

THE CMA'S REVISED MERGER ASSESSMENT GUIDELINES

A submission by Frontier Economics

This document explains the views of Frontier Economics on the Competition and Markets Authority's ("CMA") Draft revised Merger Assessment Guidelines. Frontier Economics is an economic consultancy firm that regularly advises clients on the CMA's merger clearance process.

Summary

- 1 The CMA is proposing to introduce revised Merger Assessment Guidelines. A key aim of the new draft Guidelines is to address how the CMA will assess the dynamic competitive process in merger assessments characterised by uncertainty about the future. The purpose of this response is to address how the Guidelines can best ensure that dynamic competition is assessed in a balanced way - in particular, recognising the role played by countervailing factors in uncertain and forward looking assessments.
- 2 Frontier welcomes the CMA's move towards recognising the importance of dynamic competition. The CMA has always emphasised that competition is a dynamic process of rivalry, and the process of innovation and investment is vital in delivering good outcomes for consumers. It is important to take a forward looking approach and not only to rely on static tools and techniques based on historical data.
- 3 The new Guidelines also reemphasise that the balance of probabilities is the standard of proof applied by the CMA in assessing whether or not there is an SLC. This means that, as it looks to sharpen its focus on dynamic competition, the CMA must place equal weight on evidence both for and against finding an SLC:
 - a. under a balance of probabilities test, the CMA must seek equally to avoid Type 1 (false positive) and Type 2 (false negative) errors in its assessments;
 - b. minimising *both* types of error is particularly vital in a dynamic context where forward looking assessments contain, as the CMA rightly recognises, a greater degree of uncertainty.
- 4 It is clear from the updated Guidelines that the CMA has been thinking carefully about avoiding Type 2 errors in dynamic markets – i.e. situations where a static and backward looking assessment might fail to spot an SLC located in the future.
- 5 It is our view that more could be done in the new Guidelines to balance this equally with the need to avoid Type 1 errors – i.e. situations where a static and backward looking assessment might fail to spot countervailing factors that would serve to prevent an SLC from arising in the future.

- 6 Striking this balance is particularly vital when extending the CMA's focus on forward looking dynamic assessments characterised by uncertainty. This is for three main reasons:
- forwarding looking assessment in dynamic markets involve a 'double uncertainty' as to whether both: (i) there will be competition in the counterfactual; and (ii) whether removal of that competition is an SLC. This means that SLCs in these cases will often be 'borderline' cases, where even a small chance of a countervailing effect could be enough to change the balance of probabilities;
 - countervailing factors (merger efficiencies and the supply side responses of rivals) are typically dismissed precisely because they are often characterised by uncertainty – this cannot render them irrelevant when the SLC itself is borderline and uncertain; and
 - countervailing factors (in particular countervailing entry and expansion) should be presumed to be more likely in a rapidly changing and dynamic market where competition between the merging parties has not yet materialised.
- 7 The updates to the Guidelines on countervailing factors emphasise to some extent a sceptical approach to efficiencies and competitor reactions. Such scepticism might be justified when balancing a certain and immediate prospect of an SLC against medium term and uncertain countervailing forces. But the logic of that sceptical approach falls away if the SLC itself has been identified only in the future and is itself surrounded by material uncertainty.
- 8 Our suggestion is therefore that the Guidelines should make clear that forward looking and uncertain assessments will typically require a greater degree of balancing between potential anti-competitive effects and countervailing factors, and that it is more likely that countervailing factors will play an important role in the assessment of these cases.
- 9 As with the other updates to the Guidelines, affirming this would not involve a fundamental change of approach by the CMA, rather it would recognise a logical implication of how the CMA should assess evidence under a balance of probabilities test. Nor would it require any change to the burden of proof where (as in the case of efficiencies) the CMA regards merging parties as best placed to provide evidence. Instead it would provide a positive affirmation that the existing statement that "*uncertainty about the outcome of a dynamic competitive process does not preclude the CMA from assessing the impact of the merger on that dynamic process*"¹ also applies to its assessment of countervailing factors, and that "*as with uncertainty, the absence of certain types of evidence such as historical data will not in itself preclude the CMA from concluding*"² that those factors may be significant "*on the basis of all the available evidence assessed in the round*"³.
- 10 These views are set out in further detail below.

