

March 7, 2025

Dear Larry White,

Thank you and the referees for reading my paper and for the detailed comments you gave me. I have revised the paper extensively to address your comments and hope that I managed to address them satisfactorily. Here are the details of the revision.

1. You asked me to shorten the paper and keep it under 35 pages. I extensively revised the paper and rewrote virtually every section. The paper is now under 35 pages long, all inclusive.
2. You also asked me to shorten the length of paragraphs or break long paragraphs in two. In the revision I tried to make sure that paragraphs are as short as possible.
3. I also cut the length of the Introduction, which now introduces the general topic, explains why this topic is interesting/important, and what the paper specifically does and why that is interesting/important.
4. You asked me to explain why the Facebook-Giphy merger is interesting/important. I tried to do that in the Introduction and Conclusion and also in the body of the paper. I believe that the case is interesting/important for several reasons.

To begin with, the case is the first big tech merger blocked by an antitrust agency and marks a change in how high-tech mergers are going to be evaluated (although who knows what the DOJ and FTC will do now under the Trump administration). In fact shortly after the case we have seen other big tech merger being challenged on similar grounds. The case also suggests that stealth consolidation may become harder, as a merger may go under the radar in one jurisdiction, but may then be investigated in another. This merger was actually investigated not only in the UK, but also in Austria and Australia, despite the fact that it was not notified or investigated in the U.S.

(Wollmann (2019) shows that when mergers are not notified in the U.S., they are almost never investigated either, and this merger was no exception).

More importantly perhaps, the case is the first merger where the CMA applied the loss of dynamic competition theory of harm, which it introduced in its 2021 MAG. The case illustrates the CMA's willingness to apply this theory of harm and highlights the difficulties of applying it. Since this is a new theory of harm and given that it may be used in other cases, it is obviously important to understand the lessons from the case, which I discuss in the paper.

I believe that there are some other aspects of the case which make it interesting. For instance, Facebook's motivation for the acquisition which probably had to do with its concern that Giphy might be acquired by a rival social media who would then foreclose it (there are indications that Facebook, and especially Instagram, had serious concerns about this possibility). Or the difficulty of developing a convincing counterfactual scenario. To be sure, counterfactuals – what would happen absent a merger – are always important, but in mergers between established firms in mature industries, the status quo is probably a reasonable counterfactual. But when we consider a merger between an incumbent and potential entrant, developing a counterfactual is much more challenging, particularly when the market is evolving at a fast pace. The Facebook-Giphy merger highlights these challenges.

5. You wrote “I don't understand the advertising market issue: Did the CMA really expect that the Giphy website was going to have so many visitors that it would become significant place for online advertising? And would thereby offer significant competition to Meta in online advertising? Really?”

It turns out that in Phase 1 of the investigation, the CMA indeed argued that the merger will harm future competition in display advertising by eliminating Giphy as an independent competitor from the market. In Phase 2, the CMA dropped this theory of harm, but still wrote in its final report from November 30, 2021: “We consider that GIPHY's Paid Alignment model competes closely with display advertising, such as that offered on Facebook's platforms” (Paragraph 36); “We consider that the loss of GIPHY as a potential competitor in display advertising is substantial” (Paragraph 44); and “GIPHY's Paid Alignment would have been a close competitor to Facebook in that it had the potential to become an important alternative to Facebook for at least some advertisers' display advertising budgets” (Paragraph 7.254).

Given that Giphy's Paid Alignment generated a revenue of merely \$27.5 million, compared to Facebook's advertising revenue of over \$86 billion, and given that in any event the service was still experimental and unproven, I guess it would have been impossible for the CMA to pursue a loss of future competition theory of harm further. The theory simply sounds farfetched in the context of the Facebook-Giphy merger.

