

## **1 Introduction**

- 1.1 We welcome the opportunity to respond to the Commission's consultation as part of its review of the Horizontal Merger Guidelines and the Non-Horizontal Merger Guidelines (together the 'Merger Guidelines').<sup>1</sup> We advise clients on a range of competition economics matters, including in the context of merger investigations.
- 1.2 The assessment of mergers in dynamic markets (i.e., where innovation is an important parameter of competition) has been the most debated topic in merger control for a number of years. As highlighted by the publication of the Draghi Report on The Future of European Competitiveness ('Draghi Report'),<sup>2</sup> getting merger control right in relation to incentives to innovate is of central importance for the growth and productivity of the markets under the Commission's jurisdiction. In this submission we focus on the assessment of mergers in dynamic markets (broadly, topics C and E in the Commission's consultation).
- 1.3 In the rest of this response, we cover in turn: the assessment of the impact of horizontal mergers on innovation; the assessment of the impact of non-horizontal mergers in dynamic markets; and the assessment of the Commission's novel 'entrenchment' theory of harm (which has been discussed in the context of digital platform markets).

## **2 Topic C: Innovation and other dynamic elements in merger control (horizontal effects)**

- 2.1 The Commission's 'Topic C' consultation document invites comment on several questions, largely focused around the impact of mergers on innovation. While the document refers to both horizontal and vertical mergers, the Technical Background that the Commission includes in the document relates largely to horizontal mergers, and so we first focus on horizontal mergers in this section of our response.
- 2.2 In its consultation document, the Commission summarises the four-layer framework it has developed for assessing the competitive effects of horizontal mergers on innovation, identifying harm that can arise at four different stages of the lifecycle of innovation, spanning existing products, more or less advanced pipeline products, through to an overall loss of innovation competition not focussed on any specific pipeline products. We broadly agree with how this framework characterises the potential sources of harm to innovation that can arise from a horizontal merger, and it will be helpful for the revised Merger Guidelines to reflect this framework formally.
- 2.3 In our view, the crucial and less settled debate is the way in which economic evidence is used to assess how, in fact, a specific merger is likely to affect innovation in these different stages of the innovation lifecycle identified in the Commission's framework. We focus in this section of our

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<sup>1</sup> [Horizontal Merger Guidelines](#) and the [Non-Horizontal Merger Guidelines](#) ('Merger Guidelines'), EC, 2004 and 2008 respectively.

<sup>2</sup> [The Draghi report on EU competitiveness.](#)

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response on some key points which we think should be reflected in the revised Merger Guidelines in relation to this economic assessment.

### **The distinct nature of innovation competition**

- 2.4 The appropriate economic evidence and assessment will differ, depending on which stage of the innovation lifecycle the Commission is considering. Specifically, harm arising from overlaps at the latter stages (existing products or advanced pipeline products) can be assessed in a way that is significantly analogous to price competition, where the form of economic assessment is more settled and well-established. The same cannot be said, however, for harm arising from a potential loss of overall innovation competition. Assessing the impact of a horizontal merger on overall incentives to innovate requires instead an economic assessment which recognises the distinct nature of innovation competition. We provide some observations which we think are important for the Commission to consider in this regard, in the revised Merger Guidelines.
- 2.5 Innovation can be considered as including all R&D activities targeted at improving current products as well as discovering and developing new products, which overall improve the perceived value of these products by customers. These R&D activities can differ significantly across markets, and the revised Merger Guidelines could provide a discussion which recognises the breadth of R&D activities that may be undertaken, their different characteristics and how that impacts the assessment and relevant evidence.
- 2.6 In some markets, for example, product or service innovation arises out of the work done in research facilities by specialists. This is the case for example in the pharmaceutical or agro-chemical sectors. In these circumstances, R&D expenditure is typically high,<sup>3</sup> and can be characterised as an endogenous sunk cost.<sup>4</sup> These R&D activities can often have longer lead times in bringing products to market. Innovation can, however, also take different forms. It may, for example, be introduced as more gradual product or service improvements in the normal course of business. This may be the case in some digital markets where improvements are indeed often more gradual or even almost continuous, and innovation can often have shorter lead times in bringing products to market.
- 2.7 In order to assess correctly the effects of a horizontal merger on the amount of innovation an industry will produce, it is crucial to understand and take into account the nature of the processes leading to an innovation. This is important, as understanding what drives incentives to innovate is key to evaluate correctly certain pieces of economic evidence. In what follows, we give two examples of how particular pieces of economic evidence need to be considered carefully and in a way that is different from the standard methodologies applied to assess the loss of price competition.