¹ Draft Revised Merger Assessment Guidelines, para 5.20

² Ibid., para 2.27

³ Ibid., para 2.27

The balance of probabilities as the relevant threshold

- 11 In the Guidelines the CMA makes clear that it will continue to apply a 'realistic prospect' threshold at Phase 1 and a 'balance of probabilities' threshold at Phase 2 when assessing whether a merger will lead to an SLC.
- 12 However, the CMA notes that "*Recent experience in the CMA's merger case work has demonstrated that there may be some confusion about how these standards of proof are applied in markets, that are characterised by a greater degree of uncertainty (eg dynamic markets), as compared to more mature markets.*"⁴
- 13 The CMA therefore aims to address the inherent uncertainty in merger investigations in a number of sections in the guidelines, including adding a new section on "*How the CMA assesses evidence*".⁵
- 14 This section further outlines the standard of proof at Phase 1 and Phase 2:
 - At Phase 1, "*the CMA has a duty to refer for further investigation in Phase 2 any relevant merger situation where it believes that it is or may be the case that the relevant merger situation has resulted or may be expected to result in an SLC. If the CMA believes that the relevant likelihood of an SLC is greater than fanciful, but below 50%, it has a wide margin of appreciation in exercising its judgement whether to refer.*"
 - At Phase 2, "*the CMA will apply a 'balance of probabilities' threshold to its analysis, ie is it more likely than not that an SLC will result?*".⁶
- 15 This section also makes clear that the balance of probabilities threshold applies to the CMA's overall conclusions at the end of its investigation, rather than at each step of the process.
- 16 The implication of this test is that the CMA must concern itself *equally* with avoiding Type 1 and Type 2 errors:
 - a. a Type 1 error (a false positive) would involve identifying an SLC where none existed; and
 - b. a Type 2 error (a false negative) would involve allowing a merger to proceed when it results in an SLC.
- 17 Both types of error are more likely to occur in an environment of significant uncertainty. As the Guidelines recognise, this does not affect the duty of the CMA to come to a view, nor does it change the need to balance equally the risks of Type 1 and Type 2 errors.

Avoiding 'false negatives' and the impact of 'double uncertainty' on the balance of probabilities

- 18 'False negatives' can occur if - in a dynamic market characterised by uncertainty - the CMA fails to accurately identify an SLC in relation to either:

⁴ Draft Revised Merger Assessment Guidelines Consultation Document, para 1.29

⁵ Ibid., para 1.30

⁶ Draft Revised Merger Assessment Guidelines, para 2.31-2.34

- a. the **counterfactual** – because competition in the future will look different to the past, and the merging parties would become substantially more important competitive constraints on one another in the future; or
 - b. the **competitive assessment** – because the merger would result in one of the merging parties reducing or discontinuing competitive efforts that would otherwise produce a substantial benefit to consumers in the future.
- 19 These possibilities are both recognised in the revised Guidelines:
- a. Concerning the counterfactual, it notes that “*uncertainty about the future will not in itself lead the CMA to assume the pre-merger situation to be the appropriate counterfactual. As part of its assessment, the CMA may consider the ability and incentive (including but not limited to evidence of intention) of the merger firms to pursue alternatives to the merger, which may include reviewing evidence of specific plans where available*”⁷
 - b. Concerning the competitive assessment, it notes that: “*There may be some uncertainty about the outcome of investments and innovation efforts absent the merger, including whether the investments being made by merger firms would ultimately result in products or services being made available to customers. However, uncertainty about the outcome of a dynamic competitive process does not preclude the CMA from assessing the impact of the merger on that dynamic process.*”⁸
- 20 And in general, the CMA makes clear that “*the presence of some uncertainty will not in itself preclude the CMA from concluding that the SLC test is met on the basis of all the available evidence.*”⁹ The CMA is rightly concerned to ensure that ‘false negatives’ do not occur simply because there is an element of uncertainty regarding SLCs that are based on a forward looking assessment in dynamic markets.
- 21 However, it is important to recognise that dynamic markets can give rise to a ‘double uncertainty’: (i) uncertainty in relation to the relevant counterfactual; and (ii) uncertainty around the likelihood of a merger lessening competition when assessed against that counterfactual. The CMA acknowledges both facts stating that “*establishing the appropriate counterfactual to assess the merger against is an inherently uncertain exercise*”¹⁰ and that “*some aspects of the CMA’s assessment may be subject to a large degree of uncertainty*”¹¹. It logically follows that the CMA will therefore take both types of uncertainty into account when conducting the balance of probabilities test.
- 22 ‘Double uncertainty’ has a compounding effect when assessed against a balance of probabilities threshold. To illustrate this, consider a hypothetical merger situation where:
- a. there are two plausible counterfactuals – one where merging parties *do compete*, and one where they *don’t compete*;