Instead, the CMA pursued in Phase 2 a dynamic competition theory of harm. This theory of harm was brand new and was never used before. To pursue it, the CMA had to claim that the merger will harm innovation. The problem however is that unlike price and quantity competition which we understand pretty well, and for which we have various measures that can be used to quantify it (e.g., market shares, concentration indices, price-cost margins, extent of price changes, etc), we simply do not have a good way to measure the extent of competition in innovation.

In fact, the literature shows that the relationship between competition and innovation can be positive or negative or U-shaped (see e.g., Gilbert 2022). We also do not know enough about the effects of mergers on innovation either theoretically or empirically. For that reason, it is hard to have a meaningful debate with the CMA when it argues that the merger will have a substantial negative effect on innovation. It is not clear how we can quantify the effect or substantiate the claim that the effect is substantial. It is much less clear how we can tell that the merger is more likely than not to have a negative effect. Say, how do we argue with someone who says "I believe that the probability of harm to innovation is above 50%". Suppose you disagree and believe it is only say 40% or less: how can you have a meaningful debate on that? I understand that it is largely a matter of judgement, but still, we use merger simulation say to claim that prices will increase following the merger by this or that percent. Or we use UPP to gauge the likelihood and magnitude of a price increase. What about harm to innovation? Which tools do we have to quantify the effect?

One can of course say that the difficulty exists even with mergers in familiar industries. But then at least we have past experience to guide us or we can have reasonable simulations, or we have a sound theory to build on. But here we talk about an evolving market with an experimental service (Paid Alignment was still in its infancy) and a firm that may or may not have survived as an independent entity given that it did not yet have a proven business model.

I tried to elaborate on these points in the paper. These I believe are interesting aspects of the case as they highlight the gaps in our knowledge and point to the kind of studies we need to be in a better position to evaluate future cases that involve acquisitions of potential rivals. Let me

emphasize that I am not saying that nothing should be done. Say, Gilbert (2022) has a lot to say about the need to take innovation into account in merger analysis and he gives some guidance how to do that. I believe however that the Facebook-Giphy case shows that there is a lot that we still do not know and I also believe it illustrates which arguments are convincing and which are less convincing.

6. You wrote that if Meta was planning to self-supply GIFs then “that still increases the extent of competition overall – and leaves a smaller market for the remaining firms to fight over.” I agree with you. However, I mentioned the self-supply issue in the paper only to claim that the merger was not a reverse killer acquisition, where the acquirer kills its own product after the merger. The main point in this regard is that Facebook did not have a searchable GIF library which it could have killed after the merger. Moreover, Facebook discounted the possibility that it would have decided to develop a searchable GIF library. I therefore rewrote the relevant discussion to emphasize this point. In particular, I no longer mention the CMA’s claim that had Giphy decided to develop a searchable GIF library it would have used it only for self-supply. Here’s the revised discussion:

“The acquisition was neither a reverse killer acquisition (Crawford, Valletti, and Cafarra, 2020), where the acquirer kills its own product after the acquisition, because Facebook did not have its own searchable GIF library and moreover submitted that “there was no realistic prospect that it would have decided to build its own GIF capability” (CMA, 2021b, Paragraphs 6.19).”

You also asked “Might Meta – after learning to self-supply – decide that they could profitably supply GIFs to third parties? Would/could they be considered potential entrants?” This is of course possible, but then as I mentioned above, Facebook discounted the possibility of developing its own searchable GIF library, and in any event, even if it did, the CMA argues that “Giphy was not easily replicable.” We therefore just do not know whether Facebook would have succeeded in building its own GIF capability had it decided to do so (a possibility which it discounted) and whether such a library could have been a good substitute for Giphy.

Note that for the CMA it was important to argue that there are high barriers of entry into searchable GIF libraries, otherwise it was hard for them to object the merger as entry would have

corrected any problem caused by the merger. As far as I can tell, the CMA provided convincing evidence that entry and expansion into the searchable GIF library market were hard and time consuming, which I discuss in the paper. In fact, if anything, we only saw exits from the market like Snap's decision to shut down Gfycat which was the third largest GIF provider after Giphy and Tenor. And, GIFs are still provided for free, so why make an effort to develop an own GIFs capabilities? It is always possible for the situation to change, but this is all too speculative, so I guess it is better not to get into this discussion in the paper (especially since I need to keep the text under 35 pages...)