### **Implications for Evidence: Market Shares**

- 2.8 Market shares are often used by the Commission as a prima facie indicator of market power, and this has been the case in merger cases where the Commission has considered the impact of a

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<sup>3</sup> R&D/Sales ratios are published across sectors and can be a good guide of the relevance of this parameter of competition.

<sup>4</sup> For an introduction to this topic, see Sutton, John. *Technology and market structure: theory and history*. MIT press, 2001. Sutton builds on the empirical observation that markets that are more concentrated tend to be associated with higher levels of R&D expenditure to construct a framework that explains how innovation and market structure are jointly determined.

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horizontal merger on innovation.<sup>5</sup> The Commission has helpfully broadened its consideration of concentration metrics in dynamic markets, to include other metrics that might be more directly relevant for assessing competitive strength in innovation (e.g., shares of patents and shares of staff focussing on R&D).<sup>6</sup> We welcome the use of a broader range of metrics, and these provide helpful insights into, for example, the relative strength of merging parties and their competitors. Nevertheless, these metrics remain measures of concentration, and as such it is important to consider how evidence on concentration should be viewed in dynamic markets.

- 2.9 The form that innovation takes (as discussed above) has an important bearing on how relevant or reliable market shares (or other concentration metrics) are likely to be in the assessment of the impact of a horizontal merger on innovation. Specifically, in those industries where R&D expenditure can be characterised as an endogenous sunk cost (see paragraph 2.6), market structure will *jointly evolve* with firms' R&D spending, over the same time period when a merger may have an effect. This happens in some industries where greater intensity in competition to innovate drives firms to invest more in R&D expenditure. This, in turn, for a market of fixed size, will ultimately create a lower bound for the level of concentration that can be expected to profitably be sustained.<sup>7</sup>
- 2.10 Concentration therefore cannot simply be treated as an *exogenous* determinant of market outcomes, and may not provide a reliable indicator of market power. Instead, concentration itself is an *endogenous* outcome of the competitive process. Depending on the specificities of the market and the underlying technology, fierce innovation competition can be associated with either *high or low* levels of concentration.
- 2.11 In our view, the revised Guidelines should recognise that there are industries where intense competition in innovation can drive consolidation (and therefore concentration). Understanding whether this is the case in the particular industry under examination is an important step for the Commission to take in order to come to a reliable view on the pertinence (or lack of pertinence) of market share (or concentration) information in assessing the impact of a horizontal merger on innovation.

### **Implications for Evidence: Changes in R&D Spend**

- 2.12 A further category of economic evidence that has been used by the Commission to assess the impact of a horizontal merger on innovation is the merging parties' levels of R&D spend.<sup>8</sup> Information on R&D spend has been used both to gauge the importance of innovation in a market and to understand how a horizontal merger might affect innovation.<sup>9</sup> The latter has been done by considering the plans that merging parties might have to reduce or redirect R&D spend post-merger (using internal documents, for example). Where there is evidence that the merged entity would reduce its R&D spend compared to the two merging parties' spend combined pre-merger, this has often been taken as evidence that the horizontal merger would reduce innovation.<sup>10</sup> In these instances, evidence of planned reductions in R&D spend have been treated by the

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<sup>5</sup> See e.g., cases M.7932 – Dow / Dupont, M.9461 – Abbvie / Allergan, M.9554 – Elanco Animal Health / Bayer Animal Health Division, and M.11177 – Pfizer / Seagen as referred to in footnote 35 of the Topic C document.

