sup>lt;sup>38</sup> ibid 84.

<sup>&</sup>lt;sup>39</sup> ibid 85.



conditions for the elimination of a potential competitor as a theory of harm? [Free Text]

#### Counterfactual and failing firm defence

C.11. How should the Commission consider the pre-merger situation in the counterfactual assessment, i.e. when assessing what would have been the situation prevailing absent the merger? In particular, how should the Commission treat companies' decisions, including cooperation agreements, or market developments after the announcement of the deal that may have been influenced by the deal's perspective, and could already be merger-specific?

A dynamic analysis requires the counterfactual to reflect a credible, forward-looking view of the market to accurately assess the merger's impact on competition. This requires incorporating ongoing but independent developments but excluding merger-induced effects. A distinction thus has to be made between changes that occur i) independently of the merger; and ii) induced by the merger.

Firstly, market developments that change competitive conditions independently of the merger need to be part of a realistic counterfactual. This is the core distinction between a static and dynamic analysis. Whereas a static analysis assumes current competitive conditions will prevail tomorrow, a dynamic analysis recognises that markets evolve over time and takes these changes into account. A merger may take place in a changing environment, driven by i.e., innovation, regulatory changes, or geopolitical developments. These developments shape competition, irrespective of the merger, as they can fundamentally transform or even eliminate the product market. Accurately assessing the merger's impact requires a realistic counterfactual that reflects these ongoing transformations, rather than assuming today's conditions persist.<sup>40</sup>

Secondly, any post-announcement development that is influenced by the merger should be excluded from the non-merger counterfactual. The Commission should assess evidence on whether future changes are (in)dependent of the merger.

C.12. What constitutes the right counterfactual for the Commission where crises, such as the COVID 19 pandemic, wars, or trade measures may have led to short-term shocks of potential temporary rather than permanent nature? [Free Text]

Crises are relevant circumstances in which mergers occur, so taking account of crises is important for the analysis to be in line with market reality. However, it is crucial to distinguish between exogenous shocks that are temporary in nature and the endogenous responses they trigger, which may lead to lasting structural changes in markets. The Commission should seek to forecast, with reasonable probability, what the post-crisis 'normal' will look like, recognising that this normal

<sup>&</sup>lt;sup>40</sup> Both the Horizontal (para. 9) and Non-Horizontal (para. 21) Merger Guidelines rightfully acknowledge that the counterfactual may include future changes, in particular entry and exit. However, those examples are limited to the existing market boundaries. In dynamic settings, more important changes to consider in the counterfactual are the developments described above that fundamentally transform and affect the existence of the product market.



may not be a return to the previous status quo.

In response to a crisis, firms adapt, innovate and establish new norms that may result in permanent shifts in product markets and competition. For example, the temporary shock of COVID led to lasting innovation in online communication by platforms like Zoom and Microsoft Teams. Temporary trade measures drive firms to restructure supply chains in ways that endure. These endogenous responses, not the temporary exogenous shocks themselves, are what permanently transforms markets and must, therefore, inform the Commission's counterfactual.

### C.12.a Please explain in particular under which circumstances and conditions such events should be considered structural and based on which evidence.

The structural nature of firm responses should not be determined solely by their duration, which may be unknown at the time of the assessment, but by whether they lead to lasting adaptations in, e.g., product markets, market dynamics, or competitive conditions. Evidence of this can be found in internal documents on firms' strategic plans, changes in product development priorities, and shifts in R&D expenditure. Moreover, surveys of market participants can also be informative, particularly in assessing competitors' responses and changes in customer preferences. It should be recognised, however, that market transformations are driven by firm-led innovation and customer behaviour may lag behind as habitual consumers may be reluctant to change. Therefore, the focus should be on the strategic and anticipatory responses by firms, which can signal market transformations before it becomes fully visible in market outcomes.

### C.13. What should be the right counterfactual in cases of acquisitions of firms in financial difficulties? [Free Text]

In transforming markets, traditional static criteria underpinning the failing firm defence, such as inevitable market exit and the absence of less anticompetitive purchasers, are insufficient on their own. These criteria focus primarily on short-term financial viability, disregarding the firm's potential role in shaping future competition. A dynamic counterfactual should instead reflect the possibility that even financially distressed firms may possess critical innovation capabilities, play a role in developing future products, or act as future competitive constraints. Accordingly, the assessment should incorporate a forward-looking, evidence-based analysis of the firm's trajectory, in particular its innovation capabilities to determine the firm's potential to contribute to or disrupt the development of the future product market. A firm's current financial difficulties should not obscure its potential to affect dynamic competition, particularly in markets where innovation is central to future rivalry. Failing to account for these risks allowing acquisitions that may foreclose competition in the future product market or weaken incentives for other firms to innovate. To preserve dynamic competition, the counterfactual analysis must therefore extend beyond the question of financial viability to include the firm's role in ongoing innovation competition and its potential impact on the structure and contestability of future markets.

C.13.a Under which conditions should a failing firm defence be accepted? In particular, what factors should the Commission take into consideration to assess whether the



acquisition of a failing firm/exiting assets would bring any efficiencies or otherwise counterbalance the market power brought by the concentration? [Free Text]

We refer to our response to C.13.

C.13.b Absent a failing firm defence, how may financial difficulties of the target impact the Commission's assessment of the company's competitive constraints going forward and based on which evidence, in particular where alternative buyers exist or may have existed before the announcement of the acquisition at a time where the financial situation was not yet critical, or where the firm in financial difficulties is owned, at least in part, by public entities that may have an interest in keeping the relevant firm afloat? [Free Text]

C.14 What should be the right counterfactual in cases of acquisitions of firms in declining markets where there is clear evidence that the market size or total demand in a market is shrinking on a permanent basis (e.g. due to technological changes or a lasting shift in consumer behaviour)?

We refer to our responses to C.12 and C.12.a. In line with market reality, the counterfactual should reflect any decline of the market. As highlighted in C.12.a, the supply side of the market should, however, not be overlooked. Even in declining markets, firms may still innovate to, e.g., extend product life cycles, reposition offerings, or transition to new markets. The counterfactual should, thus, not only capture the reduction in demand but also adaptive strategies on the supply side.

#### Type and quality of evidence on future market developments

C.15. According to the Court of Justice, the further into the future the effects of a merger are likely to materialise, the more persuasive and stronger the supporting evidence should be. Please explain whether you would consider justified to counterbalance the higher level of uncertainty related to the assessment of more distant future market developments also with a more significant impact of the expected effects.

We consider it justified to balance higher levels of uncertainty with the significance of expected effects. Estimations and forward-looking predictions are inherent to prospective analyses under merger control, so the Commission should not shy away from intervention in cases where the predicted impact, whether negative or positive, is substantial, even if its realisation is highly uncertain. In contrast, when the anticipated impact is minor, high uncertainty may not justify intervention at this stage. This is particularly important for protecting future competition, where the expected effects (positive or negative) tend to be large. Innovation efforts today shape the future market, so even a subtle restriction of competition in the present can significantly harm future competition, and even the emergence, development or growth of the future market. Similarly, the positive impact can be significant if the merger provides the merged firm with the capabilities to become competitive in the future market.

The Court of Justice's requirement for persuasive and stronger evidence should be understood



as a requirement regarding the quality of the evidence, and not as a bar against addressing future harms. Future harm can justify intervention, provided the evidence is robust and reliable. To this end, the Commission should define evidentiary thresholds. For instance, predictions should be supported by multiple sources (e.g., at least three), and not only sources from the merging firms. A starting point can be the merging firms' internal documents that contain predictions about the future developments of their innovation strategy. These predictions can be supported by third-party evidence, such as independent third-party reports on industry-wide trends, venture capital investment decisions and forecasts, and the perspectives of market participants gathered through consultations and surveys, acknowledging that there may not yet be customers in the future product market. See our response to C.3.c. for a detailed discussion of relevant evidence.

C.16. How far in the future should the Commission look at when assessing the impact of a merger on competition (e.g., whether companies will invest or innovate post-merger, or whether prices will increase because of the merger)? How and under what circumstances should the Commission's assessment consider long investment cycles in a given industry?

The temporal frame highly depends on the circumstances of the case, so should be determined on a case-by-case basis, guided by the expectations of market participants. It depends, for example, on the specificities of the industry, technology, capabilities, and the significance of the innovation. Additionally, the time period depends on where in the timeline of the transformation the merger occurs; a longer time period is needed when the change is just beginning to prompt innovation, compared to when the transformation is nearly complete. The temporal frame should, in any case, be sufficient to cover the lengthy transformation process from innovation today to competition in the future product market. That said, the time period cannot be indefinite, as uncertainty regarding the effects increases over time. Generally speaking, and taking into account the factors described above, a temporal frame of 10 years might be a manageable period that can account for the emergence and growth of the market.

C.17 How should the Commission's assessment take into account systemic trends and developments unrelated to the merger (e.g., technological developments such as AI, critical or strategic nature of technologies) that may (indirectly) impact the relevant product market and thus the competitive assessment within that market? Please explain how forward-looking the Commission can be and based on which evidence and metrics.

Although the systemic trends and developments are not caused by the merger, they are essential for understanding dynamic competition in the markets where the merger occurs. Taking these changes into account is key to a dynamic approach to merger control, since, as noted in response to C.11, a dynamic analysis recognises that markets evolve over time and reflects these changes accordingly. Therefore, systemic changes should be considered in both market definition and the competitive assessment to ensure accurate conclusions.<sup>41</sup>

<sup>&</sup>lt;sup>41</sup> One of the authors has discussed the impact of such systemic changes on market definition and the competitive



The Commission should pay special attention to systemic trends and developments, as they may not come up in the traditional assessment, due to the cross-market character of competition. As the word implies, systemic trends and developments alter the overall functioning of the society or economy, meaning the impact extends beyond specific product market boundaries. These changes shape future markets, thereby posing dynamic or future competitive constraints on firms, which are compelled to adjust and innovate to remain competitive. Firms introduce something new, whether a product, service, business model etc, that may create an adjacent or neighbouring market capable of disrupting and replacing the existing products, services, or business models.<sup>42</sup> Incumbents are thus not typically challenged by substitute products within their existing product markets but are threatened to be replaced by future products emerging from outside those boundaries.<sup>43</sup>

The new Merger Guidelines should include a paragraph similar to para. 21 of the new Market Definition Notice, which recognises that market boundaries may shift with ongoing transitions. Herein, the Commission should outline how it assesses these dynamic and future constraints. A useful indicator is the extent to which the merging firms are actively participating in the transformation, as this reveals the degree to which they are already competitively constrained. The merging parties' intent to transform can be evidenced by, for example, internal documents, dedicated R&D budgets and relevant patent filings. For further evidence, see the response to C.3.c.

The degree to which a forward-looking approach is warranted also depends how actively the merging firms are transforming. When firms are already innovating towards the future product, the transformation is taking place at the time of the merger and, thus, poses an immediate competitive constraint on the merging parties. If the merging parties are not yet actively innovating, the constraint may only arise further in the future, requiring a more forward-looking approach and potentially discounted weight in today's assessment.

<sup>43</sup> *ibid*.

assessment in more depth. See A. van der Veer, 'The new market definition notice misses the key to addressing transforming product markets' (2025) *Journal of Antitrust Enforcement* <a href="https://doi.org/10.1093/jaenfo/jnaf018">https://doi.org/10.1093/jaenfo/jnaf018</a>>.

<sup>&</sup>lt;sup>42</sup> David S Evans and Richard Schmalensee, 'Some Economic Aspects of Antitrust Analysis in Dynamically Competitive Industries' (2002) 2 Innovation Policy and the Economy 1, 16.



#### APPENDIX A Innovation Capability Framework<sup>44</sup>

Components	Required resources
Strategy	Innovation strategy
Leadership	Managers with an entrepreneurial mindset (visionary, risk-tolerant, future-focused), provide continuous feedback, are clear communicators, embrace employee creativity, support innovative activities, and empower employees through participative decision-making, encourage active participation in the opportunity formation process and appreciate learning and sharing
Structures and systems	Structures and systems that promote autonomy, specialization and organizational creativity, ensure efficient resource allocation, provide incentives and rewards, and professional development opportunities, effectively support information technology infrastructure, and enable internal communication and knowledge dissemination
Culture	Culture includes innovation-oriented norms, beliefs, behaviors and values, a tolerance to failures, the internal openness to new ideas, the embrace of divergent thinking and ambiguity, the structural flexibility and willingness to change, reflexive learning, and organizational forgetting
Sensing	Information acquisition, exploration, creation and interpretation, managing external sources of information, and the ideation process
	Ability to access, collect, filter, process, codify, interpret, evaluate, and manipulate information, and encouraging cross-cultural experiences among employees
	Ability to identify, acquire, create, and evaluate the external sources of information, and strategic relationships with suppliers, clients, regulatory authorities, research institutes, industry associations, non-profit organizations etc.
Seizing	Resource identification, selection, access, creation and/or acquisition of the resources and practices needed for developing the innovation, ordinary capabilities such as project management and manufacturing, R&D and technology management
	Ability to assess and analyze opportunities, portfolio management practices, and the availability and adequacy of resources and practices at disposal of the firm
	Ability to identify and acquire or develop the required resources and practices, including technology, intellectual property acquisition and the development, involves activities like design, R&D, and improving a firm's absorptive capacity

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<sup>&</sup>lt;sup>44</sup> Information gathered from Everaldo Luis Daronco and others, 'A New Framework of Firm-Level Innovation Capability: A Propensity–Ability Perspective' (2023) 41 European Management Journal, p. 242-245.