7. Following your comment on the need to learn early the institutional detail that surrounds the merger, I now discuss in Section 2 Giphy's primary rivals and the general market structure, and also discuss the fact that Giphy supplies GIF both directly on its website and app and indirectly via third party apps, and the fact that Giphy provided its service free of charge, save for the Paid Alignment service which was offered only in the U.S. and made only a small revenue.

8. You asked "It's been 18 months since Shutterstock acquired Giphy. Has anything significant – positive or negative – happened since then?" Good question. I tried to find information about Giphy after the acquisition but found very little. Giphy is now a subsidiary of Shutterstock and still provides its services as usual (say on Whatsapp, I see Giphy's GIF and they look as they always did). It then seems that nothing significant has happened: Giphy continues to provide GIFs which are still a small gadget for social media.

9. You asked me to provide the Giphy/Meta arguments in favor of the merger. Section 4 discusses the three motivations that Facebook mentioned for acquiring Giphy.

10. I made sure that all initializing of phrases – e.g., SLC and TOH – are spelled out when they first appear.

11. I made an effort to address all of the questions and issues that are raised by the two referees.

Referee 1

1. Following the referee's suggestion, I made an effort to condense the initial sections and deleted many details which are not essential to understanding the main part of the paper.

2. The referee writes "The idea that "nobody knows anything" can justify any decision—whether for intervention or for inaction." Following this comment I made an effort to clarify in Section 5 of the paper what I have in mind. My point is that when we consider a merger between established firms in a mature industry, it is plausible to assume that absent a merger, the status quo will prevail. Therefore the pre-merger outcome can be reasonably used as counterfactual.

However when we consider a merger with a potential entrant in a fast-changing industry, the pre-merger outcome cannot be plausibly used as a benchmark. There is no escape from the need to predict how the market will evolve absent a merger. This of course does not mean that "anything goes." It means that the counterfactual analysis becomes crucial (which is not the case in mergers between established firms in a mature industry), and it also means that the analysis will necessarily be more speculative. I am not sure that I have anything clever to say about how to do it in general, but at least I wanted to highlight this point. At any rate, in the context of the Facebook-Giphy merger, I believe that it is highly plausible that absent a merger, Giphy would have been acquired by another firm (more on this below).

3. The referee also writes "I would prefer to see the author's opinion on the likelihood of various counterfactual scenarios. For instance, if the author believes that Giphy remaining independent was highly unlikely, the analysis should focus more on comparing the proposed merger with alternative acquisition scenarios." The referee is right. I was not clear enough in my discussion of the counterfactuals. Following the referee's suggestion, I revised the discussion about the counterfactuals in Section 5. I now emphasize that it is unlikely that Giphy would have remained an independent firm. Given that it is also hard to believe that Giphy would have collapsed without being acquired by anyone, the most likely counterfactual is that Giphy would have been acquired by another firm.

The acquirer could have been someone like Shutterstock, which seems to me like an efficient outcome (at least I do not see any reason why it is inefficient), but it could also have been

another social media platform. But then in the latter case, the same horizontal and vertical concerns would arise.

4. Related to the last point, the referee writes “I disagree with the author’s assertion that if the buyer had been another social media platform similar concerns about the loss of potential competition in display advertising would have been raised. This overlooks Meta’s significant market power, which is unmatched by most other platforms.” It is true that Meta had a market share of 72% of the time spent on social media in the UK. Its size however affects both the benefit and cost of foreclosure. If Meta forecloses say TikTok, whose share of the time spent on social media in the UK was 12%, it may divert 12% of the users’ time to itself, but then lose access to 12% of the users’ time. If Giphy is acquired by say TikTok, which then forecloses Meta, it may divert 72% of the users’ time to itself, but may then lose access to 72% of the users’ time. The benefit and cost of foreclosure of Meta by TikTok are therefore 6 times larger than foreclosure of TikTok by Meta.