⁷ Draft Revised Merger Assessment Guidelines., para 3.14

⁸ Ibid., para 5.20

⁹ Ibid., para 2.26

¹⁰ Ibid., para 3.14

¹¹ Ibid., para 2.26

- b. it is certain that no SLC arises in the *don't compete* counterfactual; and
 - c. in the *do compete* scenario, there is at least some evidence to suggest the prospect of an SLC.
- 23 The figure below shows the impact of 'double uncertainty'. When the counterfactual is certain, the evidence must only point to an SLC with 51% probability (scenario A below). When both counterfactuals are equally likely, the evidence for an SLC must be 100% certain to meet the balance of probabilities test (scenario F). Even if the *do compete* counterfactual is 70% certain, the impact of 'double uncertainty' about the future means that the evidence for SLC in that scenario must be also be more than 70% certain (scenario D).

Figure 1 Hypothetical examples: The impact of double uncertainty

Scenario	Likelihood of do compete counterfactual	Likelihood of an SLC in the do compete scenario	Overall likelihood of an SLC
A	100%	51%	51%
B	90%	60%	54%
C	80%	70%	56%
D	70%	80%	56%
E	60%	90%	54%
F	50%	100%	50%

- 24 Notwithstanding the fact that the CMA is unlikely to – and is not required to – quantify the likelihood of a counterfactual occurring or the likelihood of an SLC relative to that counterfactual, this example serves to illustrate the thought process that the CMA will need to apply when making its “in the round” assessment at the end of Phase 2.
- 25 It logically follows from this that when there is uncertainty surrounding the counterfactual and the competitive assessment, the CMA will need to take very seriously any countervailing factors that could affect the overall balance of probabilities. With even moderate degrees of uncertainty around the counterfactual and competitive assessment, a small chance of a countervailing effect could change the balance of probabilities assessment.

Avoiding ‘false positives’ – recognising the importance of countervailing factors under uncertainty

- 26 In Section 8 of the Draft Guidelines, the CMA outline the two countervailing factors that can prevent or mitigate an SLC arising from a merger: (i) merger efficiencies, and (ii) entry and/or expansion of third parties in reaction to the effects of a merger.
- 27 In general, the CMA makes clear that it will take a sceptical approach to countervailing factors noting that in its experience “*it is rare for a merger to be cleared on the basis of countervailing factors.*”¹²

¹² Draft Revised Merger Assessment Guidelines, para 8.1

- 28 Yet both of these countervailing factors are more likely to prevent or mitigate an SLC when it relates to a future loss of competition. This is for three reasons:
- a. where the SLC is itself uncertain, a relatively lower probability of a countervailing factor would be required to change the balance of probabilities;
 - b. where the SLC is located in the future, this allows a longer timescale over which countervailing factors can develop; and
 - c. dynamic markets are characterised by rapid change, this makes both efficiencies and competitive reactions more likely.
- 29 We therefore think it is important for the Guidelines to recognise that countervailing factors are more likely to play a significant role in the dynamic markets where mergers require forward looking and uncertain assessments.
- 30 The following two subsections consider the assessment of efficiencies and entry/expansion specifically.

Efficiencies

- 31 In justifying a sceptical approach to efficiencies, the draft Guidelines state that “*studies have found that firms often do not fully realise the expected synergies from their mergers and, even for the synergies that they do realise, firms do not always pass on the benefits to their customers*”¹³ citing a review of the evidence by Kwoka (2018). But it is important to recognise how thin this evidence base is, and how hard it is to conduct such ex-post evaluations in a systematic way. Blonigen and Pierce (2016) focus on manufacturing plants, Kwoka and Kilpatrick (2018) review several studies on cost efficiency effects of mergers with a focus on US hospital mergers, Craig et. al. (2018) also study US hospital mergers. A final McKinsey study does attempt a more systematic cross-industry approach, yet the main conclusion here is not that efficiencies rarely happen. On the contrary, McKinsey find that the majority of mergers *do* deliver significant synergies. What they highlight is that pre-merger estimates of the size of those synergies are characterised by uncertainty. They state:¹⁴
- “While managers in about 60 percent of mergers deliver the planned cost synergies almost totally, in about a quarter of all cases they are overestimated by at least 25 percent”*
- 32 The study also finds that only around 15% of the mergers in their sample failed to deliver at least 70% of their planned cost synergies.¹⁵
- 33 Of course, some scepticism may be justified if the CMA finds itself weighing a highly certain and immediate prospect of an SLC against an uncertain and forward looking efficiencies assessment. This is less likely to be the case in dynamic markets.
- 34 When discussing the competitive assessment the draft Guidelines state that “*uncertainty about the outcome of a dynamic competitive process does not*