#### Transforming

Organizational resources and practices integration, combination, creation and reconfiguration, knowledge integration, and the transfer and organizational learning activities

Ability to continuously apply resources and practices for intra-firm collecting, creating, transferring, diffusing, and using innovation-related knowledge, and to determine the speed and degree of change of the firm's strategy, leadership, structures and systems, and culture

Ability to develop and commercialize innovations, to safeguard innovation and appropriability through licensing, secrecy and speed-to-market approaches, to implement business models infused with innovation, leveraging advanced market-related resources and practices



#### Topic E: Digitalisation

#### Introduction

Before addressing the specific questions, we consider it important to provide a brief introduction to contextualise our perspective. In particular, we seek to emphasise the distinctive features of digital mergers and to underscore the critical role that dynamic competition plays within this domain.

Digitalisation stands as a pivotal driver of innovation and competitiveness within the European Union (EU). Digital markets exhibit a range of unique characteristics that distinguish them from traditional sectors and present particular challenges for merger control. These markets are frequently but not always characterised by *winner-takes-all dynamics*, which tend to benefit leading companies and can lead to rapid *tipping* in favour of firms that achieve critical mass adoption, enabling rapid consolidation around a single or small number of firms. In such environments, dominant entities often construct interlinked ecosystems of products and services, where network effects render entry and expansion exceptionally difficult for competitors. This situation results in dominant players becoming increasingly insulated from competition, making it arduous for smaller competitors and nascent entrants to achieve the scale necessary to offer viable alternatives or even enter the market. Furthermore, the accumulation of data grants incumbents considerable competitive advantages, creating high entry barriers for new entrants. Mergers involving the acquisition of a large amount of data, thus, can have significant implications for the competitive landscape.

Within this context, the concept of dynamic competition is paramount. Dynamic competition encompasses the ongoing processes of innovation, technological advancement, and business model experimentation through which firms vie for future market positions, as opposed to static competition, which focuses primarily on existing market structures, prices, and outputs.<sup>45</sup> Put simply, dynamic competition can be defined as *cross-market innovation competition for future product markets*, while static competition is defined as *competition within the market*.<sup>46</sup> In markets characterised by rapid technological progress, evolving consumer preferences, and the continuous replacement of existing products and services by disruptive ones, dynamic competition often plays a more significant role in evaluating long-term competitive outcomes, especially when transactions involve nascent players or emerging markets. Therefore, the EU merger guidelines must reflect the importance of dynamic competition when assessing digital mergers. Recognising and explicitly considering dynamic competition in merger analysis would help to ensure that competition policy remains effective and responsive to the particularities of digital markets. Merger control must therefore adopt analytical approaches that give dynamic competition greater

<sup>&</sup>lt;sup>45</sup> David J. Teece, 'The Dynamic Competition Paradigm: Insights and Implications' 1 (2023) Columbia Business Law Review 373.

<sup>&</sup>lt;sup>46</sup> Jorge Padilla, Douglas H. Ginsburg, and Koren Wong-Ervin, 'Dynamic Competition and Antitrust: Quick Interferences from the Analysis of Big Tech's R&D Expenditure Ratios' 86(3) Antitrust Law Journal 897, who define dynamic competition as *competition for the market*.



prominence. By doing so, competition authorities can more effectively safeguard against anticompetitive outcomes that may not be immediately evident in current market structures but could arise as markets tip, incumbency advantages solidify, and new barriers to entry emerge.<sup>47</sup>

#### Responses to questions

#### **Ecosystem and Interrelated Products**

E.9. How should the Commission assess competition risks of non-horizontal mergers linked to having a broad range or portfolio of products or services that are interrelated or part of an "ecosystem"? Please consider also mergers outside of the digital and tech industries and explain in particular:

The Dynamic Competition Initiative proposes a foundational rethinking of competition policy to account for the complex, dynamic nature of competition in digital ecosystems<sup>48</sup>. Conventional antitrust frameworks, anchored in static, neoclassical models and focused on product markets, entry barriers, and price effects, are ill-suited to assess competitive dynamics in platform-based digital industries. We advocate a shift from market-based to ecosystem-based analysis, emphasising the centrality of dynamic capabilities as a determinant of competitive performance, innovation, and resilience.

#### 1. The Incompleteness of Static Market Models in the Digital Age

We critique the prevailing policy impulse to interpret the dominance of digital platforms, such as Amazon, Google, Facebook, and Apple, through the lens of monopoly power, gatekeeping, or entrenchment. These diagnoses, typically based on static indicators such as market shares or network effects, fail to capture the multi-level, cross-industry, and temporal dynamics of ecosystem competition. Much like analysing a football match solely through its final score, conventional approaches overlook the preparatory, strategic, and evolutionary dimensions of competitive success.

#### 2. The Five "Cs" of Ecosystems: A New Grammar of Competition

There are five structural features—termed the "Five Cs"—that define ecosystems and distinguish them from traditional firm-based competition:

• Cross-market competition: Ecosystem players operate across multiple industries and markets simultaneously. Competition occurs not only between platforms (e.g., iOS vs. Android), but also between platforms and their complementors (e.g., Microsoft and

<sup>&</sup>lt;sup>47</sup> OECD, Merger Control in Dynamic Markets (2020).

<sup>&</sup>lt;sup>48</sup> Nicolas Petit & David J. Teece, 'Taking Ecosystems Competition Seriously in the Digital Economy: A (Preliminary) Dynamic Competition/Capabilities Perspective' (December 9, 2020).



browser developers), and among complementors themselves (e.g., Spotify vs. Apple Music).

- Co-evolution: Ecosystems evolve through iterative, reciprocal interactions among heterogeneous members. This generativity can give rise to entirely new services (e.g., AWS emerging from Amazon's internal infrastructure) or lead to systemic collapse (e.g., Atari's failure due to uncontrolled third-party development).
- Complementarity: Value creation in ecosystems is rooted in the quality and diversity of complementors. However, both excessive proliferation and over-dependence on a few key complementors can destabilise the ecosystem, as shown by Apple's failed Mac OS cloning strategy in the 1990s.
- Co-opetition: Ecosystem actors simultaneously collaborate and compete. For instance, platform leaders must balance their own profit motives against sustaining a healthy complementor base, avoiding the "fox and shepherd" dilemma, where opportunistic governance may trigger ecosystem erosion.
- Conscious direction: Though ecosystems exhibit emergent properties, they require intentional orchestration. Platform leaders play a critical role in coordinating vision, rules, and resource allocation. Yet power can shift, as illustrated by the movement of influence in the PC ecosystem from IBM to Microsoft and Intel.

#### 3. What Distinguishes Digital Ecosystems? The Data Infrastructure Duality

Digital ecosystems are defined by their ability to resolve the central tension between distributed data acquisition ("sensors") and centralised data exploitation ("servers"). Successful platforms, such as Google, Amazon, and Facebook, integrate devices, apps, APIs, and user interfaces with cloud computing, AI systems, and data centres. Their competitive advantage stems not merely from economies of scale or scope, but from their ability to orchestrate complex, diverse, and evolving data assets.

Crucially, data's economic value is both non-rivalrous and uncertain. We wish to highlight joint production and knowledge asset problems: data collected for one purpose may yield unanticipated value elsewhere, as with mutton becoming a profitable byproduct of wool production after the advent of refrigeration. Firms face strategic uncertainty about how much to invest in data acquisition, given that reuse potential and complementarities across datasets are unknowable ex ante. Hence, value creation in digital ecosystems is indeterminate, contingent, and path-dependent. This generates significant challenges for static regulatory models predicated on fixed markets and linear causality.

#### 4. Dynamic Capabilities as the Core Determinant of Ecosystem Survival



Dynamic capabilities, defined as the firm's ability to sense, seize, and reconfigure assets in response to environmental change, are critical to ecosystem viability. They determine whether a platform can navigate uncertainty, re-align with complementors, and adapt to new competitive threats or technological shifts. Static scale advantages or network effects are insufficient. We, at DCI, argue that many failures in policy and economic analysis stem from treating data as a homogeneous commodity ("the new oil"), rather than as a knowledge asset embedded in organisational routines ("the new lego"). Dynamic capabilities are what enable firms to translate raw data into adaptive strategic behaviour and long-term value. The neglect of dynamic capabilities in antitrust economics has led to erroneous assumptions about the inevitability of dominance and the sufficiency of structural remedies. In fact, digital ecosystems are frequently disrupted from within or by adjacent innovations, as evidenced by Instagram's rise from a complementor to a potential platform leader – pre-empted only by Facebook's acquisition.

#### 5. Implications for Antitrust: Toward a Dynamic Capabilities-Informed Framework

We propose recalibrating competition law to reflect the realities of digital competition better. Rather than focusing narrowly on pricing power or entry barriers, antitrust should assess a firm's capacity for innovation, adaptability, and organisational coherence. This would involve:

- Recognising **Schumpeterian rents** as a legitimate reward for firms that embrace uncertainty and invest in transformation;
- Shifting focus from product markets to **ecosystem boundaries** (e.g., number of industries crossed, interdependencies among actors);
- Replacing counterfactual price-based tests (e.g., SSNIP) with forward-looking assessments of investment in R&D, organisational resilience, and innovation intensity;
- Using **filters** such as internal competition, patient capital, governance models, and ecosystem lifecycle stages to evaluate business practices;
- Distinguishing "shepherd" behaviour (sustained commitment to low prices and innovation) from "fox" behaviour (short-term self-dealing and predation) in ecosystem leadership.

In particular, we caution against per se rules, reversed burdens of proof, and other regulatory shortcuts that privilege intervention over precision. A dynamic capabilities approach provides a more nuanced way to assess the interplay between conduct and context in rapidly evolving digital markets.

However, we do not propose a wholesale rejection of established antitrust doctrine but rather a necessary complement. In the same spirit as Justice Learned Hand's acknowledgement of "superior skill, foresight and industry" or Mariana Mazzucato's call for innovation-oriented policy, we advocate for an evolution in antitrust thought: one that embraces complexity,



dynamism, and capabilities as central analytical categories. Ultimately, we argue that failure to adopt a dynamic framework risks overlooking the very source of competitive vitality in the digital economy: *ecosystem-level innovation and strategic adaptability*.

#### E.9.a What theory/theories of harm could the Commission consider.

Several large digital ecosystems increasingly dominate digital markets. Ecosystems refer to interconnected platforms that offer multiple related services across different markets, linked through shared data, users, or infrastructure. This interconnectedness means that competitive harm arising from a merger can extend beyond the primary market under review, affecting adjacent or related markets within the ecosystem. As a result, assessing the effects of mergers in digital ecosystems requires a broader, multi-market perspective to capture indirect or spillover impacts that may reinforce dominance or foreclose competition outside the initially targeted market. Crucially, an effective assessment of these markets necessitates a comprehensive understanding of the entire ecosystem, rather than focusing solely on narrowly defined individual markets. This approach could be further elaborated in the EU merger guidelines and reflected in the Commission's enforcement practice. The following theories of harm could be considered:

- One possible concern is that mergers involving ecosystems could lead to **entrenchment**, which occurs when a dominant firm leverages its market power to reinforce and extend its leading position from one market into a different one, making it harder for competitors to enter or challenge that secondary market, thereby reducing market contestability. This effect is not primarily driven by the foreclosure or marginalisation of rivals, but rather by entry barriers established by the dominant ecosystem itself. This happens partly because the new services complement existing offerings, adding value for consumers, and partly because they help retain users who may use alternative services as partial substitutes.<sup>53</sup> A notable example in which the Commission raised concerns about possible entrenchment effects is the *Booking/eTraveli* merger.
- One theory of harm could also include **platform envelopment**, which occurs when a dominant platform extends into another market by bundling or tying its existing products with new ones, leveraging network effects and shared technology to disadvantage

<sup>50</sup> OECD, Theories of Harm for Digital Mergers: OECD Competition Policy Roundtable Background Note (2023).