Of course, one can argue that Facebook is so strong that it is unlikely that many users would have switched away from Facebook to the acquiring social media platform just because they can no longer get access to Giphy on Facebook. But if the loss of access to Giphy is not enough to induce users to switch away from Facebook, then it is unclear why we need to worry that foreclosure of the rival social media by Facebook would be a big problem. Clearly there is a need here for a formal model to explore how the risk of foreclosure depends on the market shares of acquiring firm and the potentially foreclosed rivals, but developing such a model is beyond the scope of the present paper and is better left for future research. My point is that before seeing such a model it is not obvious that foreclosure is a bigger problem when Giphy is acquired by Facebook rather than by another social media platform.

5. The referee argues that the CMA may have been “overly cautious in not restricting Meta’s ability to select a buyer” and that if indeed Meta did not sell Giphy to a rival on purpose, then the outcome of the divestiture – Giphy is in the hands of Shutterstock – is worse than it could have been had Giphy been sold to one of Meta’s rivals. I am not sure I understand this comment. Shutterstock is a platform that provides access to a library of audio, image, and video content. Giphy is complementary to Shutterstock’s other products. This situation seems efficient. At the very least,

I do not see a reason why it may be inefficient. Why is it then more efficient for Giphy to be in the hands of another social media platform? What are the possible efficiency gains compared to the current situation where Giphy is owned by Shutterstock?

6. The referee writes “The author’s dismissal of the distinction between “future competition” and “dynamic competition” seems misplaced. I believe this distinction has merit.” The referee also writes “Future competition refers to potential market structure changes where a potential rival becomes a successful, effective competitor. Dynamic competition, on the other hand, exists even if the potential rival ultimately fails, as it focuses on how the prospect of entry affects the incentives of both incumbents and entrants to innovate.”

My point is this: the incentive to innovate, which is at the core of dynamic competition, depends on the difference between expected profits with and without an innovation. Let Y be the profit with innovation and N be the profit without innovation. The incentive to innovate then is proportional to $Y - N$. If the potential rival succeeds and becomes an effective competitor, both Y and N are smaller than they would be if the rival fails and does not compete effectively with the incumbent. Hence, the values of Y and N depend on future competition, that is, whether the rival succeeds or fails, and in the former case, on how successful the rival becomes and how the rival’s success affects the incumbent’s profits. The two concepts are then interrelated. In particular, without understanding future competition, one cannot determine the values of Y and N and hence cannot determine either whether the incentive to innovate, which is crucial for analyzing dynamic competition, is strong or not.

7. Balance of probabilities vs. balance of harm: this is an important debate and I thank the referee for the detailed and helpful comments. Given the need to cut the size of the paper considerably, I decided to move this part of the paper to an independent note, which I developed further and sent to Economics Letters. To my (pleasant) surprise, it was published very quickly.

Yossi Spiegel, “The balance of probabilities vs. the balance of harms in merger control,” Economics Letters, Volume 247, 2025, 112167

8. The referee writes “The claim that increased competition in advertising could harm consumers

is inappropriate or irrelevant. There are several channels through which a more competitive market for online advertising can benefit end consumers, including less intrusive ads.”

I agree that at least in principle, competition can benefit consumers by making ads less intrusive. It can also benefit consumers by lowering the cost of ads, which may then translate into lower retail prices. I mention these possibilities in Section 6.1. However, I am not aware of theoretical or empirical papers that show that competition in advertising makes ads less intrusive or lowers the prices of goods. In fact, Varian (2022), which I cite, shows that at least in the context of a simple and straightforward model, the cost of ads is not passed on to consumers. The model suggests that it is not obvious that when ads become cheaper, consumers benefit from lower prices of goods. This of course does not mean that it is impossible to write models where the lower cost of ads will be passed on to consumers, but still, it means that this is not immediately obvious.