¹³ Draft Revised Merger Assessment Guidelines, para 8.6

¹⁴ <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/where-mergers-go-wrong#>

¹⁵ Ibid., Exhibit 2

*preclude the CMA from assessing the impact of the merger on that dynamic process*¹⁶. It naturally follows that when it balances the likelihood of a SLC in a dynamic market, the CMA will need to consider efficiencies in the same way. In our view, the draft Guidelines on efficiencies would be improved if they recognised this explicitly.

- 35 This parity of assessment under the balance of probabilities test is already recognised in the draft Guidelines in respect of the timeliness criteria for efficiencies, where *“the CMA will assess whether the claimed efficiencies are to be realised (and the resultant rivalry-enhancing effects felt) within the same timeframe as the CMA has adopted in the rest of its analysis*^{17”}
- 36 This reasoning is particularly important in cases of ‘double uncertainty’ where it is unclear that a “do compete” counterfactual will necessarily unfold in the future. When making its in the round assessment in these cases, the CMA will need to pay close attention to efficiencies – even those characterised by uncertainty – that would tip the balance of probabilities.

Example

- 37 Consider the example in Scenario D of Figure 1 above, of a case where the likelihood of an SLC occurring is likely, but not certain:
- a. there is a 70% chance of a “compete” counterfactual; and
 - b. there is 80% confidence that the merger, when assessed against that counterfactual, would lead to an SLC; so
 - c. together (as shown above) these imply a 56% chance of an SLC – over the balance of probabilities threshold.
- 38 Introducing only a very uncertain prospect of countervailing efficiencies into this assessment would change the outcome. In this example, only a 10% chance that efficiencies were large enough to eliminate the SLC would be enough to tip the balance of probabilities in favour of clearance.

¹⁶ Draft Revised Merger Assessment Guidelines, para 5.20

¹⁷ Ibid., para 8.11

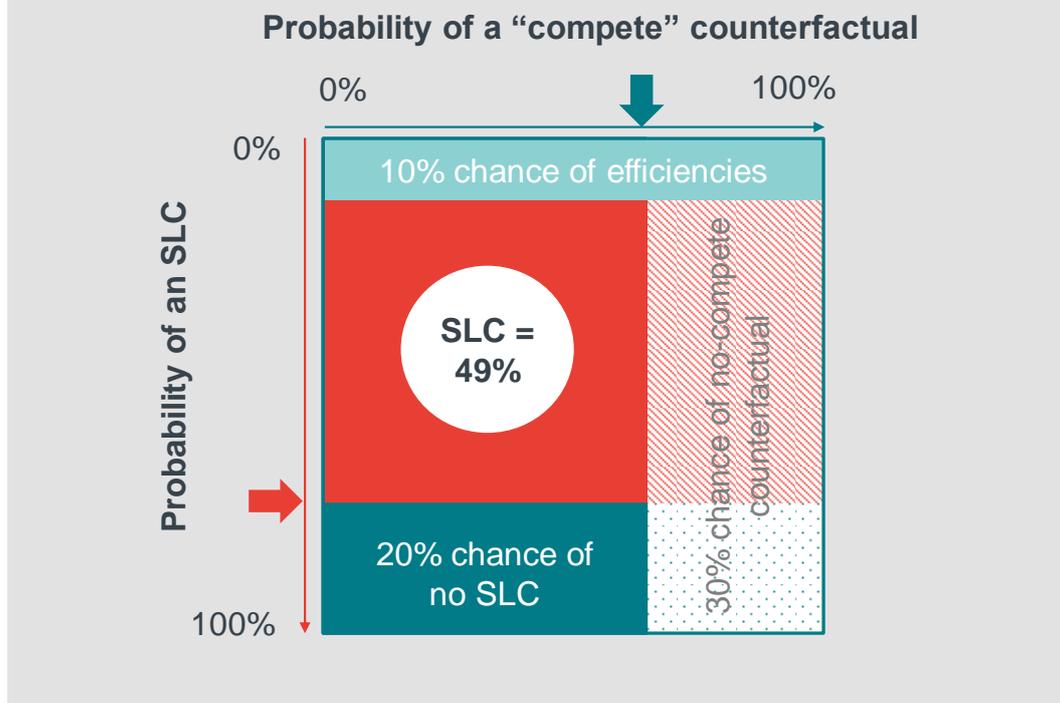
MAKING COMPLEX DECISIONS UNDER UNCERTAINTY