<sup>&</sup>lt;sup>49</sup> Matthias Koch, Daniel Krohmer, Matthias Naab, Dominik Rost, and Marcus Trapp, 'A matter of definition: Criteria for digital ecosystems' (2022) 2(2) Digital Business 100027.

<sup>&</sup>lt;sup>51</sup> Nicolo Zingales & Bruno Renzetti, 'Digital Platform Ecosystems and Conglomerate Mergers: A Review of the Brazilian Experience' (2022) 45(5) World Competition 443.

<sup>&</sup>lt;sup>52</sup> See, for instance, Roberson's analysis of the Commission's merger decisions, in which the author emphasises the necessity of a holistic approach when assessing mergers in digital ecosystems (Viktoria H.S.E. Robertson, Merger Review in Digital and Technology Markets: Insights from National Case Law (Final Report for the European Commission 2022)).

<sup>&</sup>lt;sup>53</sup> Manu Batra, Paul de Bijl, and Timo Klein, 'Ecosystem Theories of Harm in EU Merger Control: Analysing Competitive Constraints and Entrenchment' (2024) 15(6) Journal of European Competition Law & Practice 357.



competitors.54

• A merger involving ecosystems might, however, also have unilateral effects on an ecosystem level. In particular, a merger could weaken horizontal competitive pressure when a dominant ecosystem acquires a target that, although operating in a distinct market, imposes competitive constraints on the ecosystem. A notable example in which such concerns were discussed is the merger between *Amazon* and *iRobot*. Through such a merger, the ecosystem may deliberately eliminate this constraint to strengthen its position, or the effect may arise incidentally from other strategic motives. This reduction in competition can lead to anticompetitive outcomes similar to those identified under the horizontal unilateral effects framework, where the merged entity gains a greater ability to exercise market power unilaterally.<sup>55</sup>

It should be noted, however, that ecosystem theories of harm are a relatively new concept, which still requires further development.<sup>56</sup> Furthermore, various traditional theories of harm remain applicable in the context of digital ecosystems. However, they are often amplified within the ecosystem setting, particularly with respect to data-related concerns (*see*, E. 10 et seq.). Thus, digital ecosystems are not merely a distinct category of theories of harm but also significantly influence and amplify traditional theories by extending competitive interactions across interconnected markets. Therefore, merger assessments should not only involve ecosystem theories of harm but also integrate ecosystem dynamics as a cross-cutting analytical lens to fully capture the competitive effects in digital environments.

## E.9.b Under which conditions or market circumstances could this/these theory/theories of harm or concerns materialise.

The likelihood of these theories of harm arising increases when the services within an ecosystem are closely linked or highly complementary, as this allows for anti-competitive practices like tying, bundling, or cross-subsidising, which can exclude competitors not only in the core market but also in related markets.<sup>57</sup> Moreover, strong network effects combined with significant data synergies can intensify these risks, since the merged entity controls vast, interconnected user networks and datasets, which can strengthen entry barriers and push markets toward tipping.<sup>58</sup>

<sup>&</sup>lt;sup>54</sup> OECD, Theories of Harm for Digital Mergers: OECD Competition Policy Roundtable Background Note (2023).

<sup>&</sup>lt;sup>55</sup> Manu Batra, Paul de Bijl, and Timo Klein, 'Ecosystem Theories of Harm in EU Merger Control: Analysing Competitive Constraints and Entrenchment' (2024) 15(6) Journal of European Competition Law & Practice 357.

<sup>&</sup>lt;sup>56</sup> Eliana Garces, Olga Kozlova Guglielmi, and Devin Reilly, 'Ecosystem Theories of Harm in Merger Enforcement: Current Direction and Open Questions' (2024) 15 Journal of European Competition Law & Practice 272.

<sup>&</sup>lt;sup>57</sup> Manu Batra, Paul de Bijl, and Timo Klein, 'Ecosystem Theories of Harm in EU Merger Control: Analysing Competitive Constraints and Entrenchment' (2024) 15(6) Journal of European Competition Law & Practice 357.

<sup>&</sup>lt;sup>58</sup> OECD, Theories of Harm for Digital Mergers: Note by the European Union (2023).



Control over interoperability adds another dimension of risk, since the combined firm could degrade or block interoperability with rival products to favour its own offerings (an issue discussed, for example, in the *Google/Fitbit* merger).<sup>59</sup>

## E.9.c What are the elements, including evidence and metrics, that the Commission could use to assess the potential competition risks linked to having an increased portfolio of interrelated products and services.

In such cases, the Commission should analyse whether the merged entity's expanded portfolio of products and services creates or strengthens dominant positions across interconnected markets. Such an analysis requires a consideration of ecosystem effects. This requires a multi-market assessment beyond narrowly defined product markets to capture ecosystem-wide competitive dynamics. For this, quantitative measures of user base overlap, retention, and multi-homing rates are useful for evaluating lock-in and user engagement. Furthermore, the Commission should consider data synergies as well as the uniqueness, integration, and interoperability of acquired datasets, which can enhance innovation capabilities or foreclose competitors. Existing contract terms may provide an indication of potential bundling or tying strategies across the portfolio, which in turn could suggest that product interdependencies have leveraging effects in adjacent markets.

#### Data-related concerns and Aggregation of data

E.10. How should the Commission assess competition risks linked to the merged entity's accumulation of data? Please consider also mergers outside of the digital and tech industries and explain in particular:

#### E.10.a What theory/theories of harm could the Commission consider.

In some digital mergers, data is one key driver of competition, as its nature and control fundamentally shape market dynamics. It is imperative to analyse the dynamic effects of data-driven mergers, particularly data-driven market tipping and the consequent construction of barriers for new entrants, which can entrench incumbents and stifle innovation over time. <sup>60</sup> Data should be considered a driver of competition, not solely an input. Particularly, this last aspect is essential for preserving dynamic competition, which is crucial for digital markets.

The specific theory of harm invoked in merger assessments critically depends on the type, scale, and use of the data involved. Possible clusters of theories of harm the Commission could consider

<sup>&</sup>lt;sup>59</sup> Ben Rininger, 'The Ecosystem Theory of Harm in Merger Enforcement: A Transatlantic Comparison' (2025) 93(3) University of Cincinnati Law Review 830.

<sup>&</sup>lt;sup>60</sup> Alexandre de Cornière & Greg Taylor, 'Data and Competition: A Simple Framework with Applications to Mergers and Market Structure' (2020) CORE Discussion Paper.



are the following:

First, mergers involving data-driven firms may generate **anti-competitive effects by enabling the combination of distinct datasets**. Aggregated data can create unique synergies and enhance market power in ways that cannot be reduced to traditional product overlaps.<sup>61</sup> When the acquiring firm holds a dominant position in a market heavily dependent on data, the acquirer could integrate the acquired data with its existing datasets, thereby expanding its overall data resources and deriving valuable insights through advanced data mining techniques.<sup>62</sup> This consolidation can reinforce the acquirer's dominance in data-driven markets by raising barriers for potential entrants or competitors seeking to enter the market. Such dynamics can give rise to competition concerns, as exemplified in the European Commission's assessment of the *Google/Fithit* merger.

Second, the data-driven mergers may, if exclusively controlled by the merged firm, restrict competitors' access to crucial data and impair competition in downstream markets. The acquisition of unique and non-substitutable data can raise classic vertical foreclosure issues, particularly when this data is essential for rivals operating downstream. The core concern lies in the merged entity's ability and incentive to withhold or limit access to this critical data asset, thereby undermining competitive dynamics. Such a theory of harm was notably examined in the European Commission's review of the *Microsoft/LinkedIn* transaction.

While the previous theories of harm typically concentrate on individual markets, the OECD proposed a relative foreclosure theory of harm concerning data. It advocates applying the portfolio effects framework, which accounts for the competitive advantages gained by firms operating across multiple, interconnected markets, as a suitable approach for this analysis. This framework captures the competitive advantage that arises when a firm operates across multiple complementary markets, providing it with power that exceeds its influence in any single market considered independently. In the context of a data-driven market, this advantage stems from a platform's expanding presence across a wide array of activities, enabling it to collect and leverage additional data sources to reinforce its market position.<sup>64</sup>

Theories of harm may also encompass potential negative impacts on privacy within the scope of competition analysis. For example, one approach conceptualises privacy as a quality dimension of competition, arguing that mergers could weaken firms' incentives to uphold high privacy standards, thereby reducing competition on privacy-related attributes. Alternatively, privacy can be framed through the consumer choice perspective,

<sup>&</sup>lt;sup>61</sup> Alexandre de Cornière & Greg Taylor, 'Data-Driven Mergers' (2024) TSE Working Paper N° 1576.

<sup>&</sup>lt;sup>62</sup> Thomas Stuart, 'Too little too late?' (2021) 17(2) European Competition Journal 407

<sup>&</sup>lt;sup>63</sup> Alexandre de Cornière & Greg Taylor, 'Data-Driven Mergers' (2024) TSE Working Paper N° 1576.

<sup>&</sup>lt;sup>64</sup> OECD, Theories of Harm for Digital Mergers: OECD Competition Policy Roundtable Background Note (2023).



which emphasises variety as a fundamental objective of competition policy, suggesting that mergers may limit the diversity of privacy options available to consumers. <sup>65</sup> However, while privacy constitutes an important dimension of competition, it typically functions as one among several product attributes, and its enhancement may require careful consideration of trade-offs with other elements of product quality.

## E.10.b Under which conditions or market circumstances could this/these theory/theories of harm materialise.

Strong dependence on exclusive or unique datasets can significantly heighten concerns around data concentration and competition. When one firm controls large, high-quality datasets, it can develop advanced products and services or optimise algorithms in ways competitors cannot easily match. This effect is amplified by network effects and feedback loops, where more users generate more data, further strengthening the incumbent's position and making it harder for newcomers to compete. Such dynamics risk foreclosing the market, as rivals lack access to critical data, which raises barriers to entry and may impede competition. This effect is especially significant in markets where data is a key driver of innovation and, thus, possibly of competitive pressure. This dynamic may be further intensified by regulatory frameworks (such as the GDPR), which can restrict the development of alternative data sources and inadvertently reinforce incumbent firms' market positions. Ultimately, the extent to which datasets are unique and applicable across markets plays a critical role in determining the plausibility of these competition concerns.

Moreover, in ecosystem markets, where a dominant platform operates across several interconnected services, the ability to leverage data across these markets can strengthen market power and hinder competition, including in adjacent or even unrelated markets. <sup>69</sup> Mergers that consolidate separate datasets or user bases risk amplifying these effects. Given the strong network effects typically present in these markets, such consolidation can lock in and attract consumers, increasing the risk of market tipping.

<sup>&</sup>lt;sup>65</sup> Samson Y. Esayas, 'Merger Control and Theories of Harm on Data Privacy as a Non-Price Parameter', in Samson Y. Esayas (ed), *Data Privacy and Competition Law in the Age of Big Data:* Unpacking the Interface Through Complexity Science (Oxford University Press 2024).

<sup>&</sup>lt;sup>66</sup> Jörg Hoffmann & Germán Oscar Johannsen 'EU-Merger Control & Big Data On Dataspecific Theories of Harm and Remedies' (2019) Max Planck Institute for Innovation & Competition Research Paper No. 19-05.

<sup>&</sup>lt;sup>67</sup> Justus Haucap, 'Competition and Competition Policy in a Data-Driven Economy' (2019) 54(4) Intereconomics 201.

<sup>&</sup>lt;sup>68</sup> Michal S. Gal & Oshrit Aviv, 'The Competitive Effects of the GDPR' (2020) 16(3) Journal of Competition Law & Economics 349.

<sup>&</sup>lt;sup>69</sup> OECD, The evolving Concept of Market Power in the Digital Economy: OECD Competition Policy Roundtable Background Note (2022).



# E.10.c What are the elements, including evidence and metrics, that the Commission could use to assess competition risks linked to the accumulation of data.

When analysing whether merger-induced data accumulation is harmful to competition, the Commission should focus on whether the merger substantially reduces competitors' ability to access or replicate critical data resources. If competitors are restricted in their access to critical data, it becomes more difficult for them to compete and thus exert competitive pressure on the increasingly dominant company. Data, therefore, should be considered a competitive parameter. This means that an important metric to consider in such scenarios is the data itself and the context in which it is set. First, it is important to evaluate the uniqueness and exclusivity of the datasets involved. Large, unique datasets increase barriers as rivals cannot easily replicate them. The Commission should, therefore, consider internal data inventories, user data aggregation across products, and data coverage. Secondly, the complementarity of the data sets offers an important indication as to how synergies can be leveraged. Strong user overlap supports lock-in and data-driven network effects, and thus could imply the strengthening of market power. The Commission should also analyse feedback loops where increased data leads to improved algorithms and innovation, which in turn reinforces market power. If such dynamics are strongly present within a market, the likelihood of exclusionary effects arising is significantly increased.