<sup>6</sup> See e.g., case M.7932 – Dow / DuPont, Annex 1 of the decision, M.8084 – Bayer / Monsanto, and M.11177 – Pfizer / Seagen as referred to in footnote 36 of the Topic C document.

<sup>7</sup> See Sutton, J. (1998) *Technology and Market Structure*, MIT Press.

<sup>8</sup> See e.g., case M.7932 – Dow / DuPont, recital 3263.

<sup>9</sup> See e.g., case M.7932 – Dow / DuPont, Figure 100.

<sup>10</sup> See e.g., case M.7932 – Dow / DuPont, recital 3263.

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Commission in a similar way to how it would treat evidence of plans to increase prices as a result of the merger – i.e., strong evidence that a horizontal merger will reduce competition.

- 2.13 However, unlike prices, R&D spending has no direct effect on consumer welfare. Rather, it is the innovation that flows from R&D activities that matters. In order to compete most effectively, firms would typically want to be as innovative as possible, but to do so most efficiently from a cost (i.e., R&D spend) perspective. This should add an additional layer of complexity in interpreting evidence on post-merger R&D spending plans. A horizontal merger might affect the level and direction of R&D spending, and might also alter the underlying relationship between R&D spend levels and how much innovation that spend produces (through synergies, etc). It is very likely that there will be mergers where the merged entity may be able to reduce R&D spend overall (compared to the sum of the spend of the pre-merger firms), but nevertheless can achieve greater levels of innovation (than the sum of the pre-merger firms), and thereby be a stronger competitor.
- 2.14 The approach to dealing with such complexity has generally been to assess these issues within the analysis of ‘efficiencies’, for which the merging parties bear the burden of proof. However, it is far from clear that merging parties have access to the necessary information pre-merger to successfully demonstrate or quantify such efficiencies to the level that would be required to offset concerns identified as part of the competitive assessment. This shouldn’t be taken, however, as an indication that such synergies – in relation to R&D spend – do not exist, rather it is symptomatic of the highly sensitive nature of the relevant information for their quantification. Instead of pushing the assessment to an ‘efficiencies’ part of an assessment, we would argue that because the outcome of interest is *innovation itself* (not R&D spend levels), some analysis of the relationship between R&D spend levels and innovation – and crucially any changes resulting from the merger – should be undertaken within the competitive assessment itself. Certainly, relying on R&D spend levels as a prima facie indicator of competitive outcomes as a result of a horizontal merger, without engaging with the relationship between those spend levels and the resulting innovation, would in our view be misleading and risk over intervention against potentially pro-competitive mergers.
- 2.15 It is important, therefore, in our view for the revised Merger Guidelines to explicitly recognise that, as well as incentivising firms to invest in R&D spend to be as innovative as possible, competitive processes generate incentives to reduce the cost associated with producing innovation (i.e., to be as efficient as possible). As a result, mergers can deliver synergies that can increase the level of innovation output per euro spent. It seems to us that a holistic assessment of whether a merger might increase or decrease innovation in the market could be conducted within the competitive assessment to provide the best context to minimise both false positives and false negatives.

### **3 Topic C: Innovation and other dynamic elements in merger control (vertical effects)**

- 3.1 The existing Non-Horizontal Merger Guidelines recognise innovation as one non-price parameter of competition that should be considered when assessing vertical effects, as outlined in the ‘Topic C’ consultation document.<sup>11</sup>

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<sup>11</sup> Topic C consultation document, paragraph 54.