One feature of making complex qualitative assessments in the presence of uncertainty is that that decision makers are prone to *over precision* – the tendency in psychology to think one’s predictions are more certain than they are. For example, research has shown that 90% confidence intervals typically contain the correct answer less than 50% of the time.¹⁸

To recognise this, decision makers may need to adapt their approach to take account of the difficulty of assessing complex probabilistic outcomes. Research has shown that assessments of uncertainty significantly improve when decision makers do not attempt a single overarching estimate in one go. Instead it is better to segment the probability space into its distinct outcomes, and think about the likelihood of each outcome.¹⁹ This makes it possible to assess the chance of more complex “overall” outcomes based on several, simpler, judgments.

The figure below illustrates this in the case of the example given above – dividing the outcomes according to whether there (i) is or is not competition in the counterfactual; (ii) whether there would or would not be an SLC in the ‘compete’ counterfactual; and (iii) the likelihood of efficiencies. Making individual (inevitably subjective) assessments of each of these elements will yield a more accurate assessment in more complex borderline cases. In this example, segmenting outcomes in this way makes it easier to see how efficiencies change the balance of probabilities when there is a 10% (or more) chance that they are large enough to counteract the SLC.

Figure 2 Illustration: Impact of efficiencies in an uncertain assessment



¹⁸ See for example *The Trouble With Overconfidence*, Psychological Review 115(2):502-17.

¹⁹ See “A simple remedy for overprecision in judgment”, Judgment and Decision Making. 2010 Dec; 5(7): 467–476.

Entry or expansion of competitors

- 42 As with efficiencies, the draft Guidelines outline a relatively sceptical approach to entry stating that the CMA “*considers that entry and/or expansion preventing an SLC from arising would be rare*” and that “*The CMA’s evaluation of its past cases has shown that in some instances, when it has relied on entry or expansion to clear mergers, that entry or expansion did not in fact materialise*”.²⁰
- 43 However, it is again important to recognise that this is an area where conclusive analysis is challenging, and where the underlying data points simply to a degree of uncertainty. The KMPG report cited in the draft Guidelines finds a range of outcomes, and cannot be used to conclude that expectations of entry or expansion are rarely realised.
- 44 Another key pillar of the scepticism towards entry and expansion in the draft Guidelines is a theoretical argument (expanded on versus the existing Guidelines) at para 8.33 regarding why entry *as a reaction to merger* is unlikely. In short, this is a “Goldilocks” argument:
- a. if entry was attractive at pre-merger prices, then it should already have happened (or would imminently happen in the counterfactual in any event); whereas
 - b. if entry was unattractive at pre-merger prices, then any entry which returns prices to the pre-merger levels (and therefore eliminates the SLC) would also be unattractive.
- 45 The Guidelines take the view that for entry or expansion to defeat an SLC, the circumstances must be porridge that is ‘just right’ – where the profits of entry are on the borderline between these two cases.
- 46 This argument works with a stylised and static model where barriers to entry are reasonably high and where firms compete essentially only via entry and setting prices (e.g. there are no opportunities to expand via launching second brands or other supply side repositioning possibilities within the market). In a market where that model fit the facts, a certain degree of scepticism might well be merited when the CMA is balancing a highly certain and immediate prospect of an SLC against the probability of entry. However there are many cases, even outside rapidly changing dynamic markets, where these assumptions don’t hold. This sceptical model of entry loses its merit when applied to complex, forward-looking assessments of competitive effects in dynamic markets.
- 47 In dynamic markets, in which the SLC concerns the loss of future competition, it is our view that countervailing entry/expansion in response to merger is far more likely – and so a more balanced assessment of competitor entry and expansion is required.

Example

- 48 The differences in market dynamics are illustrated with Examples 1 and 2 in Figure 3 below.

