The Facebook-Giphy merger

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Abstract: I examine the Facebook-Giphy merger which the UK Competition and Markets Authority (CMA) blocked in 2022. The CMA's decision marks the first time that an antitrust agency has blocked a big tech acquisition and suggests that at least some antitrust agencies are willing to take a tougher stance on mergers in the digital sector. The decision has a number of interesting features which I discuss in the paper.

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1. Introduction

There is a growing concern about the increasing market power of big tech giants. Many commentators argue that mergers and acquisitions have played an important role in this process and that antitrust scrutiny of these mergers and acquisitions needs to be tightened (see e.g., Coscelli, 2021). Although big tech giants have acquired hundreds of companies over the past 15 years, many, if not most, of their acquisitions went under the radar, while others have been cleared after an initial review.[1] Moreover, while some the acquisitions were large, subject to antitrust scrutiny, and in retrospect appear to have been problematic (e.g., Google-Youtube, Google-Waze, Google-Doubleclick, Facebook-Instagram, Facebook-WhatsApp, and Microsoft-Linkedin), until recently, no big tech acquisition was ever blocked.[2]

The acquisition of Giphy by Facebook (called Meta Platforms since October 2021), which was blocked by the UK Competition and Markets Authority (CMA) in 2022, is a notable exception. It was the first big tech acquisition blocked by an antitrust agency. Since then there have been a few other attempts to block big tech acquisitions, including Meta's acquisition of Within Unlimited (a VR studio) by the FTC in July 2022, Microsoft's acquisition of Activision Blizzard (a video game holding company) by the CMA and the FTC's in October and December of 2022, and Booking Holdings' proposed acquisition of Flugo Group Holdings AB ("eTraveli") (a platform for selling flights) by the European Commission (EC) in September 2023.[3]

These decisions suggest that antitrust agencies are now willing to take a tougher stance on high-tech mergers. This tougher stance is part of a larger trend which calls for reforming antitrust enforcement in the digital sector (see e.g., the U.S. House of Representatives (2020), ACCC

[1] For instance, the FTC (2021) reports that over the period 2010-2019, the GAFAM firms - Google (now Alphabet), Apple, Facebook (now Meta Platforms), Amazon, and Microsoft - were involved in 616 acquisitions of above $1m (excluding Hiring Events and Patent Acquisitions), which were not notified to the FTC under the Hart-Scott-Rodino Act. See also OECD (2023).

[2] Argentesi et al. (2019) provide ex-post assessment of a number of UK mergers in digital markets and conclude that there were "certain gaps in the way these cases were analysed, which in some cases may have resulted in the realization of market conditions less conducive to a competitive outcome." See also Walker (2023).

[3] More recently, two proposed big tech mergers were terminated: in December 2023 Adobe and Figma (a collaborative web application for interface design) terminated their proposed merger after the CMA's and the EC's decisions to open Phase 2 investigations into the merger and in January 2024 Amazon and iRobot (robot vacuum cleaners maker) terminated their proposed merger in the face of opposition from EC.

(2019), Crémer et al. (2019), Furman et al. (2019), and Scott Morton et al. (2019)). A similar tougher stance on mergers is also reflected in the newly adopted 2023 U.S. Merger Guidelines.[4]

Not everyone agrees however that merger policy in the high-tech sector should be tightened. For instance, Cabral (2020, 2021) argues that while vigorous enforcement is required to curb the increasing power of big tech giants, tightening merger policy in the high-tech space may discourage innovation and ultimately harm consumers. Similarly, the UK Competition Appeals Tribunal (CAT, 2022) states in its judgement on the Facebook-Giphy merger that "In some instances, disapproval of a merger may have a chilling effect on innovation." Eisfeld (2024) estimates that an overall ban of all startup acquisitions in the software industry would decrease entry by 8%-20% in markets that have a low baseline profitability. By contrast, blocking only mergers conducted by large, strategic, acquirers would boost entry by over 4% in affected markets.

In this paper I review the Facebook-Giphy merger and assess the CMA's decision to block it.[5] The case is interesting for several reasons. First, it 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.