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- 3.2 It is our view that these aspects of the Non-Horizontal Merger Guidelines should be preserved in the revised Merger Guidelines. In particular, we would emphasise the importance of continuing to apply the structured 'ability, incentive and effect' framework for assessing the impact of non-horizontal mergers on competition, regardless of whether dynamic or static parameters of competition are more important in any particular market.
- 3.3 How that framework is then implemented (for example, in terms of the types of foreclosure that may be most relevant, and the evidence that is most pertinent) will, however, vary depending on the specific parameters of competition that are most relevant. In that regard, the Commission may want to give more clarity to how such a framework will be implemented when cases concern those dynamic markets where quality and innovation are the key parameters of competition. In such situations, which have been common in recent cases, the Commission should make clear in its revised Merger Guidelines how it will approach the competitive assessment.
- 3.4 We provide our thoughts on this issue regarding three aspects of the competitive assessment: mechanisms of foreclosure, the assessment of a foreclosure theory of harm, and the treatment of efficiencies in such cases.

### **Mechanisms of vertical foreclosure in dynamic markets**

- 3.5 Vertical foreclosure in some dynamic markets – those where price is a less important parameter of competition – may be more likely to occur through 'non-price partial foreclosure'. That is, rather than via price increases, a foreclosure strategy may instead be affected through non-price mechanisms. Further, foreclosure through non-price mechanisms may in some instances be achieved through more subtle and gradual (and therefore 'partial') strategies, rather than withdrawing access outright for example. Examples of these might include the merged entity reducing the degree to which rivals can interoperate with its own software, or the merged entity creating delays in rollouts of improvements in technologies to rivals, thereby raising their costs or making their products less attractive to consumers.
- 3.6 The more the revised Merger Guidelines can provide examples of mechanisms it considers to be most relevant in different types of market, the more the revised Merger Guidelines will be of use to merging parties in reducing the uncertainty of whether their transaction is likely to be cleared. Of course, specifying in the revised Merger Guidelines a complete list of possible foreclosure strategies will not be possible (or desirable). What is, therefore, in our view critical (and should be reflected in the revised Merger Guidelines) is that the Commission's assessment in each case is clear about the specific foreclosure mechanisms that it has in mind – even if these are novel mechanisms.

### **Assessing foreclosure theories of harm in dynamic markets**

- 3.7 As set out above, in our view, the ability, incentive, effect framework remains the right one for assessing foreclosure theories of harm, and should be at the heart of the revised Merger Guidelines for assessing non-horizontal mergers, even in dynamic markets.
- 3.8 Historically, a quantitative 'vertical arithmetic' has been conducted as part of the assessment under this framework, in order to test whether the costs and benefits of pursuing a foreclosure strategy provide the Merged Entity with an incentive to do so. A vertical arithmetic calculation is, however, harder to implement in a world of partial, non-price foreclosure (compared to total, price foreclosure). For example, evidence would be required on both the extent to which a change in the quality of the upstream product affects the quality of the downstream product and also the

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elasticity of demand for these (partial and gradual) changes to the downstream product quality. This is further exacerbated by the fact that in dynamic markets, the products both upstream and downstream are evolving over time. As such, historical evidence on margins and diversion ratios, which the current Merger Guidelines emphasise, may be less informative of future market conditions than would be the case in less dynamic markets.