²⁰ Draft Revised Merger Assessment Guidelines, para 8.26

Figure 3 Hypothetical merger situations

Example 1: Two competitors merging in a static market	Example 2: A potential entrant merging with a nascent existing player
<ul style="list-style-type: none"> ■ There are four firms competing in an established market. ■ Two of the incumbent firms declare their intention to merge. ■ This is a mature market. Therefore the CMA considers the counterfactual to be the <i>status quo</i>. 	<ul style="list-style-type: none"> ■ There are currently three firms competing in a new and dynamic market. ■ Firm A plan to enter by merging with nascent existing Firm B ■ In the absence of merger, Firm A would plan to develop its own product and enter as a fourth competitor

- 49 When comparing these two examples of potential “4-to-3” mergers, a first point to note is that the second involves ‘double uncertainty’ - Firm A may or may not be successful in the counterfactual, and potential merger effects only arise if it is. This uncertainty will change the required probability with which a countervailing entry needs to occur in order to alter the balance of probabilities.
- 50 To some extent, this is recognised in the Guidelines insofar as they consider future entry that is not a reaction to the merger. In relation to the loss of dynamic competition, the Guidelines are clear that “*entry or expansion by a third party that may occur with or without the merger, to the extent that it is relevant, will usually be considered in the competitive assessment*”²¹. However the CMA will need to be wary of “attention bias” in its evidence gathering, and not place undue weight on the likelihood of entry by a merging party simply because the CMA has the benefit of a detailed forensic examination of that particular firm’s internal plans.
- 51 More importantly, the second scenario creates a fundamentally different economic incentive to enter in response to a putative SLC. In both examples entry by a fourth player is viable and likely (in Example 1 it has already happened, in Example 2 it is expected to happen). The key difference is this:
- a. In Example 1, entry by an **additional** (fifth) player is needed to counteract the SLC (the assets and capabilities of both merging parties remain in the market, the merger simply puts them under common ownership); whereas
 - b. In Example 2, only entry by an **alternative** (fourth) player is needed to counteract the SLC (the merger effect is to prevent Firm A from ever developing the assets and capabilities to enter the market).
- 52 However sceptical we may be of the likelihood of entry by a fifth player in either case, in Example 2 this simply isn’t required to defeat the SLC. In fact, given the willingness of Firm A to invest in entry (absent merger) the presumption should be positively in favour of expecting third party entry if the merger goes ahead. The merger means that the place in the market, which would be taken in the counterfactual, will remain available – effectively creating “space” in the market for an additional entrant. Even if entry were not to occur (for instance, due to barriers to entry), expansion from existing firms in the market should be expected. For an

²¹ Draft Revised Merger Assessment Guidelines, para 3.21

SLC to occur in these situations, there would also need to be a clear and demonstrable relationship between the number of firms and market outcomes.

- 53 This makes the assessment of countervailing entry fundamentally different in dynamic settings where the SLC relates to the elimination of future competition between the merging parties. Whereas the static case may require sceptical attention to overall market profitability post-entry, in the dynamic context attention should be firmly on whether the merging party has any particularly special or unique capabilities that make it the only or best viable candidate for entry. Absent that, the presumption should naturally be in favour of likely countervailing effects.
- 54 This discussion suggests two ways in which the draft Guidelines could be improved in relation to countervailing entry and expansion:
- First, as with efficiencies, the Guidelines should recognise that carefully balancing the prospect of countervailing entry and expansion will be more important when the SLC involves uncertain, forward looking assessments. And that an assessment of the prospect of countervailing entry and expansion is likely to be particularly important when the basis for the SLC is that one merging party might abandon or scale back their own future plans for entry and expansion.
 - Second, the Guidelines should recognise that, in those circumstances, an SLC located in the future is unlikely to arise unless the relevant merging party possesses some unique assets or capabilities that make it particularly well placed to enter and expand in a way that other third parties could not replicate in its absence.
- 55 As with the other updates to the Guidelines, affirming this would not involve a fundamental change of approach by the CMA. Instead it would represent the CMA treating evidence from the Merging Parties and other firms equally as it would require the CMA to assess whether rivals possess “*any features that would affect how well-placed it is to enter, such as existing customer relationships from related products that could enable it to cross-sell or bundle them to gain scale quickly*”²², and would not require the CMA to conclude “*on the precise characteristics of the product it would launch*”²³.

²² Draft Revised Merger Assessment Guidelines, para 5.16

²³ Ibid., para 5.12