Three "takeaways" from Amazon/Deliveroo

On 4 August 2020 the CMA cleared Amazon's proposed minority investment in Deliveroo. Having previously been concerned that the investment could damage competition by discouraging Amazon from re-entering restaurant food delivery in the UK and altering its competitive incentives in respect of online delivery of "convenience" groceries, the CMA cleared the investment at Phase 2.

Whereas the CMA had previously provisionally cleared the investment on failing firm grounds its second set of provisional findings and this final report focussed on the fact this was a minority investment *not* a merger. The CMA concluded that "in the counterfactual Amazon is likely to re-enter the supply of online restaurant platforms in the UK", but that they "do not, however, find it sufficiently likely that the Transaction will have such a material impact on Amazon's incentives to re-enter, or its approach following re-entry, to result in a substantial reduction in potential competition..."

In this memo we discuss the economic analysis which helped formalise why a minority investment of this sort could not be expected to deter future entry while also touching on some broader "takeaways" from the case.

Takeaway 1: no open season for Failing Firm defences

The first round of Provisional Findings, and its clearance decision on failing firm grounds, will undoubtedly have attracted the attention of "dealmakers" looking to push through transactions in industries that have been profoundly impacted by the Coronavirus pandemic.

However, any notion that the Covid crisis represents "open season" for failing firm defences has been quickly disabused. Just days after the first set of Provisional Findings the CMA issued guidance that clarified its position[1] while the final decision in Amazon/Deliveroo abandoned this conclusion on the basis that Deliveroo's financial position had improved since the depth of the crisis.[2]

Takeaway 2: the clearance hinged on how a minority investment would impact incentives to re-enter

The case hinged on whether a minority investment (which would not generally raise concerns if it occurred between already competing firms) could have a disproportionate impact by preventing Amazon from re-entering restaurant food delivery (a space it exited in 2019) when it otherwise would have done so. The CMA ultimately cleared the investment because it accepted that, whatever one's views on whether Amazon was a likely re-entrant, a minority investment in Deliveroo would not prevent Amazon from re-entering restaurant delivery if this was something that was in its interest at some point in the future.

The parties did not consider Amazon to be a likely re-entrant.[3] However, much of the debate on whether Amazon was a likely re-entrant relates to confidential information (e.g. whether restaurant delivery was an area of focus for Amazon; the extent to which a logistic operation optimised for multi-drop "milk round" delivery is useful for operating a restaurant delivery service; the extent to which Amazon's Prime membership program could grant ability and incentive to re-enter etc.) and, as such, we do not dwell on it here.

However, the question of how the effects of a minority investment by a player who is not an existing competitor relate to a "full" merger between existing competitors is a more conceptual one and it is easier to set out the economic debate and why, ultimately, the investment did not raise concerns even if one thought Amazon was a likely re-entrant.

It was accepted at a relatively early stage that a modest minority investment between already competing players would have a limited impact on competition: if Amazon had an operational restaurant business in the UK a minority investment would only cause it to "internalize" a modest share of the profits on sales lost to Deliveroo (and of course a price increase would not just divert sales to Deliveroo but also to other delivery options including Just Eat, Uber Eats, Dominos etc.) and would not have any impact on Deliveroo's incentives at all.[4] However, the CMA's concern was that the minority investment could have more profound effects on Amazon's *entry decision*: wouldn't Amazon want to refrain from competing with an asset in which it had a stake and wouldn't this mean the transaction was a de-facto 4 to 3 merger?

While perhaps superficially appealing, this approach, which requires that a small investment could have an outsized effect on entry incentives, does not survive a rigorous analysis of economic incentives. This is because, even if one thought Amazon was likely to re-enter restaurant delivery, an investment could only change its incentives to do so if it materially affected the cost-benefit assessment as to whether entry was in its interest. If the impact on post-entry

[1] See: https://www.gov.uk/government/publications/merger-assessments-during-the-coronavirus-covid-19-pandemic/annex-a-summary-of-cmas-position-on-mergers-involving-failing-firms

[2] Paragraph 26.

[3] Paragraph 6.83.