E.11. How should the Commission assess the relevant standard and criteria determining the value of the target's data in the context of data aggregation? Please select and explain the relevant criteria in the context of data accumulation that would be determinative for assessing the value of the data:

- a. Velocity (i.e., speed at which the data is collected)
- b. Variety (i.e., type of data composing the data set)
- c. Value (i.e., economic relevance of data)
- d. Volume (i.e., size of the data set)
- e. Quality of data (e.g., completeness, cleanliness of a data set)
- f. Uniqueness / difficult to replicate
- g. Accessibility
- h. Other

#### E.11.1 Please explain the relevant criteria you have selected.

While all listed criteria are relevant to the analysis, greater emphasis should be placed on the underlined factors, as they are most influential in shaping competitive dynamics.



- <u>Variety</u>: A wider array of data might enable deeper insights across multiple data sources. It also could indicate that relative foreclosure theories of harm might become more likely.
- <u>Data Quality</u>: Data becomes valuable if it is usable. This significantly hinges upon its quality. This, in turn, depends on its accuracy, relevance (i.e., statistical power), the completeness and cleanliness of the dataset, as well as how easily the data can be used for analysis. High-quality data enhances the ability to build superior algorithms, thereby entrenching possible market power.
- <u>Uniqueness and difficulty of replication</u>: This is a critical aspect when evaluating data in the context of digital mergers. Unique and hard-to-replicate data confers a sustainable competitive advantage to the data owner. Data exclusivity strengthens market power in dynamic markets where data drives future innovation and, thus, (maybe) competition.
- Accessibility: Similar to hard-to-replicate data, restricted accessibility to unique or aggregated data can entrench the merged entity's market power by raising barriers to entry, reducing contestability, and ultimately diminishing incentives for innovation and dynamic rivalry in evolving markets

# Future market dynamics and technological changes

E.14. In markets driven by technological changes, what would be an appropriate timeframe for the Commission to adequately assess the impact of mergers on competition? Should there be a distinction between markets before and after "tipping" to a leading company?

In markets characterised by rapid technological advancement, the timeframe used by the European Commission when assessing mergers should be sufficiently extended to capture the full spectrum of competitive impacts, particularly those related to innovation and potential market evolution. As highlighted in the Draghi Report, the economy is increasingly dominated by innovation-intensive sectors where digital technologies, brand strength, and scale play a critical role in competition. Factors going beyond price-based rivalry, thus, become more important. However, current antitrust methodologies applied in merger control often rely on static economic models focused on immediate price effects, market structure, and market shares. Such models fail to fully account for the dynamic nature of competition in digital markets that is driven by innovation. Given the continuously evolving landscape of technology markets (with new products and services frequently emerging), a static analysis provides only a limited view and overlooks the broader, long-term competitive implications of mergers.

However, placing greater emphasis on innovation also raises challenges regarding the predictability and legal certainty of regulatory decisions. Innovation-related and other dynamic effects are inherently more uncertain and difficult to quantify compared to short-term impacts on

<sup>&</sup>lt;sup>70</sup> European Commission, *The Draghi Report* (2024), p. 298.

<sup>&</sup>lt;sup>71</sup> Gönenç Gürkaynak & David J Teece 'Integrating Innovation Concepts into the Merger Control Context' (2025) Journal of European Competition Law & Practice 1.



prices or output. Policymakers must carefully balance the short-term innovation gains from increased scale against the longer-term risks of diminished innovation incentives among the merging firms, their competitors, customers, and suppliers.<sup>72</sup> This illustrates the difficulty of reliably identifying and weighing dynamic long-term anti-competitive effects. The current Horizontal Merger Guidelines emphasise that concerns must be *reasonably certain*, a standard that is difficult to meet when dealing with uncertain future innovation outcomes, unless clear indicators, such as pipeline products, are present.<sup>73</sup> This suggests that, beyond adjusting the timeframe and perspective of analysis, the methodological tools and frameworks used to assess anti-competitive effects must also be refined to adequately capture the complexities of digital competition (*see* E.15).<sup>74</sup>

The distinction between tipped and untipped markets is particularly important in digital sectors, where competition often occurs through indirect entry and the continual reconfiguration of competitive channels. Determining whether a market has tipped is crucial, as the competitive dynamics and appropriate regulatory responses differ notably. Pre-tipping markets require especially careful and forward-looking analysis to prevent irreversible market concentration, whereas post-tipping markets require close monitoring of potential entrenchment of dominance. However, and importantly, the tipping zone itself is not fixed but varies with changes in market potential, meaning a market can experience re-tipping over time. Thus, the tipping zone represents a continuously shifting target. Furthermore, assessing tipping cannot rely solely on static indicators such as market shares or entry barriers. It must also account for ongoing competitive dynamics while the market remains contestable. So, while the distinction between tipped and untipped markets shapes the analytical approach, it does not substantially alter the timeframe required to adequately assess digital mergers. Regardless of market status, the inherent

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<sup>&</sup>lt;sup>72</sup> European Commission, The Draghi Report (2024), p. 298.

<sup>&</sup>lt;sup>73</sup> Svend Albaek & Raphaël De Coninck, 'Dynamic Capabilities and EC Merger Control: A Difficult Match? (*Network Law Review*, 5 June 2025)

<sup>&</sup>lt;https://www.networklawreview.org/albaek-coninck-merger-control/> accessed on 27 July 2025. For instance, para. 59 of the current Horizontal Merger Guidelines acknowledges that anti-competitive effects can arise with mergers involving potential competitors if one of the merging parties is very likely to undertake the necessary sunk investments to enter the relevant market within a relatively short timeframe. Establishing proof of a future event being highly likely can be challenging.

<sup>&</sup>lt;sup>74</sup> See, for example, Petit and Teece's capabilities framework, which emphasises that competition in innovation-driven markets hinges on firms' dynamic abilities to innovate, adapt, and reconfigure resources, rather than solely on market power or pricing. It highlights the importance of firms' capacity to identify and exploit opportunities in rapidly evolving environments (Nicolas Petit & David J. Teece, 'Capabilities: the next Step for the Economic Construction of Competition Law' (2024) 15(8) Journal of European Competition Law & Practice 513).

<sup>&</sup>lt;sup>75</sup> Nicolas Petit, Big Tech and the Digital Economy: The Moligopoly Scenario (Oxford University Press 2020), p. 91.

<sup>&</sup>lt;sup>76</sup> Nicolas Petit & Thibault Schrepel, 'Evaluation of the Commission Notice on Market Definition in EU Competition Law' Submission to the European Commission of 15 May 2020.



dynamism and potential for re-tipping in digital sectors demand that merger analysis remain forward-looking and sensitive to ongoing evolution, meaning a dynamic perspective is essential in all cases, both before and after a market appears to have tipped.

# E.15. What metrics and evidence should be used to adequately assess likely future market trends and developments post-merger, including in terms of business models, technologies, and trade patterns?

To foster a robust assessment in merger control, it is crucial to integrate forward-looking metrics and evidence that reflect firms' incentives and capacities to innovate, invest, and enter or exit markets over the medium to long term. Such an approach requires careful consideration of R&D activities, innovation pipelines, potential competitive pressures from emerging firms, and the prospective impact on future business models and technologies. Moreover, the analysis should account for how a merger may reshape the competitive environment beyond short-term price effects. A comprehensive evaluation is best achieved by combining quantitative indicators, such as patent portfolios and investment expenditures, with qualitative insights derived from internal documents and market intelligence. This multidimensional methodology enhances the accuracy and relevance of competition analysis by capturing the dynamic evolution of markets.

### Privacy and data protection

E.16 Do you consider that the Commission's past case practice regarding privacy and data protection considerations (e.g., in M.8788 - Apple/Shazam, M.9660 - Google/Fitbit) was appropriate? If not, please outline in detail where you disagree with the approach taken by the Commission.

Access to data plays a pivotal role in digital mergers, as data protection and privacy are intrinsically linked to the ways in which companies collect, process, and utilise customer and user information. In this context, data is not merely a by-product of digital activity but a key driver of competition and a significant source of competitive advantage.<sup>77</sup> While the European Commission's past case practice reflects an important initial acknowledgement of privacy and data protection issues, there is still scope to recognise data as an independent competitive parameter.

To date, the Commission's assessments have primarily focused on data-related concerns within the framework of traditional competition theories, namely horizontal effects arising from the accumulation and combination of datasets<sup>78</sup>, and vertical effects, where data is treated as an essential input that could potentially lead to the foreclosure of rivals<sup>79</sup>. However, the Commission could set a stronger focus on incorporating privacy as a quality parameter, recognising that

<sup>&</sup>lt;sup>77</sup> European Commission, Competition Policy Brief: Non-Price Competition: EU Merger Control Framework and Case Practice (2024).

<sup>&</sup>lt;sup>78</sup> For example, *Apple/Shazam*.

<sup>&</sup>lt;sup>79</sup> For example, *Google/Fitbit*.



competition over data privacy practices forms an important dimension of consumer welfare. In this context, mergers could, therefore, reduce incentives for firms to maintain stringent privacy standards, thereby diminishing competition in privacy attributes.<sup>80</sup> However, this requires careful balancing with other elements such as product quality.

E.17 Please outline the framework within which the revised Guidelines should reflect privacy and data protection considerations, if at all. Please outline how this framework fits within the legal mandate set by the EU Merger Regulation.

The EU Merger Regulation aims to prevent transactions that would substantially reduce effective competition, particularly by creating or reinforcing dominant market positions. It seeks to maintain a competitive internal market environment that benefits both consumers and businesses by mitigating the risks associated with excessive market concentration. As highlighted in section E.16, within the context of digital mergers, data functions not merely as an input but as a vital competitive parameter. Data accumulation and analysis enable firms to refine algorithms, enhance innovation, and deliver highly personalised products and services. These capabilities foster a cycle of feedback loops: greater user engagement yields more data, which in turn strengthens a firm's innovation potential and market position.<sup>81</sup> In this context, the handling of data is not only a regulatory concern but also a key element of quality competition. Sensitive data, in particular, represents an even more valuable competitive asset due to the inherent difficulties of access and replication, which can amplify the potential anti-competitive effects described above. Accordingly, merger guidelines should explicitly acknowledge and articulate these risks as part of the spectrum of possible anti-competitive harms in digital markets.

E.18 Do you believe the revised Guidelines should provide guidance on the relationship between data protection and privacy considerations and the availability of sufficient alternatives and market power? If so, please outline the framework you would propose for addressing the interplay between privacy and data protection regulation (e.g., the GDPR) and the EU Merger Regulation

Data protection and competition law objectives cannot always be effectively pursued in isolation

<sup>&</sup>lt;sup>80</sup> Debbi Salzberger, Nikiforos Iatrou, Gideon Kwinter & Erin Keogh, 'Data, Not Data: Uncovering the Implications of Data in Merger Reviews' (2022) 52 The University of Memphis Law Review 969. However, see also *Microsoft/LinkedIn*, in which the European Commission recognised that privacy protection represented a significant dimension of competition in the professional social networking sector. The Commission determined that, following the transaction, Microsoft would possess both the capacity and incentive to disadvantage LinkedIn's competitors, particularly those offering professional social networks with enhanced privacy features sought by users (para. 350).

<sup>&</sup>lt;sup>81</sup> Patrick Mikalef, John Krogstie, Ilias O. Pappas, and Paul Pavlou 'Exploring the Relationship between Big Data Analytics Capability and Competitive Performance: The Mediating Roles of Dynamic and Operational capabilities (2020) 57(2) Information & Management 103169.



from one another. In practice, regulators may need to strengthen cooperation and coordination to ensure coherent, effective, and complementary enforcement activities. 82 This need is particularly acute in the digital sector, where data represents a critical factor of production and a source of market power.

Although the GDPR and competition law may apply simultaneously, they are distinct legal regimes, each based on different legal concepts and objectives. Nevertheless, the concepts of privacy, data protection, and competition are interlinked, as the accumulation and use of data can have significant consequences on competition. At the same time, there can be instances where privacy objectives and competition concerns may diverge or even conflict. These situations highlight the importance of close cooperation and coordination among the relevant regulatory authorities. To ensure coherent and effective enforcement, clear guidance is necessary. Both frameworks would benefit from explicit provisions on cooperation and mechanisms for resolving potential conflicts of objectives. Such coordination would ensure that both competition and privacy goals are pursued in a complementary and balanced manner, without undermining either policy objective.