Second, the merger was blocked by the CMA despite the fact that Facebook and Giphy are U.S. based and Giphy had no revenues outside the U.S.[6] The merging firms and some third parties submitted that the CMA's decision to assert jurisdiction over the merger would make UK merger enforcement "highly unpredictable" and could stifle innovation and dynamism within the technology sector.[7] Martínez (2022), however, reports that pre-acquisition, Giphy paid dividends which lowered the value of its assets below the Hart-Scott-Rodino threshold to avoid merger notification. The merger then is an example for "stealth consolidation" (Wollmann, 2019). The CMA's decision suggests that when merging firms operate in multiple jurisdictions, stealth

[4] For example, the 2023 U.S. Merger Guidelines lower the concentration thresholds that trigger a presumption that a merger may cause a substantial lessening of competition, and suggest a number of new presumptions and plus factors. see https://tinyurl.com/nhj5txpm

[5] For other papers that examined the case, see Martínez (2022), Smith and Erciyas (2022), Bon et al. (2023), and Walker (2023). The first two papers mostly focus on the legal aspects of the case, while the last two, written by economists at the CMA and Ofcom, discuss the rationale for the CMA's decision to block the merger.

[6] Besides the UK, the merger was also reviewed in Austria and in Australia (see Martínez, 2022). In Austria, the Cartel Court approved the merger subject to conditions needed to alleviate concerns about vertical foreclosure of Meta's social media rivals. See https://tinyurl.com/4ym44nv8. The decision was upheld by the Austrian Supreme Court of Justice. See https://tinyurl.com/mtes2jy5

[7] See CMA (2021b, Paragraphs 3.51 and Appendix H).

consolidation may become harder as the merger may go under the radar in one jurisdiction, but investigated in another.[8]

Third, the CMA based its decision on vertical and horizontal theories of harm (ToH). The vertical ToH was pretty standard and based on the concern that following the merger, Facebook would foreclose access to Giphy's services to rival social media platforms in order to harm their ability to compete in social media. The horizontal ToH by contrast was novel and arguably, much more controversial. It was based on the concern for the loss of potential competition, and more specifically, the loss of dynamic competition in the UK display advertising market. The latter is defined by the Merger Assessment Guidelines (MAG) published by the CMA in 2021 as the loss of efforts or investments of firms "aimed at protecting or expanding their profits in the future" (MAG, Paragraph 5.17).

Historically, antitrust agencies were reluctant to raise potential competition ToH, perhaps because they were deemed too speculative. Over time, however, some commentators have began to question this reluctance. For instance, Shapiro (2018) writes that "One promising way to tighten up on merger enforcement would be to apply tougher standards to mergers that may lessen competition in the future." The CMA's decision to block the Facebook-Giphy merger, and the subsequent decisions in the Microsoft-Activision Blizzard and the Adobe-Figma cases, indicate that at least some antitrust agencies are now willing to consider the loss of potential competition rather than just consider the loss of actual competition.

Fourth, the Facebook-Giphy merger was the first where the CMA applied the 2021 MAG, and as Bon et al. (2023) argue, "can be seen as providing a grounding for how the CMA will apply the Guidelines when assessing concerns about a loss of dynamic competition in future cases." The case highlights that this ToH is based on predictions about an uncertain future which are naturally hard to substantiate, and also highlights the difficulty of establishing convincingly that the merger is more likely than not to give rise to a substantial lessening of competition (SLC), especially when what is at stake are the incentives to innovate and the resulting effects on consumers.

The rest of the paper is organized as follows. In Section 2, I review the background for the merger and in Section 3, I review the three relevant antitrust markets defined by the CMA and the

[8] Interestingly, Sarah Cardell, the CEO of the CMA said recently that "a handful of global deals" may now proceed without CMA interference. See "UK competition regulator will review fewer global deals, says boss," Suzi Ring, Financial Times, February 27, 2025, https://tinyurl.com/mrxj6fr8

market power of the merging parties in each market. In Section 4, I examine the possible motivation for the acquisition, and in Section 5, I discuss the counterfactuals used by the CMA to evaluate the competitive effects of the acquisition. In Sections 6 and 7, I discuss the horizontal and vertical ToHs considered by the CMA. I conclude in Section 8.

2. The background

Facebook, established in July 2004, is a leading social media firm and owns, among other things, three major social media platforms: Facebook, Instagram, and WhatsApp. Its total revenue in 2020 was $86B, of which 97.9% came from advertising (Congressional Research Services, 2021).

