Dear Merger Efficiencies Review Team,
I am Professor of Economics at the University of Southampton. My research examines how mergers affect innovation and the implications for merger control and competition policy, with a particular focus on pharmaceutical markets.

Further to our online meeting on Monday 23 February 2026 with Amra Topcagic and colleagues, I am submitting this response to the call for evidence on the CMA's approach to assessing rivalry enhancing efficiencies in mergers, summarising and expanding on points we discussed.

My reply heavily relies on a recent paper I published in the *European Economic Review* with Lorenzo Cassi (available at https://doi.org/10.1016/j.euroecorev.2026.10526). Along with this email, I also attach a short ProMarket article (to be published on the 15tho of March) that summarises the findings of the academic paper on how acquisitions can undermine innovation through disruption and loss of inventive human capital - what we term "manslaughter acquisitions" in the ProMarket piece, but not in the academic work.

1. Dynamic efficiencies and innovation: what should be measured and how
A recurring challenge in merger review is that "dynamic efficiencies" often refer to innovation and investment outcomes that are uncertain, long horizon, and difficult to verify ex ante. In practice, innovation can be measured in different ways, and this can lead to different assessments. Existing academic work has examined both inputs and outputs of the innovation process, including R&D expenditures, patents and quality weighted patents (by citations), and clinical trial progress in pharma.
The empirical literature in pharmaceuticals frequently finds post merger declines in R&D and patenting for the merged entity (Ornaghi, *International Journal of Industrial Organization*, 2009), and in some settings also for rivals (Haucap et al., *International Journal of Industrial Organization*, 2019).
An important gap in many "dynamic efficiencies" submissions is that they focus on projects and pipelines, but underweight the role of people. In my recent paper with Lorenzo Cassi, we also include inventor level outcomes and find that acquisitions are associated with higher inventor exit from innovative activity, higher mobility, and lower productivity for both movers and stayers.
This implies a practical point for the CMA: when assessing dynamic efficiencies that rely on improved innovation performance, the credibility of the claim depends not only on whether assets, technologies, or projects are combined, but also on whether the merged entity can retain and effectively integrate the scientists and engineers who generate innovation.

2. Innovation theories of harm
2.1 Killer acquisitions
In pharma, "killer acquisition" concerns are more plausible when there is meaningful overlap between the acquirer and the target's innovation trajectories, which creates an incentive to pre-empt future competition.
A key practical issue, highlighted in the European Commission study I contributed to with Lear Lab (available at https://op.europa.eu/en/publication-detail/-/publication/6eacab93-b129-11ef-acb1-01aa75ed71a1), is that public sources alone often do not suffice to conclusively assess a killer acquisition theory of harm (or the absence of harm), and that scrutiny frequently requires non-public, internal evidence. This point generalises to efficiency claims. If dynamic efficiencies are asserted, the CMA will often need internal materials to

assess whether the efficiencies are merger specific and credible (that is, likely to be implemented).
The European Commission study also notes that killer acquisition type concerns can extend beyond mergers to other contractual arrangements such as licensing. From an efficiencies perspective, this suggests that when parties claim merger-specific efficiecies, it can be useful to ask:

- why a licensing or collaboration agreement would not deliver the claimed benefits,
- what frictions prevent contracting, and
- whether those frictions are truly resolved only through common ownership.

2.2 "Manslaughter" acquisitions as a distinct mechanism

Even where overlaps are limited, innovation can be reduced through integration disruption and human capital loss. In our evidence, the mechanism is not necessarily deliberate project termination, but organisational change that triggers departures and depresses productivity among remaining inventors.
This suggests closer scrutiny may be warranted where:

- innovative output is concentrated among a small subset of highly productive inventors,
- research teams are tightly interconnected and vulnerable to disruption, and
- the deal plausibly entails laboratory consolidation, geographic relocation, or changes in incentives and autonomy for research teams.

3. What evidence should be required for an efficiency defence, especially for dynamic efficiencies

I suggest the CMA places greater weight on evidence showing how the claimed efficiencies will be delivered in practice, and whether the necessary organisational changes are realistic. This includes evidence on people and integration, such as plans to retain key scientific staff, integrate research teams, and manage the location of research facilities, including any closures or relocations.
The underlying rationale is straightforward: if mergers are justified as creating synergies among research teams, authorities should also ask what concrete steps will prevent the common outcome that teams are dissolved, key inventors leave, and innovative productivity falls in the critical post merger period. As mentioned during the meeting on Monday, it is difficult to see how ideas and projects can be integrated if knowledge is embodied in human capital and scientists are not easy to move and integrate. Where claimed dynamic efficiencies play a central role in the assessment, the CMA could consider whether proportionate remedies or commitments, capable of being monitored post decision, would be appropriate.

4. How far do pharma-based insights extend to other industries

Pharmaceuticals are unusually well suited for studying innovation impacts because patents, scientific labour markets, and clinical trial milestones provide observable proxies for innovation. In other sectors, patenting may be less central, and innovation may be protected through trade secrets, first mover advantage in taking products to the market, or complementary assets.
That said, the human capital mechanism likely generalises to other industries. The management literature on "acquihires" documents elevated turnover among employees in acquired firms relative to organically hired employees, which is consistent with the idea that acquisitions can trigger mobility and disruption even when the objective is talent acquisition (see papers cited in my *EEREV* article).

For the CMA, this supports a broader principle: dynamic efficiencies that depend on innovation should be assessed through both asset based and people based lenses, even in sectors without clear patent or clinical trial measures.

I hope these points are useful to the review. I would be very happy to discuss any of the above with the CMA team, or to provide further details from the underlying research even after the conclusion of this call.

With best wishes,

Carmine Ornaghi
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