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<sup>&</sup>lt;sup>82</sup> European Data Protection Board, *Position Paper on Interplay between Data Protection and Competition Law* (2025).



# **Topic F: Efficiencies**

#### Introduction

Before answering these questions, we offer a brief introduction to set the context. In particular, we outline the challenges facing competition law with regard to efficiency gains, specifically dynamic gains.

Efficiency gains are expressly recognised by European law as factors that may, in principle, offset the anti-competitive effects of a merger. As such, two legal approaches can be considered for their integration into the analysis: an integrated approach, which takes them into account from the outset of the assessment of competitive effects (single-step analysis), or a two-step approach, in which efficiency gains are examined separately as a defence to challenge or mitigate the identified anti-competitive effects.

Despite this recognition, analysis of the European Commission's decision-making practice shows that the actual impact of these gains in competition litigation remains marginal. The French Competition Authority also pointed out in 2020<sup>83</sup> that companies generally devote little attention to these gains, even though they are the only ones with all the data needed to assess them. This under-exploitation is all the more regrettable given that some mergers could actually generate efficiency gains that would benefit consumers.

It is essential to take innovation into account in competition policy, and more specifically in merger law. This requirement stems from a renewed understanding of contemporary economic dynamics. Innovation is a key driver of competitiveness and growth, particularly in technology-intensive sectors (pharmaceuticals, digital, energy, etc.). Neglecting the impact of a merger on companies' capacity to innovate can lead to economically sub-optimal decisions.

In this context, the Draghi report proposes striking a balance<sup>84</sup>: without calling into question merger control or advocating radical reform, the existing tools should be adapted to changes in economic thinking. One of the options considered is to allow the parties to a merger to demonstrate that the transaction increases their capacity and incentive to innovate. This "innovation defence" is similar in logic to the efficiency gains well known in competition law.

In practice, however, the efficiency argument alone is never sufficient to justify an anticompetitive merger. This is due to the strict requirements imposed by the law: the gains must be verifiable, directly linked to the transaction and benefit consumers within a reasonable period of

<sup>&</sup>lt;sup>83</sup> French Competition Authority, Guidelines of the Competition Authority on merger control, 23 July 2020, pt 541.

<sup>&</sup>lt;sup>84</sup> M. Draghi, The Future of European Competitiveness, Part B, In-depth analysis and recommendations, p. 299.



time.

These conditions are all the more difficult to meet when the gains claimed are dynamic, i.e. they unfold over time, for example in the form of gradual cost reductions, the creation of new products or the improvement of existing products. Unlike so-called static gains (immediate cost reductions, economies of scale), dynamic gains are based on evolving factors such as research and development. The European Commission equates these dynamic gains with innovation gains, i.e. gains that create value through the introduction of new or improved products onto the market.

Furthermore, prospective analysis of such gains faces a twofold obstacle: on the one hand, their hypothetical nature and long-term nature make them difficult to verify ex ante; on the other hand, data from practice are scarce. Indeed, only cases that have been thoroughly reviewed can give rise to a genuine assessment of efficiency gains. In the majority of mergers, these gains are implicitly assumed to be sufficient, without detailed analysis.

This explains why studies on the subject are based on a limited but particularly strategic sample, especially with a view to reforming the guidelines. New discussions are also underway on taking greater account of dynamic efficiency gains, or even other collective benefits, linked to the ecological transition, industrial sovereignty or the promotion of innovation.

To better integrate the innovation dimension, the traditional approach to competition needs to be adapted. This must first and foremost involve a dynamic rather than a static vision. This perspective raises broader issues than efficiency gains alone, although the two aspects are closely linked. Innovation is not limited to R&D, patents or investment. However, when analysing a merger and efficiency gains, any assessment of the impact of the merger on competition in terms of innovation must include its effects on the merged entity's capacity and incentives to invest. For a broader analysis of the competitive dynamics of innovation in merger law, see Topic C.

This dynamic approach should lead to the introduction of an assessment framework to enable companies to usefully invoke efficiency gains, particularly dynamic efficiency gains. To this end, the guidelines could not only clarify the situations in which these gains cannot be taken into account (negative approach, already present in law), but also define the cases in which they can be taken into account (positive approach). Such clarification would make it possible to better articulate law and economics, offer greater predictability to companies and reduce information asymmetries.

In addition, because the obstacle principle is that of verifiability of gains, a legal lever of efficiency commitments could be introduced. This would involve requiring companies to commit contractually to achieving the efficiency gains they claim, by incorporating them into the corrective measures. This mechanism, which is already used in the United Kingdom<sup>85</sup> and

<sup>&</sup>lt;sup>85</sup> See CMA, 2024, final report Anticipated Joint Venture between Vodafone group PLC and Hustchison Holdings Limited, ME/7064/23, 5 décembre 2024.



supported by the Draghi report, has a twofold advantage: it allows for a thorough ex ante assessment, while making authorisation conditional on the actual realisation of the gains. It thus encourages companies to propose realistic commitments. To reinforce the credibility of these commitments, they could be accompanied by incentive mechanisms such as "crown jewels", which consist of providing for a more costly alternative remedy in the event of non-compliance with the first. By combining constraints and incentives, this method would increase the likelihood of the alleged gains being realised. However, it must be used with caution so as not to discourage companies from proposing potentially beneficial merger projects.

#### General

- F.1. In your/your client's view, do the current Guidelines provide clear, correct and comprehensive guidance on how the Commission assesses merger efficiencies? [One option possible]
  - a. Yes, fully
  - b. Yes, to some extent
  - c. No, to an insufficient extent
  - d. Not at all
  - e. I am not sure
  - F.1.1. [If 'Yes, fully', 'Yes, to some extent' or 'No, to an insufficient extent' or 'Not at all'] Please explain and mention in particular which provisions of the current Guidelines (if any) are not clear or correctly reflecting the objective of assessing merger efficiencies, or what would be missing for the current Guidelines to address this objective.

Several provisions would benefit from clarification. At this stage, and in summary, this mainly concerns Section VII on efficiency gains — in particular the general points (points 76 to 78) — as well as the elements relating to the conditions that must be met for these gains to be validly taken into account by the Commission:

- That they are passed on to consumers (EU Comm., Guidelines on the assessment of horizontal mergers (2004/C 31/03, points 79 to 84)
- They must be specific to the merger (EU Commission, Guidelines on the assessment of horizontal mergers (2004/C 31/03, point 85)
- Whether they are verifiable (EU Commission, Guidelines on the assessment of horizontal mergers (2004/C 31/03, points 86 to 88).
- F.2. In your/your client's view, should the revised Guidelines better reflect how the Commission is assessing merger efficiencies in the overall competitive appraisal of a



merger in relation to the following aspects? Please select the areas that you believe the revised Guidelines should better address [Multiple options possible]

- a. Benefits to consumers [Free text]
- b. Merger-specificity of efficiencies [Free text]
- c. Verifiability of merger efficiencies [Free text]
- d. Other [Free text]
- e. The revised Guidelines should not better reflect any of these areas

## Benefit to consumers

F.3. How should the Commission assess whether merger efficiencies will benefit consumers that would otherwise be harmed by the loss of competition resulting from the merger? In particular, please explain:

According to the current guidelines, the gains must be "to the benefit of consumers" his important to verify that consumers "will not be worse off as a result of the merger" However, for this to be the case, the gains must be "substantial and timely" and materialise for consumers "in those relevant Market", i.e. on the markets where competition problems have been identified The Commission provides two elements. First, it specifies that the more distant the gains are in time, the less weight the Commission will be able to give them. They must therefore occur "in due time" Secondly, the competitive pressure exerted by other companies must be taken into account..

These various provisions should be adapted. It is recognised that dynamic gains are, initially, passed on to businesses, then consumers. This reasoning was, for example, lacking in the *Western Digital* merger<sup>90</sup>. While the Commission recognised that in dynamic, fast-innovating markets, lower production costs could benefit consumers, it made this passing-on conditional on an acceleration in the introduction of new products and/or new production technologies<sup>91</sup>. However, this evidence was particularly hypothetical and, despite the economic studies provided<sup>92</sup>, the Commission considered that the parties had not sufficiently substantiated their claims<sup>93</sup>.

<sup>&</sup>lt;sup>86</sup> EU Commission, Guidelines on the assessment of horizontal mergers (2004/C 31/03, paras. 79 to 84.

<sup>&</sup>lt;sup>87</sup> *Ibid.*, para. 79.

<sup>&</sup>lt;sup>88</sup> *Ibid.*, para. 79.

<sup>&</sup>lt;sup>89</sup> *Ibid.*, para. 83.

<sup>&</sup>lt;sup>90</sup> EU Commission, Dec. 23, 2011, COMP/M.6203, Western Digital Ireland/Viviti Technologies.

<sup>&</sup>lt;sup>91</sup> *Ibid.*, para. 1030.

<sup>&</sup>lt;sup>92</sup> Laprévote F-C., "I Abandon All Hope, ye Who Enter Here?", *Concurrences*, no. 2-2014, pp. 60-71.

<sup>&</sup>lt;sup>93</sup> EU Commission, Dec. 23, 2011, COMP/M.6203, Western Digital Ireland/Viviti Technologies, pt 1031.



This example illustrates that the current approach to passing on efficiency gains to consumers is not suitable for certain types of gains, in particular dynamic efficiency gains. However, this limitation could be overcome through the following amendments:

First, the time horizon for assessment could be re-evaluated from a longer-term perspective, taking into account the speed of change and the length of innovation cycles in the sector concerned (see F.6).

Second, the parties should be able to use different tools and techniques to assess quantitatively whether the alleged efficiency gains will materialize after the merger (see F. 3.d, F3 e and F. 5). Some methods are sophisticated and require a large amount of data, while others are easier to implement. These methods could therefore be used by the parties to support their claims during an investigation, or by competition authorities to validate the accuracy of their analysis and improve the treatment of efficiency claims.

F.3.a For which types of efficiencies and under which conditions will those efficiencies be likely to be passed on to consumers?

The current guidelines therefore highlight the diversity of efficiency gains – which is positive in itself. However, the emphasis is mainly on the reasons why these gains will not be taken into account. This approach, which can be described as "negative", focuses on exclusions, limitations and exceptions rather than on concrete possibilities.

It would be more appropriate to adopt a positive approach, reversing the logic: instead of focusing primarily on what will not be included, it would be more useful to explain what can actually be taken into account as efficiency gains. Even if this list of positive criteria is limited, it would have the merit of providing clear, transparent and constructive guidance.

Without claiming to be exhaustive, several types of dynamic efficiency gains linked to innovation can be identified<sup>94</sup>.

Firstly, dynamic efficiency gains may be linked to research and development activities. Concentration can lead to the combination of several complementary innovation programs through synergies in skills and capabilities or by reducing duplication of R&D. For example, a concentration can lead to a reduction in such duplication when it brings together companies that devote R&D resources to complementary research<sup>95</sup>. This makes it possible to increase

<sup>&</sup>lt;sup>94</sup> Cartapanis M., *Innovation and Competition Law*, Aix-Marseille University, LGDJ, pref. D. Bosco, 2018, pp. 187 et seq.

<sup>&</sup>lt;sup>95</sup> Cassiman B., Colombo M. G., Garrone P. and Veugelers R., "The Impact of M&A in the R&D Process: An Empirical Analysis of the Role of Technological and Market Relatedness", *Research Policy*, vol. 34, iss. 2, 2005, pp. 195-220.



investment in research and development and to increase the efficiency of the resources devoted to it. In some cases, the operation enables a company with obsolete technology to acquire more efficient technology or to combine complementary technologies<sup>96</sup>.

Secondly, dynamic efficiency gains can also be linked to intellectual property rights and the spillover effects of innovation. Firstly, and often described as the "spillover effect", certain gains refer to a company's ability to appropriate the benefits of a successful innovation. However, this ability may depend on how easily a competitor can imitate or replicate the innovation. If, for example, the technology is such that reverse engineering is almost impossible, or if it is covered by intellectual property rights, companies can easily protect their innovations and thus eliminate spillovers to competitors<sup>97</sup>. On the other hand, when the spillovers from innovation are not appropriable, concentration can improve dynamic efficiency by encouraging companies to invest in R&D projects that push back the technological frontier. Next, dynamic efficiency gains can also manifest themselves in the joint exploitation of intellectual property rights, which reduces, for example, the phenomenon of patent entanglements<sup>98</sup>. Finally, improved intellectual property rights enforcement can be classified as dynamic efficiency gains. Small businesses are less likely than large businesses to have the resources to finance legal action to protect their intellectual property rights. According to some studies, the likelihood that a company will take legal action to enforce its patents is negatively correlated with the number of patents held by that company 99. Therefore, when a merger improves the ability of the parties to enforce their intellectual property rights, this is also likely to increase incentives to innovate 100.