On May 15, 2020, Facebook completed an acquisition of Giphy for $315m (CMA, 2021b, Paragraph 2.31).[9] Giphy, incorporated in 2013 and headquartered in New York, provides an online database and search engine for GIFs (Graphics Interchange Format) and GIF stickers on social media and messaging platforms free of charge. GIFs are short (typically 2.5 seconds), looping, soundless videos that can be added to messages (say on WhatsApp); GIF stickers display animated images comprised of a transparent or semi-transparent background over which images or text can be added. Social media platforms use GIFs and GIF stickers to increase user engagement, and thereby boost their advertising revenues. Giphy does not own the intellectual property rights to the usage and distribution of its GIFs and GIF stickers; it secures these rights from their owners through a purpose-built license (CMA, 2021b, Paragraph 4.20).

Giphy offers GIFs and GIF stickers to social media users both on its own website and app, and via third party apps, such as WhatsApp, Instagram, Snapchat, or TikTok, that integrate Giphy's GIF and GIF sticker databases using Application Programming Interfaces (API) or Software Development Kits (SDK). The third party apps are referred to as "API/SDK partners." Facebook's platforms accounted for more than half of Giphy's API traffic (CMA, 2021b, Paragraph 8.94).

At the time of the acquisition, Giphy accounted for 60%-70% of the global API/SDK searches (CMA, 2021b, Paragraph 8.19).[10] Tenor, established in 2014 and acquired by Google in

[9] Facebook acquired all outstanding equity in Giphy through its wholly-owned subsidiary, Tabby Acquisition Sub, Inc. (CMA, 2021a, Paragraph 41). While the acquisition price according to the CMA was $315M, the UK Competition Appeal Tribunal wrote that "Facebook paid some US$400 million for GIPHY" See Court of Appeal (2021, Paragraph 5). The Congressional Research Service (2021) also writes that the price was $400M.

[10] In the UK, over a billion GIF searches are run each month on average using API/SDK partners (CMA, 2021b, Paragraph 11).

2018,[11] was the only close competitor with a share of 30%-40%. There were smaller providers of searchable GIF libraries, including Gfycat, Gifbin, Imgur, Vlipsy, and Holler, but at the time of the merger, only Giphy and Tenor maintained attractive and current content libraries, and had a sophisticated search engine and a wide distribution network of API/SDK partners. In 2020, shortly after Facebook acquired Giphy, Snap, the parent company of Snapchat, acquired Gfycat, which was the third largest provider of searchable GIF libraries with a share of less than 5%, but eventually decided to shut down Gfycat and discontinue it services as of September 1, 2023.[12]

Although Giphy offered its services for free, in 2017 it started offering a "Paid Alignment" service in the U.S. in exchange for a fee. The service allowed brand partners to align GIFs which promote their brands with popular search terms, to ensure that users see them first when searching for a GIF, or to insert their GIFs into Giphy's trending feed.[13] Giphy's annual revenue from the Paid Alignment service was estimated at $27.5m (Hern, 2022). Internal Giphy documents indicate that Giphy was planning to expand the service internationally. However, as part of the merger, Facebook discontinued the service and did not take on Giphy's sales team (CMA, 2021b, Paragraphs 2.10-2.14 and 11.119).

On June 9, 2020, three weeks after the acquisition, the CMA made an Initial Enforcement Order requiring Facebook and Giphy to remain independent.[14] On November 30, 2021, the CMA published a final report which required Meta to divest Giphy on the grounds that the merger had resulted, or may be expected to result, in an SLC in the supply of (i) display advertising services in the UK due to the loss of dynamic competition" and (ii) social media services worldwide due to vertical input foreclosure. Meta applied to the CAT for a judicial review of the CMA's decision. The CAT remitted the case to the CMA for reconsideration on June 14, 2022.[15] On 19 October 2022, the CMA issued a final report on the Remittal Inquiry which maintained its initial decision and required that Meta divests Giphy. On June 23, 2023, about three years after the acquisition,

[11] See https://blog.tenor.com/google-acquires-tenor-77fdc1be737c

[12] See Parties' joint response to the provisional findings (18.8.22), https://tinyurl.com/2tcrks8t and "Gfycat, the Snap-owned GIF hub, shuts down on September 1," by Lauren Forristal, Techcrunch.com, July 5, 2023, https://tinyurl.com/mrxuxta8

[13] The feed shows the latest and most popular GIFs based on the service's search algorithms. For example, Giphy has partnered with Pepsi for the Super Bowl, and with Dunkin Donuts for Valentine's Day (CMA, 2021b, Paragraph 7.36).