[4] That minority shareholdings between competitors can cause unilateral price effects is well understood. See, for example, Salop, SC. O'Brien, DP. 2000. "Competitive effects of partial ownership: financial interest and corporate control", *Georgetown Law*.

competition of a minority investment would be small so would be its impact on the entry decision itself: the two issues are intrinsically linked.

Put differently, if one thought, for sake of argument, that Amazon had, or would soon have, a strong strategic imperative to re-enter restaurants, a small investment in one of three incumbent players in the UK could not be expected to hold it back. Alternatively, if this small stake *were* sufficient to substantially scale back or eliminate Amazon's entry incentives, then this could only be the case if Amazon was not anticipated to be a committed or effective entrant and hence any loss of competition would be muted.

To build out this intuition we developed a stylized two-stage model of the UK restaurant food delivery industry in which Amazon first decided on whether to enter restaurant delivery (and, if so, what proportion of geographic "locations" to serve).[5] Having decided whether, and how much, to enter, the second stage of the game involved price competition between it and three incumbent suppliers (Just Eat, Uber Eats and Deliveroo, we abstracted from other delivery options).

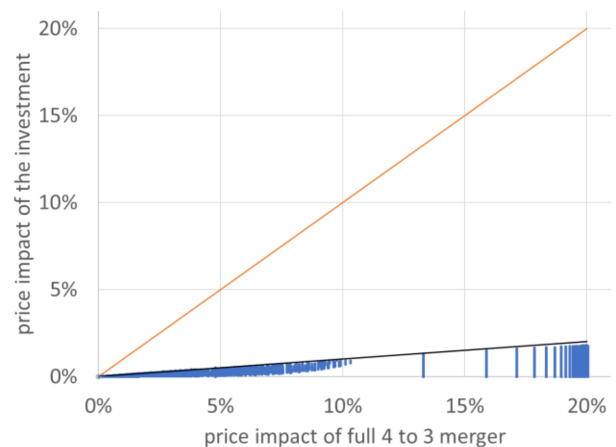
This model captured two inter-related theories of harm. First, that the minority investment could soften competition (and increase prices) once entry had occurred.[6] Second, it could induce Amazon to either enter less intensively than it would do otherwise (by serving a smaller proportion of locations) or to simply not enter at all.

We used this model to consider three questions: i) the extent to which a minority investment in one of the three incumbents would alter Amazon's entry incentives and ultimately competition; ii) the conditions under which such an investment would deter Amazon from entering entirely; and iii) how the price impacts of the minority investment compared to a hypothetical "full" merger between already competing competitors.[7]

To make general predictions we populated the model with an exhaustive set of 877k parameter combinations before restricting attention to the 200k or so which were both relevant to the CMA's theory of harm (i.e. the ones which implied Amazon would have an incentive to re-enter without the minority investment) and suitably realistic.[8] This analysis led us to two key economic intuitions.

First the model showed that, even accounting for the potential incentive effects from entry, the price impact of a minority investment was always substantially smaller than that from a benchmark 4 to 3 merger (i.e. a merger between two of four competitors active in all locations). This can be seen in the Figure below which plots on the horizontal axis the price effect from a "full" merger under a specific set of parameter values and, on the vertical axis, the price impact from a minority investment for the same set of parameter values. All of the blue dots lie well below the orange 45-degree line, implying that (as one would expect) the effects of the investment were always less than the effects of a full merger. Indeed, as can be seen from the fact all of the dots are below the black line, the effects of the investment were always less than 10% of a full merger (and were often even less than this).

Figure 1: impact of investment vs. a "full" 4 to 3 merger



Source: CRA.

Second, the model allowed us to consider the circumstances under which a minority investment would deter Amazon from entering at all. This would occur in situations where the net business case for entering was positive without the investment and negative with it in place. It is straightforward

[5] The model is discussed at paragraph 7.37 onwards of the CMA's decision which states that "We agree that the model is helpful in illustrating the mechanisms at work as a result of the Transaction and the differences in incentives resulting from a 16% investment as opposed to a full merger."