Thirdly, according to a Schumpeterian approach to innovation, dynamic gains may arise due to an increase in the size of a company or its financing capabilities. According to Schumpeter, innovation is characterised by a threshold effect below which the probability of discovery is zero<sup>101</sup>, and a larger company, capable of diversifying risks by engaging in several activities, will be more innovative and more inclined to develop complementary projects. In other words, large companies are likely to have more productive innovation activities and greater potential for cost savings or economies of scale<sup>102</sup>. The Commission also acknowledges that vertical mergers can "contribute to aligning the incentives of the parties concerned to invest in new products and new

<sup>&</sup>lt;sup>96</sup> Combe E., Économie et politique de la concurrence, Dalloz, 2<sup>nd</sup>ed., 2020, p. 466.

<sup>&</sup>lt;sup>97</sup> This analysis was conducted, for example, by the European Commission in the *Dow/Dupont* case. Taking these factors into account, the Commission considered that, given the importance of intellectual property rights in the plant protection products sector, the original innovator can be expected to reap the benefits of its innovation by preventing its rivals from imitating the successful innovation (Comm. EU, M.7932, *Dow/DuPont*, 27 March 2017, para. 2001).

<sup>&</sup>lt;sup>98</sup> Lianos I. and Dreyfuss R. C., "New Challenges in the Intersection of Intellectual Property Rights with Competition Law", *Centre for Law, Economics and Society CLES*, UCL, Working Paper Series 4/2013, Apr. 2013, p. 71.

<sup>&</sup>lt;sup>99</sup> OECD, *Dynamic Efficiencies in Merger Analysis*, Policy Roundtables, DAF/COMP(2007)4, 15 May 2008, pp. 55-56. <sup>100</sup> *Ibid.*, p. 56.

<sup>101</sup> Combe E., Économie et politique de la concurrence, Dalloz, 2nded., 2020, p. 475.

<sup>&</sup>lt;sup>102</sup> Lianos I. and Dreyfuss R. C., op. cit., p. 71.



production processes"<sup>103</sup>. For example, in certain cases, such as where the target does not have specific innovation capabilities, the merger may be essential to advance innovation and promote future competition.

To better consider these aspects, we can also examine gains recognized in horizontal or non-horizontal agreements, as certain conditions are common to gains in terms of merger control: the first condition (improvement in production, distribution or technical or economic progress) is similar to the types of gains that are admissible, while the third and fourth conditions correspond to the requirement of specificity and substantiality.

The guidelines on the assessment of Article 101(3) TFEU, updated in 2023, provide an interesting framework with numerous examples. The Commission could draw inspiration from the regulations and texts revised in 2023 on R&D agreements and specialisation agreements<sup>104</sup>. For example, drawing on the R&D guidelines, which state that the introduction of new or improved products must compensate for any price increases or other restrictive effects on competition<sup>105</sup>, and that, as a general rule, an R&D agreement is more likely to generate efficiencies that allow consumers to receive a fair share of the resulting benefits when the parties combine complementary skills and assets, such as research capabilities developed in different sectors or different fields of research<sup>106</sup>.

F.3.b Are there certain types of transactions that, due to their nature or the characteristics of the products or markets involved, are more prone to efficiencies?

We know that concentration can encourage the emergence of large companies, which have significant financial resources, better access to credit and can diversify projects to limit risks. The size of their laboratories also enhances the efficiency of the innovation process. More specifically, several typical cases can be identified, with certain concentrations likely to generate efficiency gains depending on their nature or the sector of activity. More generally to mergers involving highly complementary products or technologies. Mergers involving businesses whose assets, technologies, or capabilities are highly complementary may realise efficiencies more readily, as integration can streamline operations.

Finally, transactions involving complementary R&D activities are likely to generate innovation synergies, know-how sharing and a better allocation of R&D resources (on these issues, see Topic

<sup>&</sup>lt;sup>103</sup> EU Commission, Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, *OJ C* 265/6, 10 Oct. 2008, para. 57).

Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, 2023/C 259/01 and Regulation (EU) N° 2023/1067 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements.

Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, 2023/C 259/01, para. 159.

European Commission, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, 2023/C 259/01, para. 160.



C).

F.3.c How should the Commission establish that the efficiencies (in-market and out-of-market) will benefit substantially the same consumers who might be harmed by the loss of competition resulting from the merger?

We refer to our response to F.3.d.

F.3.d How should the Commission trade off benefits and harm between different consumer groups when efficiencies benefit only a certain group of consumers?

Balancing the effects of a merger on different consumer groups, particularly when efficiency gains benefit only some of them, raises technical questions that fall within both competition law and welfare economics.

From a legal perspective, when assessing the effects of a merger under Regulation No 139/2004, the European Commission must, in particular, assess whether the efficiency gains likely to result from the transaction can offset its restrictive effects on competition.

This requirement raises a particular difficulty when the expected benefits — such as lower costs, improved quality or faster innovation — are only felt by one segment of the customer base, for example a geographically or sectorally defined group. In such a case, the question arises as to whether these gains can nevertheless offset, overall, any deterioration in market conditions for other consumer groups.

The guidelines could accept that substantial gains for one group of consumers are sufficient to offset negative effects for another group, provided that the overall balance is positive and that the positive effects are closely linked to the concentration. This is the whole point of the discussion initiated on so-called 'out-of-market gains' (in some cases, this analysis is necessary, for example in multi-sided markets, where gains must be assessed taking into account several groups of consumers). It would therefore be appropriate to consider revising the guidelines to replace the term 'on the specific market' with 'beyond the harmed group'. Such a reformulation would allow for a more consistent consideration of distributional effects, both within and outside the relevant market, and would help to reduce the arbitrariness associated with the definition of the relevant market in the assessment of efficiency gains<sup>107</sup>. It would also allow the undertaking to provide evidence relating to "future markets". It is well known that when a merger takes place in a changing product market, its impact on the development of future products and on future competition must be assessed (see Topic C). The parties should therefore be able to provide

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<sup>&</sup>lt;sup>107</sup> OECD, Out-of-Market Efficiencies in Competition Enforcement, nov. 2023, n°. 161.



justifications relating to competition through innovation in the current changing market to develop the future product (competition-driven innovation) and competition in the future product market (innovation-driven competition).

In essence, and since the gains must be substantial, i.e. sufficient to offset or even exceed the anticompetitive effects, some countries, such as Australia, require public consultation in merger authorization proceedings, during which the Australian authority can "test" the efficiency gains and seek the views of stakeholders<sup>108</sup>.

Regarding efficiency gains, several factors should be available to the parties, depending on the context of the merger in question. Some of these factors are already well developed(?) in soft law.

For example, the 2023 guidelines on R&D agreements distinguish between concentrations that promise products that create entirely new demand and those that aim to improve the performance of an existing component: in the case of the creation of an entirely new product, the parties may be competitors in terms of innovation, but do not fall within the definition of existing or potential competitors<sup>109</sup>. The balancing of the efficiency gains should therefore consider the low impact of the merger on current competition and focus on future competition. As for mergers aimed at improving existing products, it is known, for example, that the presence of other significant competitors with a good track record of innovation, the short life cycle of the component and the fact that the parties will continue to manufacture and sell the component independently make it likely that the efficiency gains will be passed on to consumers and that the joint venture is unlikely to eliminate competition on the market for the components in question or to eliminate competition through innovation in question<sup>110</sup>.

The parties could also defend their merger by assessing the social benefits of the planned innovations (where possible). To this end, several distinctions could be made.

First, a distinction could be made between whether the gains relate to incremental or radical innovations (or both), since radical innovations generate substantially greater benefits for society than incremental innovations<sup>111</sup>. Second, the general or specialised nature of the planned innovation may play an important role. General-purpose innovations are broad innovations (computers, smartphones, operating systems) that can have a significant impact on an entire industry (or even several industries). They therefore have a very wide range of applications. In

<sup>&</sup>lt;sup>108</sup> See OECD, *Efficiencies in Merger Control*, 2025, 20, ACCC, *Merger assessment guidelines*, June 2025, pt. 7.21; and, for example, ACCC, 2022, MA1000021-1, Application for merger authorisation lodged by Telstra and TPG in respect of the proposed Multi-Operator Core Network commercial arrangements and spectrum sharing.

Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, 2023/C 259/01, para. 170.

Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements, 2023/C 259/01, para. 170.

Cheng T., "Putting Innovation Incentives Back in the Patent-Antitrust Interface", J. of Technology and Intellectual Property, vol. 11, iss. 5, 2013, p. 420.



contrast, so-called specialized innovations may be radical, but their scope of application is more limited. Efficiency gains relating to a general innovation could carry significant weight in the Commission's analysis.

However, such a trade-off requires careful economic assessment based on robust empirical data. While the legal approach paves the way for a comprehensive assessment of the effects on consumers as a whole, its practical implementation requires economic tools that can only be used with the necessary rigor through joint work with economists.

F.3.e How should the Commission trade off benefits that may materialise already in the short term (e.g. product improvements) and harm to consumers that could materialize in the longer run (e.g. entrenchment of an already strong or dominant market position, raising barriers to entry)?

It would be desirable for the Commission to adopt a forward-looking and differentiated approach, based on a rigorous assessment of the likelihood, magnitude and timing of the effects involved.

To this end, it could usefully develop, with a view to legal certainty, a typology of barriers to entry — structural, strategic, regulatory or related to access to data or infrastructure — in order to clarify the criteria that may indicate that a temporary competitive advantage is likely to turn into lasting market power. Such an analytical framework would make it easier to identify situations in which short-term gains cannot justify a structural deterioration in the long-term functioning of the market.

In this regard, the general or specialized nature of the planned innovation may play an important role. General-purpose innovations can have a significant impact on an entire industry (or even several industries). They therefore have a very wide range of applications. In contrast, specialized innovations may be radical, but their scope of application is more limited. Efficiency gains relating to a general-purpose innovation could be an important factor in the Commission's analysis (see F.3 d.). This could affects the trade-off — for instance, given the anticipated impact, short-term gains may not justify the barriers.

Thus, the trade-off to be found depends on the innovation capabilities (and their potential scarcity) that remain among competitors after the merger. The Commission could take innovation capabilities into account in its analysis: if these capabilities are widely shared across market players, the merger is unlikely to have a significant long-term impact. In this regard, the Nvidia–Run:AI<sup>112</sup> merger is illustrative, as the Commission highlighted the innovation capacities of third parties.

<sup>&</sup>lt;sup>112</sup> EU Comm., M.11766, 20 December 2024.



F.4. What metrics, evidence and factors should be used to assess whether cost efficiencies are likely to be passed on to consumers in the form of lower prices? Please explain.

This question calls into question the credibility of the evidence provided by the parties. One of the main difficulties in integrating efficiency gains into the competition analysis is their uncertain or unobservable nature at the time the European Commission takes its decision. This widely accepted observation reflects the forward-looking nature of the assessment: efficiency gains, in particular dynamic efficiencies linked to innovation, are based on future promises whose realization depends on multiple factors.

It would be appropriate for the Commission to define minimum thresholds of evidence using the balance of evidence approach, and the forecasts put forward should be based on several independent sources – at least three, for example.

A useful starting point could be the internal documents of these companies, containing forecasts on the evolution of their innovation strategy. These internal elements could then be corroborated by external sources such as independent reports on sector trends, data on venture capital investment, or feedback from market participants collected through consultations or surveys.

For further information, please refer to our response (see F.5 and Topic C).

- F.4.a Assessment whether costs are variable costs or fixed costs.
- F.4.b Empirical assessment of pass-on from past cost changes.
- F.4.c Remaining competitive pressure (either from existing rivals or potential entry) on the merged entity.
- F.4.d Other (please specify).
- F.5. What metrics, evidence and factors should be used to assess whether consumers benefit from improved goods or services that may result from increased investment and innovation ('innovation efficiencies')?

A thorough economic analysis, which is essential to fully assess the indicators, evidence and factors that should be used to evaluate whether consumers benefit from improved goods or



services that may result from increased investment and innovation, should be carried out.

However, it should be noted that one of the main difficulties in integrating efficiency gains into competition analysis is their uncertain or unobservable nature at the time the European Commission makes its decision. This widely accepted observation reflects the forward-looking nature of the assessment: efficiency gains, in particular dynamic efficiencies linked to innovation, are based on future promises whose realisation depends on multiple factors.