[14] The description of the events in this paragraph and the next are based on CMA (2023a, 2023b).

[15] Importantly, appeals to the CAT can only be on judicial review grounds and not on their merits: "It is our task not to consider whether the CMA has "got it right", but whether the decision it made was lawful or not" (CAT 2022, Paragraph 125). The CAT unanimously dismissed five of Meta's six grounds of challenge, but partially upheld Meta's application on one procedural ground and therefore remitted the case to the CMA for reconsideration.

Meta completed Giphy's sale for about $53M in cash to Shutterstock, Inc., which is a New York based platform that provides access to a library of audio, image, and video content, and is traded in the New York Stock Exchange.[16]

3. The CMA's market definition and findings regarding market power[17]

To evaluate the competitive effects of the merger, the CMA defined three relevant antitrust markets within which the merger may result in an SLC. The first market was the global market for supply of searchable GIF libraries, of which Giphy was the market leader.

The second market was the global market for social media. The CMA (2020) found that the Facebook Group (including Instagram and WhatsApp) had a combined share of around 72% of the time spent on social media in the UK in 2020-2021 (CMA, 2021b, Paragraph 5.137-5.138). The second largest platform was TikTok with a share of 10%-12%, while SnapChat and Twitter were the third and fourth with shares of 5%-7% (CMA 2021b, Table 4).[18] The CMA (2020) also found that the competitive threat to Facebook from the entry and expansion of other platforms is limited due to several self-reinforcing barriers to entry, such as same-side and cross-side network effects;[19] the superior consumer data that Facebook has which allows it to better target specific audiences and offer more value to advertisers; and the significant economies of scale required to develop and maintain an effective display advertising platform.[20]

The third relevant antitrust market was the UK market for display advertising which was worth £5.5 billion in 2019 (CMA, 2020, Paragraph 2.62). The CMA found only limited substitutability between digital advertising and traditional offline advertising and concluded that typically the two are complements rather than substitutes. It also found that from the perspective of advertisers, there is limited substitutability between search advertising and display advertising. The former is primarily intent based and geared towards consumers who have already shown

[16] See "Meta sells Giphy to Shutterstock to comply with UK regulator order," Reuters May 23, 2023, https://tinyurl.com/5e3dh3r7

[17] Unless stated otherwise, the facts in this section and the next are largely based on CMA (2021a, 2021b).

[18] Notably, the CMA excluded YouTube from the relevant market, based on evidence that YouTube does not impose a strong competitive constraint on Facebook as users access YouTube principally to watch videos, whereas the top reason for accessing Facebook is "keeping in touch with friends and family."

[19] Same-side network effects arise for instance when an increase in the number of Facebook users boosts the utility of each Facebook user. Cross-side network effects arise when an increase in the number of Facebook users attracts more content developers and advertisers.

[20] The investments include the development of a website/app and back-end functionality to support the platform and technical equipment, and investments in facilities, equipment, and marketing.

interest in buying the product, while the latter is used to raise brand awareness and reach consumers who might not yet have shown interest.[21] Moreover, the CMA found that the advertising market is national, as advertisers are often interested in targeting users with particular characteristics, including their location, language, and culture. The CMA concluded that the Facebook group has a significant market power in the UK display advertising market, with a market share of 50%-60% in 2019, and 40%-50% in 2020 (CMA, 2021b, Paragraphs 5.187-5.189 and 5.197).[22]

4. The motivation for the acquisition

The CMA argued that the Facebook-Giphy merger had both a horizontal dimension (Giphy competes with Facebook in the market for display advertising) and a vertical dimension (GIFs are used by social media platforms as an input). In general, horizontal mergers are possibly motivated, at least in part, by the parties' desire to soften competition in the market (here the display advertising market), while vertical mergers are often motivated by the desire to alleviate various distortions that may arise along the vertical chain, or alternatively, by foreclosure considerations. In what follows, I will discuss the three motivations that Facebook mentioned for acquiring Giphy.

4.1. A concern about losing access to Giphy's services

The first motivation that Facebook mentioned was a concern that Giphy will cease to operate due to ongoing losses. From Facebook's perspective, the risk was that the user experience on its platforms would be compromised (CMA, 2021b, Paragraph 2.29). In particular, it estimated that losing access to Giphy's content would negatively affect the proposition of Instagram, which relied exclusively on Giphy for the provision of GIFs and GIF stickers, to end users and its ability to monetize its service (CMA, 2021b, Paragraphs 2.37, 2.39).