[6] In areas where Amazon enters, it will "internalise" a fraction of Deliveroo's profits equal to the size of the minority stake. As such, a sale won from Deliveroo will be less "valuable" than it would be absent the investment, reducing Amazon's incentive to compete. This effect is, however, smaller than that brought about by a full merger, because Amazon internalises only a proportion (rather than the entirety) of its impact on Deliveroo and Deliveroo would not internalise the impact of its behaviour on Amazon at all.

[7] A full description of the model is outside the scope of this memo. But, at a high level, the model assumed a Shubik-Levitan differentiated demand system in which each firm set a single price across their footprint and firms had symmetric marginal costs. We assumed also that certain "locations" were more attractive to serve by assuming that Amazon's entry cost was increasing in the proportion of locations it "covered". The finding that a minority investment has a materially smaller impact on incentives and on expected competitive outcomes than a full merger is robust to different ways of introducing smoothness to the entry decision (e.g. assuming uncertainty about the business case for a binary entry decision).

[8] We only included combinations which implied that a hypothetical monopoly delivery platform could operate profitably.

to show that, if the minority investment has only a small impact on post-entry competition, it must also only have a small impact on the net business case for entry. As such, those circumstances where the minority investment deterred Amazon from entering entirely must correspond to circumstances where Amazon's commitment to entry (and hence its impact on prices were it to enter) were weak.

Overall, the economic case for clearing the transaction was sound, even if one considered Amazon was a likely re-entrant into restaurant delivery. While minority shareholdings can trigger anticompetitive effects (e.g. if they occur between existing competitors in concentrated industries), the conditions were not in place in this case. This was also particularly true when one considered the broader global context of innovation by a firm like Amazon: it seemed implausible that global experimentation and innovation would be held back by a small stake in a UK-focussed company and, once one acknowledged this, it was implausible that such a stake could hold back Amazon from bringing an innovative new service or solution to the UK.

Takeaway 3: concerns around "but for" organic entry and "reverse killer acquisitions" are a key focus

The CMA's approach in Amazon Deliveroo underlines the growing focus in merger control on dynamic considerations and potential competition rather than static overlaps. Transactions which would previously have been viewed as purely complementary and presumptively pro-competitive are likely to be given much more scrutiny.

It underlines also that, while much policy focus has been on "killer" acquisitions (instances where an incumbent purchases a smaller firm that could constitute a nascent competitive threat), the more commonly-occurring theory of harm is likely to be "reverse killer acquisitions"[9] (those in which the alternative to an acquisition by a large incumbent is that it would seek to enter the space itself).[10]

Other examples of this approach include PayPal/iZettle (where, while it might have started with killer acquisition concerns, the CMA's focus quickly turned to the question of whether PayPal would become a stronger competitor to iZettle's business); and Sabre/Farelogix (where, as well as a concern that Farelogix was a dynamic threat to Sabre, the CMA pursued a concern that Sabre could, but for the transaction, develop a rival to Farelogix's "merchandising" product).[11]

Our final takeaway then is that, in a world where there is a perception that big tech can do anything it sets its mind to, competition agencies will view any large conglomerate transaction as potentially being a "potential competition case in disguise" and will carefully consider whether it is appropriate to assess it with reference to a counterfactual with organic entry by the purchaser.

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[9] The term "reverse killer acquisitions" was coined in an article in Vox.EU by Cristina Caffarra, Greg Crawford, and Tomaso Valletti. See: "How tech rolls: Potential competition and "reverse" killer acquisitions". https://voxeu.org/content/how-tech-rolls-potential-competition-and-reverse-killer-acquisitions

[10] See Latham, O. Tecu, I. and Bagaria, N. "Beyond Killer Acquisitions: are there more common potential competition issues in tech deals and how can these be assessed", Competition Policy International. They apply a set of "filters" to 409 acquisitions by Google, Amazon, Facebook and Amazon and find that only 14 bear the hallmarks of a "killer acquisition". They conclude "killer acquisitions, while important when they arise, are likely rare" and that the reverse killer acquisition concern is likely to arise more frequently.

[11] CRA advised the Parties in both of these transactions.