However, this uncertainty is not unique to efficiency gains. The anti-competitive effects of a merger are no easier to anticipate; they are also hypothetical and subject to ex ante assessment. It would therefore be inconsistent to require certainty in one case and not in the other.

In addition to the requirements relating to the credibility of evidence (see our response to F. 4) about the evidence that the parties can provide to demonstrate efficiency gains, several types of documents must be admissible.

To assess whether a merger is likely to generate efficiencies, companies must first identify the critical resources and capabilities necessary for the development of future products and competitiveness in the emerging market (see Topic C). Although the exact form of the future product or market is uncertain, these capabilities already exist at the time of the assessment and can therefore constitute a tangible basis for analysis. For example, merging companies should provide a detailed breakdown of their R&D budget, personnel and facilities, as well as evidence from internal documents relating to the normal course of business, containing their plans, priorities and forecasts.

Thus, as early as the pre-notification phase, the parties must be able to provide evidence of their key resources and capabilities in terms of innovation and competition in the target market. Reports from independent analysts may also provide useful insights. Three types of arguments could be put forward.

First, an analysis of the respective capabilities of the merging companies could help identify possible overlaps (particularly in R& D) or, conversely, their complementarities. In this context, the internal documents of the merging companies should contain a detailed breakdown of R&D budgets and facilities, as well as information from strategic documentation (plans, priorities, forecasts) generated in the normal course of their business.

Secondly, an analysis of the effects of the proposed transaction: the complementarity of activities (particularly R&D), internal documents dedicated to anticipating the concentration and the effects of the merger should contain a detailed breakdown of the combined R&D budgets, the effects of the merger on staff and facilities, as well as elements from the post-merger strategic planning documentation (plans, priorities, forecasts). Internal documents that identify the resources and capabilities necessary for a company's growth. In this context, certain post-merger factors may be decisive: financial capital, such as investor support; human capital; the deployment of



technologies; the importance and size of customers, etc. For example, it is sometimes possible to quantify efficiency gains based on data relating to future investments. To do this, the parties could detail the relevant research and development activities, distinguishing clearly between fundamental and applied research. The more investments are directed towards market-oriented activities – i.e. mainly applied research – the more tangible the efficiency gains can be measured. These activities, which are directly linked to concrete applications, make it possible to anticipate economic benefits that can be observed more quickly.

Thirdly, the parties should be able to provide an analysis of the sector. It is essential to consider several factors that influence the likelihood, nature and timing of efficiency gains. First, the pace of innovation cycles varies considerably from one sector to another: in some areas, such as biotechnology or the pharmaceutical industry, these cycles are long due to research, clinical testing, and regulatory approval phases, which means that gains are realised later. Conversely, in sectors such as digital and information technology, innovation is faster and more continuous, which can allow the expected synergies to materialise earlier. Secondly, the structural characteristics of the markets concerned must be considered in the analysis, in particular network effects (where the value of the service increases with the number of users) or "winner takes all" dynamics, which are common in digital markets. In some cases, these mechanisms can amplify the potential gains from a merger by promoting rapid economies of scale or technological standardization.

However, presenting this evidence requires a delicate balance. As is often the case in economics, the demonstration must be both rigorous and accessible. In this regard, the OECD<sup>113</sup> points out that, although econometric models and quantitative methods can strengthen the probative value of an argument, they require advanced technical skills, which can be a barrier for competition authorities, particularly when it comes to dynamic efficiency gains, for which studies are still imprecise or underdeveloped.

In this context, studies show that pre-merger evidence is generally better received than evidence produced specifically for the purposes of the proceedings. The latter – commissioned studies or expert reports – are often perceived as less objective and therefore less credible. A decision by the European Commission illustrates this scepticism. In the *Ryanair/Aer Lingus* case<sup>114</sup>, the Commission considered that the efficiency gains claimed were not verifiable, judging as "very optimistic" the assumption that Ryanair could fully apply its business model to Aer Lingus, in particular with regard to cost reductions, without reducing service quality or revenues<sup>115</sup>. The General Court of the European Union confirmed this position.

This structural scepticism towards evidence specifically prepared to support a merger is an obstacle to the recognition of efficiency gains. It would therefore be appropriate for the

<sup>&</sup>lt;sup>113</sup> OECD, Efficiencies in Merger Control, 2025, p. 17.

<sup>&</sup>lt;sup>114</sup> Decision COMP/M.4439, 27 June 2007, para. 1151.

<sup>115</sup> Decision COMP/M.4439, 27 June 2007, pt 1133; TEU, 6 July 2010, T-342/07, Ryanair v Commission.



Commission to review its position on this point to relax its evidentiary requirements where the consistency and methodology of studies are established in a serious and transparent manner.

In the longer term, and since analyzing dynamic efficiencies requires effective management of uncertainty, considering the time needed to implement innovation, its chances of success, how it will be disseminated and its ultimate impact on consumer well-being, it is often difficult to quantify. However, as the OECD points out<sup>116</sup>, economic studies on these subjects remain incomplete: "there is still some way to go". There is a lack of empirical analysis of mergers in rapidly changing sectors, such as technology and biotechnology, which would make it possible to update or consolidate existing findings. Furthermore, the diversity of conclusions drawn in the economic literature can often be explained by the variability of the assumptions used in the models or by the specific nature of the industries studied.

Since the direct impact of dynamic gains is difficult to measure immediately, it is proposed to adopt a long-term approach based on ex post observation of actual effects. This could involve setting up periodic ex post reviews of authorised concentrations in the form of systematic audits, which would eventually be incorporated into the Commission's decision-making practice.

Such an approach would have two advantages. It would improve the quality of ex ante analysis by providing empirical data from past experience and validating or invalidating the assumptions made by companies about the efficiency gains put forward in the initial assessment. These studies could be updated and made public, specifying the situations in which dynamic efficiency gains have actually materialised and benefited consumers. Such an approach would enhance the transparency of the Commission's approach to efficiency gains and place merger control in a positive, experience-based evaluation framework. It would ultimately make it possible to introduce an analysis of not only the current welfare of consumers, but also their future welfare (see F6 and F7).

Admittedly, this method entails administrative and methodological costs. It may also be difficult to attribute the realisation (or non-realisation) of gains to a single factor. However, this approach has the advantage of better informing public decision-making by gradually incorporating objective elements into a cumulative database that can be used to refine future assessment criteria.

F.5.a Consumers' willingness to pay as measured by actual purchasing behaviour.

We refer to our response to F5. However, it should be noted that in some cases, analysing demand in terms of dynamic efficiency gains can be difficult, as customers do not yet exist.

F.5.b Consumers' willingness to pay as measured by consumer surveys.

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<sup>&</sup>lt;sup>116</sup> OECD, Efficiencies in Merger Control, 2025, p. 29.



We refer to our response to F.5.a.

F.5.c Benefits from improved zero-priced products/services measured by consumer engagement (e.g. trends in number of users or hours of engagement).

We refer to our response to F.5.a.

F.5.d Other. [Free text]

F.6. What would be an appropriate timeframe for efficiencies to be considered *timely*? Please explain whether this would differ per industry, and indicate under what circumstances this timeframe should be longer or shorter.

The question of the timeframe for realising efficiency gains is crucial. Competition authorities tend to reject dynamic efficiency gains. This is because the European Commission tends to focus on short-term price developments, which means that gains related to non-price competition or innovation will be more difficult to demonstrate. However, unlike some countries, the guidelines do not specify a fixed timeframe, and this flexibility should be maintained.

As for determining a time limit, the economic literature is still uncertain about this type of gain, as academics have conducted less analysis on dynamic gains than on static gains<sup>117</sup>. However, a consensus seems to be emerging: longer time limits than those currently applied should be introduced to take account of dynamic gains. This time limit could be discussed with the parties, particularly in the context of efficiency commitments (see our response to F. 10).

To this end, the focus should shift from protecting consumers' current welfare to their future welfare, as the damage to innovation and future competition is not felt by consumers today but may ultimately limit their choices and benefits.

In practice, the duration to be considered varies greatly depending on the circumstances of each situation and must therefore be determined on a case-by-case basis, considering the expectations of market players. It depends on the characteristics of the sector, the type of technology concerned, and the capacity and scope for innovation. The timing of the merger in the transformation process and the distance from the technological frontier<sup>118</sup> also play important roles: a longer period will be necessary if innovation is still in its early stages, compared to a

<sup>&</sup>lt;sup>117</sup> OECD, Efficiencies in Merger Control, 2025, p. 29.

Aghion P., Bloom N., Blundell, R. Griffith R. and Howitt P., "Competition and Innovation: An Inverted-U Relationship" *The Quarterly J. of Economics*, vol. 120, no. 2, May 2005, pp. 701-728; Scherer F. M., "Market Structure and the Employment of Scientists and Engineers", *The American Economic Rev.*, 1967, pp. 524-531



situation where the transformation is already well advanced. In any case, the time frame must be sufficiently long to cover the entire transformation process, from the current innovation to the emergence of competition in the future market. That said, this period cannot be unlimited, as uncertainty increases with time. In general, and in view of the above, a period of 8 to 10 years could be a reasonable timeframe for assessing the emergence and development of a new market (See Topic C).

F.7. How can competitive benefits and harms accruing in the near future be balanced with competitive benefits and harms accruing in the more distant future? Please explain in particular how to balance situations where the benefits of a merger would only materialise in the more distant future (and to establish that these distant events are likely), while the harm would materialise shortly after the merger.

It is inherent to dynamic competition that there is a risk of short-term harm but benefits in the long-term and then explain why. If sufficient credible evidence that the long-term benefit will happen, it does not have to be a problem. The long-term benefit will be of larger significance than the short-term harm (also Topic C) because of the benefits of innovation to consumer welfare etcIn-depth analysis of dynamic competition is a real challenge and goes far beyond the scope of this Topic.

It should be noted, however, that while the difficulties often stem from an overly static interpretation of competitive behaviour in innovative markets, promoting innovation may involve a trade-off between two forms of competition: static competition, focused on the immediate efficiency of markets, and dynamic competition, geared towards innovation and technological progress in future markets.

However, the simultaneous pursuit of static and dynamic efficiencies can create tensions. In practice, it is not always possible to maximise both forms of efficiency at the same time. Competition law is therefore sometimes forced to choose between these objectives. The intuition is simple: in order to support costly innovation efforts (and thus promote dynamic efficiency), companies must be able to expect high returns on investment, which often implies the possibility of charging prices above those of the competitive market. In other words, there is a payback period during which consumers bear a higher cost in exchange for future benefits linked to innovation.

Similarly, concentration in an innovative sector can confer market power, but it can also enable companies to pool complementary skills and assets, avoid duplication of R&D investment and, ultimately, produce significant innovations.



In this context, the negative effect of reduced competition in the short term may be offset by the benefits of innovation in future competition.

Competition analysis in innovative markets must therefore cover the entire innovation cycle, taking into account ex ante competition, which stimulates initial investment in research, and ex post competition, which occurs after commercialization and enables the diffusion of innovation.

However, this dynamic creates a paradox: excessive competition after innovation (ex post) can discourage investment before innovation (ex ante). If an innovation is immediately copied or challenged by competitors, the company behind it may not reap sufficient benefits to make its efforts profitable. This is why intellectual property rights serve to temporarily limit ex post competition in order to encourage ex ante investment.

To take account of this economic reality, competition law must adopt a resolutely dynamic approach, capable of considering the time lags between investment, innovation and its effects on the market. Such a perspective would make it possible to adjust the analysis, particularly in mergers, according to the potential long-term impact on innovation and consumer welfare (on this point, see Topic C).

# Merger specificity

F.8. How should the Commission assess whether efficiencies are a direct consequence of the notified merger? Please explain in particular which evidence and metrics the Commission could use.

Generally, when the parties invoke dynamic gains, this condition prevents the European Commission from accepting the gains. Indeed, when it comes to innovation, the European Commission generally questions the parties on the improvement of innovation and on the possibility of creating the same incentive through agreements such as the licensing of intellectual property rights or joint ventures. However, it is almost always possible to envisage an alternative, for example, an industrial property licence agreement. For example, in the *Hutchison 3G Austria/Orange Austria* merger<sup>119</sup>, the parties claimed efficiency gains such as cost savings, increased network capacity, greater investment capacity and faster 4G roll-out, enabling Hutchison to modernise its network<sup>120</sup>. However, the Commission found that the evidence presented by the parties was not sufficient to establish that the identified gains were indispensable and specific to the merger, as a roaming agreement would also have made it possible to achieve them<sup>121</sup>. In the known cases<sup>122</sup>, the competition authorities rejected the efficiency gains on the grounds that the parties could still access the know-how and intellectual property rights in

<sup>&</sup>lt;sup>119</sup> EU Commission, Dec. 12 Dec. 2012, M.6497, Hutchison 3G Austria v. Orange Austria.