- 3.9 Nevertheless, as far as possible, in our view the Commission should still seek to test quantitatively whether there is an incentive to foreclose, and it would be helpful for the revised Merger Guidelines to make reference to this. The vertical arithmetic exercise enables the costs and benefits of foreclosure to be assessed in a structured way – which is crucial if the Commission is to fully establish an incentive to foreclose. This needn't involve the Commission ascribing 'false precision' to the vertical arithmetic calculations in dynamic markets, which are likely to be highly uncertain. Rather, it should allow the Commission to impose a useful discipline in highlighting the key factors upon which the success of a foreclosure strategy for the Merged Entity hinges.
- 3.10 In this context, qualitative evidence, such as the Parties' internal documents and third-party views (competitors and customers), are likely to be relied upon to a greater extent in some dynamic markets. In our view, this evidence will be most valuable and will be used most reliably, when used within the ability, incentive and effect framework, and specifically in order to target information on the costs and benefits of pursuing a foreclosure strategy for the merged firm. Limited weight should be placed on general third-party views (e.g. regarding the merger overall) or third-party views on aspects that they are not in a good position to judge (for example, competitor views on incentives of the merged firm).
- 3.11 To assess the incentives to foreclose for example, this might require the use of highly targeted third-party questionnaires, seeking estimates from competitors and customers of diversion under the specific foreclosure mechanisms being investigated. In addition, information regarding future market conditions may be available from the parties' deal rationale, valuation and synergies analysis; commercial due diligence, for example in relation to the potential competitive strength of rivals, including in relation to new products or markets; or from internal modelling to assess the profitability of large R&D projects. Targeted information requests to competitors (e.g. for recent documents containing entry and expansion plans) can potentially be a valuable source of evidence in dynamic markets.
- 3.12 The revised Merger Guidelines could reflect the need for qualitative information, including in a dynamic setting, to be targeted at answering the specific questions relevant for assessing a potential foreclosure strategy, within a clear ability, incentive and effect framework.
- 3.13 Even within this framework, in our view, it is likely that where novel, non-price, partial foreclosure strategies are the relevant ones, it may be harder for the Commission to conclude with as high a degree of certainty about the incentives of the merged firm. It is simply likely to be easier to assess, for example, diversion to competitors in response to a foreclosure strategy in a market that is relatively static and where firms largely compete on price. The Guidelines could helpfully reflect that the level of certainty might be different in different markets, as this is something that the Commission needs to grapple with when forming its overall decision on any particular merger.

### **Treatment of efficiencies in vertical (dynamic) foreclosure cases**

- 3.14 The Non-Horizontal Merger Guidelines recognise that most vertical mergers are less likely to significantly impede effective competition than horizontal mergers, given they do not entail a loss of direct competition and the substantial scope for potential efficiencies. We would argue that

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such references should be retained in the revised Merger Guidelines, and are just as applicable in the context of dynamic markets.

- 3.15 Despite this general recognition of the scope for significant efficiencies in non-horizontal mergers, the burden of proof falls on the merging parties to demonstrate the efficiencies that arise as a result of the transaction. In a static setting, where, for example, price is an important parameter of competition, it might be relatively more straightforward for merging parties to provide evidence on, for example, cost efficiencies and the removal of double margins. In a dynamic setting, however, efficiencies might take the form of the impact of the merger on future product development and synergies in R&D pipelines. As discussed in paragraph 2.14, such information is likely to be the most commercially sensitive in nature. In our experience, it is highly challenging for merging parties to provide evidence of a sufficient quality and surety to meet the burden of proof imposed on them by the EC in a merger review, when efficiencies are of this nature.
- 3.16 In our view it is important that the EC considers this challenge in its review of the Guidelines, and considers a more flexible approach to the evidence it requires on efficiencies in vertical mergers in dynamic markets, to ensure it is not overly prohibitive. Given the general scope for efficiencies to be more relevant in vertical mergers, it is important that the EC does not make the bar too high for beneficial mergers, which produce efficiencies to be allowed.
- 3.17 This is all the more important given the uncertainty that is likely to surround the competitive assessment itself as discussed above. It is important that uncertainty is factored in consistently across the competitive assessment and the assessment of efficiencies, and in our view the revised Merger Guidelines should explicitly recognise this.