9. The referee also writes “assessing whether competition is desirable is not within the CMA’s remit—it is a legislative question. If competition is undesirable, then it would be up to the legislator to decide that some sectors should be exempted from the application of competition law. The CMA’s role is to determine whether a merger would substantially lessen competition.”

The referee’s comment is well-taken. The Facebook-Giphy merger highlights the fact that antitrust policy assumes implicitly that output expansion is always desirable. This is also true for the antitrust treatment of firms in the tobacco, alcohol, sweetened beverages, and gambling industries, where the implicit assumption is that lower prices and higher output are desirable. But then firms in these industries are often subject to other public policies which raise prices and restrict output, including taxation, entry restriction, or bans on advertising. It then seems that antitrust policy is inconsistent with other public policies.

The point then is not to criticize the CMA (which follows the common practice in antitrust) but rather to point out that it is perhaps time to align antitrust policies with other public policies. It seems odd that when antitrust agencies evaluate mergers in the tobacco industry, alcohol, sweetened beverages, or gambling industries, they assume that low prices and high output are desirable, while at the same time other government agencies try to raise prices and restrict output. I believe that a similar point is worth making about display advertising, albeit there are important differences because say advertising is used by two-sided platforms to fund free content and is not a stand-alone product like tobacco, alcohol, or sweetened beverages. Yet if display advertising is

a price we pay to get free content, then more display advertising may be akin to paying a higher price which may harm consumers. In any event, I rewrote the last paragraph in Section 6.1 to clarify what I have in mind.

Referee 2

1. The referee suggested to focus more on “the general lessons that can be drawn from the case rather than on the details of the case itself.” Following this suggestion, I shortened the background section, and the discussions of market definition and procedural details so most of the paper focuses on the lessons that can be drawn from the case.

2. Following the referee’s suggestion, I have also shortened the discussion of the motivation for the acquisition, the efficiency gains, and the review the ToH put forward by the CMA. In particular, I made an effort to eliminate duplications across the different sections and also deleted the discussion of the secondary ToH which the CMA dropped in Phase 2.

3. The referee suggested to expand the discussion on the evaluation of the ToH put forward by the CMA. I now discuss these in Sections 6 (the horizontal ToH) and 7 (the vertical ToH). In particular, in Section 6.1, I expanded the discussion on the distinction between future competition and dynamic competition beyond the Facebook-Giphy case.

4. The referee writes “it is unclear to me why more competition in display advertising should necessarily lead to more ads, given the two-sided nature of this market and given the ad-nuisance nature of ads.” This is a fair point. If more competition does not lead to more ads then the potential problem that I point out is not there. In the revision, I tried to clarify the main point, which is that display ads are not necessarily “goods” and hence the analysis of the merger should take this into account. The same problem is also relevant for other industries like tobacco, alcohol, sweetened beverages, and gambling, where larger output does not necessarily benefit consumers. I now emphasize that it may be a good idea for antitrust analysis to treat products that are not necessarily “goods” in a way which is aligned with other public policies. A comprehensive discussion of this issue however is well beyond the scope of the paper, so I just mention it briefly.

5. The referee suggested to change the title of the paper to “something along the lines of “Dynamic competition in digital mergers: The Facebook-Giphy case” or alike.” I thought about this but while dynamic competition is an important aspect of the case, there are additional aspects which make the case interesting, so I decided to leave the title unchanged. I am not sure that the current title is optimal, but then I am not sure that I have a better title to replace it.

6. Following Referee 2’s suggestion, I dropped the international comity section.

Again, many thanks to you and the two referees for the helpful comments and suggestions. I hope that I managed to address them satisfactorily.

Best regards,

Yossi Spiegel