<sup>&</sup>lt;sup>120</sup> *Ibid.*, para, 404.

<sup>&</sup>lt;sup>121</sup> EU Commission, Dec. 12 Dec. 2012, M.6497, Hutchison 3G Austria v. Orange Austria, para. 418.

<sup>&</sup>lt;sup>122</sup> EU Commission, Comp/M.9409, Aurubis/Mettallo; Comme eur. Dow/Dupont, Comp./M.7932, Comm. eur., Comp/M.6905, Ineos Solvay.



question through licensing agreements rather than through a merger. In other words, the dynamic gains are very unlikely to meet the specificity criterion<sup>123</sup>.

This condition could be relaxed. Dynamic efficiency gains result from an uncertain environment, long-term investments and synergies that are sometimes unpredictable and cannot be fully modelled in advance. They do not follow a linear or immediately observable logic. Requiring proof that only concentration would generate these gains is tantamount to imposing a condition that is difficult to satisfy, if not impossible to prove rigorously in this type of context. This leads to a paradox: the most transformative and beneficial gains in the long term – because they relate to innovation and structural competitiveness – are also the most difficult to accept within the framework of overly strict reasoning.

A more flexible approach should therefore be adopted, based on a probabilistic and forward-looking analysis that takes into account the potential of concentration to stimulate innovation, without requiring absolute proof of the absence of alternatives. This would allow dynamic efficiency considerations to be better integrated into merger control, while maintaining a rigorous assessment framework that is compatible with the objectives of preserving competition.

F.9. How should the Commission assess whether efficiencies cannot be achieved to a similar extent by less anti-competitive alternatives?

We refer to our response to F4 and F5. It would therefore be desirable to adopt a more flexible approach, based on a forward-looking and probabilistic analysis, which recognises the potential of mergers to foster innovation, without requiring absolute proof of the absence of alternatives. Such an approach would allow for a better consideration of dynamic efficiency issues in merger assessment, while maintaining a rigorous framework consistent with the objectives of protecting competition.

F.9.a In particular: How should the Commission take into account less anticompetitive alternatives of a non-concentrative nature (e.g. a licensing agreement, a cooperative joint venture or a network sharing) and a concentrative nature (e.g. a concentrative joint venture, or a differently structured merger)?

This condition could be relaxed. Dynamic efficiency gains result from an uncertain environment, long-term investments and synergies that are sometimes unpredictable and cannot be fully modelled in advance. They do not follow a linear or immediately observable logic. Requiring proof that only concentration would generate these gains is tantamount to imposing a condition

<sup>&</sup>lt;sup>123</sup> OECD, Efficiencies in Merger Control, 2025, p. 23.



that is difficult to meet, if not impossible to prove rigorously in this type of context. This leads to a paradox: the most transformative and beneficial gains in the long term — because they relate to innovation and structural competitiveness — are also the most difficult to accept within the framework of overly strict reasoning (see our response to F8).

F.9.b In particular: How should the Commission assess whether a less anticompetitive alternative is reasonably practical and what market circumstances might impact that assessment?

We refer to our response to F4 and F5.

# Verifiability

F.10. How should the Commission ensure that the efficiencies claimed by the parties are verifiable and likely to materialise? Please explain in particular what evidence and metrics the Commission could use.

The verifiability of gains requires, in positive law, that the Commission be certain that the realisation of these gains is probable, which implies that they are precise, convincing and quantified<sup>124</sup>.

It would be appropriate for the Commission to define minimum standards of proof using the 'body of evidence' approach, and the forecasts provided should be based on several independent sources – at least three, for example.

A useful starting point could be the internal documents of these companies, containing forecasts on the evolution of their innovation strategy. These internal elements could then be corroborated by external sources such as independent reports on sector trends, data on venture capital investments, or feedback from market participants collected through consultations or surveys. Please refer to the section on evidence and audits above.

Where possible, companies could corroborate their claims with evidence related to the planned innovation. For example, it is possible to measure the social benefit of a process innovation when it manifests itself in reduced production costs. As for product innovation, its benefits stem from the additional amount that consumers are willing to pay for the new product.

The guidelines could also clarify the possibility of including efficiency gains in the design of

<sup>&</sup>lt;sup>124</sup> EU Commission, Guidelines on the assessment of horizontal mergers, 2004/C 31/03, para. 86.



corrective measures. This is also the thrust of the Draghi report, which mentions the possibility of including innovation commitments, particularly in terms of investment levels. These corrective measures or commitments would therefore make it possible to guarantee that the gains are possible (since the party is making a commitment) and that they will materialise (since the party will comply with the remedies) (See answer to F5). This can be a particularly useful guarantee when the claimed gains are likely but difficult to quantify or when they depend on incentives from companies, which, as we know, can fluctuate over time<sup>125</sup>. This possibility of designing remedies that include efficiency gains is already applied in the United Kingdom. The CMA effectively applies this option. For example, in the Vodafone/Three merger, the concentration was authorised subject to legally binding investment commitments for the alleged gains, in this case network integration, but with a delay in implementation (eight years). The parties therefore committed to deploying and integrating the network<sup>126</sup>.

The proposal appears promising in that it involves both a thorough *ex ante* assessment of a merger and subjecting it to the satisfaction of the efficiency gains claimed by the parties within a more or less long period of time. It would also have an incentive effect, since, under threat of sanctions, companies would be encouraged to propose credible gains<sup>127</sup>. However, the question remains as to what sanctions should be imposed if the commitments are not fulfilled or if the gains are not achieved. In this regard, the report refers to "adequate deterrent measures" to encourage companies not to deviate from their commitments. What does this mean? If the measures envisaged involve calling into question the authorisation decision, caution should prevail. In addition to the many difficulties posed by the annulment of an authorisation decision, the uncertainty generated by the possibility of annulment may prevent the parties from fully committing to realising the gains. When a merger is aimed at integrating two previously separate entities, synergies and gains can only be realised if the merger is final. It is difficult to imagine that a company would invest significant resources in combining complementary R&D or production programmes if it were threatened with the dissolution of those investments.

Such commitments or remedies could therefore be accompanied by existing tools, such as the *crown jewels* method. These alternative remedies, which are more costly for the company, may be replaced by a subsidiary commitment that is "at least as good as the first in terms of creating a viable competitor [but] will not give rise to any uncertainty as to its implementation and can be implemented quickly"<sup>128</sup>. The *crown jewels* mechanism is a means of compensating for information asymmetries by encouraging companies to make every effort (i.e. according to an obligation of means) to achieve the projected gains<sup>129</sup>. Like alternative solutions, or even "two-step" commitments, *crown jewels* act both as a threat of more rigorous commitment and as a signal of

<sup>&</sup>lt;sup>125</sup> OECD, Efficiencies in Merger Control, 2025, p. 15.

<sup>&</sup>lt;sup>126</sup> See CMA, 2024, final report Anticipated Joint Venture between Vodafone group PLC and Hutchison Holdings Limited, ME/7064/23, 5 December 2024.

On this issue, see Brodley J. F., "The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress," *New York University L. Rev.*, vol. 62, 1987, p. 1048.

<sup>&</sup>lt;sup>128</sup> ADLC, Guidelines of the Competition Authority on merger control, para. 45.

<sup>&</sup>lt;sup>129</sup> OECD, Mergers: Remedies, DAF/COMP/WP3/WD(2011), 28 June 2011.



confidence in the initial commitments proposed<sup>130</sup>.

F.11. How can merger efficiencies, in particular when it comes to non-price efficiencies, be identified and quantified? Please explain to what extent merger efficiencies need to be quantified for the Commission to conclude that they will outweigh the competitive harm, and how.

Admittedly, the European Commission takes into account gains that are difficult to quantify, provided that they are identifiable and their effect is not marginal<sup>131</sup>. Nevertheless, this requires, at the very least, that sufficient and accurate information be provided to support the alleged efficiency gains<sup>132</sup>. However, by their very nature, dynamic efficiency gains pose a measurement problem: dynamic effects will occur – if they occur – over several periods and may be more abstract in nature than static effects. Consequently, methodological difficulties are inherent in the nature of the control exercised. In the case of a merger, the demonstration is necessarily prospective. The verifiability of the evidence provided is therefore another limitation to the consideration of dynamic efficiency gains in mergers, as it is impossible to predict how the parties will behave in terms of innovation.

However, it is known, for example, as recognised by the French competition authority, that an increase in the financial resources devoted to R&D is indeed "likely to increase the probability of obtaining results and, in so doing, the probability of passing on gains to consumers", since, by its very nature, the contribution of R&D investment to economic progress is always difficult to assess given the uncertainties inherent in research<sup>133</sup>.

Therefore, much of the evidence developed in response to question F5 can be provided. For example, the quantification of efficiency gains can be based on the analysis of data relating to future investments. To do this, it is essential to detail precisely the research and development (R&D) activities concerned and, where appropriate, to make a clear distinction between fundamental research and applied research. The more investments are directed towards market-oriented R&D activities, particularly applied research, the easier it is to measure the expected efficiency gains in terms of productivity, profitability or economic impact.

Beyond that, it is also possible to consider including efficiency gains in the design of corrective measures so that the parties commit to achieving them (see our response to F.10).

<sup>130</sup> Couard J., "La technique des joyaux de la couronne en droit des concentrations", RTD com., Apr.-June 2011, p. 202.

<sup>131</sup> EU Commission., Guidelines on the assessment of horizontal mergers, op. cit., pt. 86.

<sup>132</sup> OECD, Dynamic Efficiencies in Merger Analysis, op. cit., p. 62.

<sup>&</sup>lt;sup>133</sup> French Competition Council, Opinion No. 05-A-01, relating to the acquisition of Laboratoires Dolisos by Boiron, 7 January 2005.



F.12. Based on what evidence and metrics can the Commission alleviate uncertainties as to the implementation of efficiencies, in particular when they will not materialise in the very short term?

We refer to our response to F.10 and F.11.

- F.13. What evidence should be taken into account to verify efficiencies? Please select the evidence that you believe is relevant and substantiate your reply, especially pointing out specific challenges in the assessment of such evidence. [Multiple options possible]
  - a. Internal documents, including those used by management to decide on the merger.

Evidence existing prior to the transaction (internal, historical or public data) should generally be considered relevant (we refer to our response to F5).

As previously indicated, an examination of the Commission's decisions shows that evidence produced specifically for the transaction, such as studies or expert reports commissioned by the parties, is often rejected because it is considered less reliable or impartial<sup>134</sup>. This structural scepticism towards evidence specifically prepared to support a merger is an obstacle to the recognition of efficiency gains. It would therefore be appropriate for the Commission to review its position on this point in order to relax its evidentiary requirements where the consistency and methodology of studies are established in a serious and transparent manner (see F.5).

b. Statements from management, owners and financial markets about expected efficiencies.

We refer to our response to f.13.a.

c. Historical examples of efficiencies and consumer benefit.

This method of proof is certainly not without its limitations, insofar as it is based on an analysis of future effects using past data. Nevertheless, as mentioned above (see F.5), we believe that, given the current state of economic literature, it is the most relevant method for assessing dynamic efficiency gains.

d. Pre-merger external experts' studies on the type and size of efficiency gains and

<sup>&</sup>lt;sup>134</sup> OECD, Efficiencies in Merger Control, 2025, p. 28.



on the extent to which consumers are likely to benefit.

These elements could corroborate, within the framework of the bundle of indices method, the other evidence provided by the parties (see F.4).

e. Economic models, including those investigating the merging parties' and their rivals' ability and incentives to invest and innovate.

The answer to this question requires specific economic expertise, which the author of this paper, as a lawyer, cannot claim to have. However, as is often the case with economic evidence, the exercise relies on a delicate balance: it is necessary to put forward solid and convincing arguments, while ensuring that they are accessible and understandable to the competition authorities. The OECD rightly points out that econometric models and quantitative methods, although they can provide significant probative value, require a certain level of technical expertise. This can be challenging, particularly when it comes to dynamic gains, for which projections are often more uncertain or less directly measurable. Nevertheless, this observation does not call for abandoning the use of economic evidence, but rather for an educational and gradual approach, where economic tools are used in a proportionate manner, closely linked to market realities and the authority's assessment capabilities. A clear demonstration, even if based on complex assumptions, can be entirely convincing if it is well structured and contextualised (on this issue, which links to the broader issue of dynamic competition, please refer to Topic C).

f. Other.

F.13.f If you have indicated 'Other', please specify.