## **4 Topic E: Digitalisation**

- 4.1 The 'Topic E' consultation document invites stakeholders to reflect on how digital transformation has shaped the Commission's recent approach to both horizontal and non-horizontal competition concerns. Many of these considerations echo the themes we have already explored, particularly around innovation—so pivotal in the digital realm—and its implications for merger assessment. What is especially noteworthy, however, is the 'Topic E' consultation document's focus on an 'entrenchment' or 'ecosystem' theory of harm,<sup>12</sup> a theory of harm which the Commission has deployed most notably in Booking/eTraveli as well as Amazon/iRobot. We focus our comments in the rest of this section on the use of an ecosystem / entrenchment theory of harm.
- 4.2 An explicit ecosystem theory of harm is a comparatively new development. As such, it will be important for the revised Merger Guidelines to provide as much clarity as possible about when this theory of harm will be used and how. A broad range of behaviours and concerns is already captured by existing horizontal and non-horizontal theories of harm. The revised Merger Guidelines could, therefore, set out the types of evidence the Commission will use to assess the particular features of the firms, products and markets in question, in order to come to a view on those (in our view likely limited) circumstances when these existing well understood theories of harm are not appropriate. Doing so will provide benefits in terms of the predictability of decisions and the ability of merging parties (and other market participants) to effectively engage with the Commission's analysis.

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<sup>12</sup> Topic E consultation document, paragraphs 82, 87-89.

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- 4.3 In terms of assessing an ecosystem theory of harm, the Commission's report 'Competition Policy for the Digital Era'<sup>13</sup> (the "**Digital Experts Report**") provides a starting point for framing this theory of harm, which we think the revised Merger Guidelines could helpfully reflect. It will then be particularly important for the revised Merger Guidelines to expand on the evidence and analysis that the Commission might rely on in order to establish certain core elements of the theory. In particular:
- a) As explained in the Digital Experts Report, the theory of harm relies on the strengthening of dominance, "*because new services add value to consumers for which they are complements, and help retain other users for which they are partial substitutes.*"<sup>14</sup> It will be important, therefore, to establish robustly how **consumer preferences** operate in a way that fortifies dominance. With this in mind, the revised Merger Guidelines could helpfully expand on how the Commission will use evidence to test, for example, the nature of the products, the extent to which they are complements, substitutes or neither, the extent to which consumers are likely to multi-home or alternatively to value the network properties of consuming the target product within the dominant firm's ecosystem, among other factors.
  - b) In order for the ecosystem theory of harm to be of concern it needs to have an **appreciable effect on the core market**. However, for this to happen, the asset that the acquirer has purchased needs to be one for which the acquirer's core market rivals do not have access to a credible alternative. If rivals in the core market have access to a similar asset or are able to replicate the functionality, offering, or benefits of the asset, it is difficult to see how the merger could lead to appreciable barriers to entry or expansion and a consequent increase in dominance of the merged entity. Again, the revised Merger Guidelines could helpfully reflect this.
  - c) Finally, but most importantly, as set out very clearly in the Digital Experts Report<sup>15</sup>, the mechanisms which might give rise to an ecosystem theory of harm may also create **substantial efficiencies**. Dominance in a core market might be entrenched as a result of consumers valuing the ability to utilise the target's product within the dominant firm's ecosystem – implying necessarily that there are significant advantages to consumers from doing so. Disentangling these benefits for consumers from potential longer-term concerns about entrenching a dominant position should be at the heart of the Commission's assessment. It is therefore crucial that, to the extent that they include reference to an ecosystem theory of harm, the revised Merger Guidelines explicitly recognise the need to avoid creating an 'efficiency offence' and avoid prohibiting pro-consumer mergers. The more the revised Merger Guidelines can explain how the Commission will weigh efficiencies against longer term competitive harm in its assessment of an ecosystem theory of harm, the better placed merging parties will be to provide the relevant evidence.

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<sup>13</sup> Competition policy for the Digital Era (2019), Cremer et al, pages 121, 122 and 123.

<sup>14</sup> Competition policy for the Digital Era (2019), Cremer et al, page 121.

<sup>15</sup> Competition policy for the Digital Era (2019), Cremer et al, pages 121 and 123.