Taken at face value, Facebook argued that in essence, this was a "life-saving" acquisition meant to ensure Giphy's viability. This is the opposite of a "killer acquisition," where a dominant

[21] The merging parties disagreed and argued that all forms of advertising are substitutable, as advertisers allocate their budgets across all different advertising channels with the goal of maximizing their return on investment. The CMA rejected these arguments and wrote that most advertisers argue that they set budgets for search and display advertising independently, because the two play different roles. As of 2019, awareness campaigns accounted for around 17% of the total spend by Facebook advertisers. See Figure N.9 in CMA (2020, Appendix N).

[22] Facebook's share of the U.S. digital advertising market in 2020 was estimated at 23.4%, ranking second to Google (29.4%) and ahead of third-ranking Amazon (9.5%). See Congressional Research Services (2021).

firm acquires a rival in order to shut it down or discontinue its products.[23] Killer acquisitions are often mentioned as one of the reasons for the high concentration in the digital economy.[24] 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).[25] Unlike a killer or a reverse killer acquisition which harm consumers by eliminating products from the market, a life-saving acquisition ensures that consumer surplus is preserved or even enhanced.[26]

The "life-saving" story however begs at least two questions. First, why was Facebook concerned about Giphy's viability? After all, there is no evidence that Giphy was in financial distress (CMA, 2021b, Paragraph 6.35) or had difficulties raising external funds, say due to a "kill zone" effect which arises when high-tech firms operate in the shadow of big tech giants.[27] Nor is there evidence that potential customers or API/SDK partners were reluctant to adopt Giphy's services due to concerns about its viability. And, to the extent that the problem had been one of shortage of funds, it is unclear why the only way to solve it was by a complete acquisition rather than by an acquisition of a minority stake, by signing a long-term contract for developing new products for Facebook, or by forming a joint venture with Facebook.[28]

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[23] The seminal paper on killer acquisitions is Cunningham, Ederer, and Ma (2021). They present evidence for killer acquisitions in pharmaceutical drug industry. Gautier and Lamesch (2021) find that the GAFAM firms acquired 175 companies over the period 2015–2017. Consistent with the killer acquisitions story, they find that in the majority of the acquisitions, the target's product was discontinued under its original brand name, especially when the target was a young firm. By contrast, Ivaldi, Petit, and Ünekbaş (2023) study 12 GAFAM acquisitions reviewed by the European Commission and find little evidence for a weakening, let alone a killing, of competition following the acquisition.

[24] For example, the U.S. House of Representatives (2020) states that the significant increase in market power in the digital economy is due in part to the fact that "a dominant firm acquired smaller companies to shut them down or discontinue underlying products entirely—transactions aptly described as "killer acquisitions.""

[25] Even if Facebook would have decided to develop its own searchable GIF library, this would have been hard and would have taken a long time, as Giphy is not "easily replicable" (CMA, 2021b, Paragraphs 8.50 and 9.27)

[26] Although Facebook discontinued the Paid Alignment service after the acquisition, it would be a stretch to claim that killing the service was a main motivation for the acquisition. Indeed, the CMA did not make this claim (see e.g., CMA, 2021b, Paragraph 2.49). Moreover, mergers and acquisitions are often followed by net reductions in the number of offered products for reasons that are related to organizational considerations like focusing on their core competencies rather than the desire to eliminate a rival's closely competing products (see e.g., Atalay et al., 2024).

[27] Kamepalli, Rajan, Zingales (2020) rationalize the kill zone story by developing a model where some potential customers delay the adoption of a product when they anticipate that the firm will be acquired by a dominant firm in order to avoid incurring switching costs. The delayed adoption hinders the firm's ability to raise funds. Motta and Shelegia (2022) provide an alternative model of the "kill zone" argument, where an incumbent firm may induce an entrant to choose a "non-competing" path to ensure that the incumbent will not deploy a copycat strategy.

[28] Indeed, the CMA argued that Facebook considered a possible minority investment in Giphy or alternatively, paying an annual fee to access Giphy's content. See CMA (2021b, Paragraph 2.35).

Second, suppose that Facebook was truly concerned about Giphy's viability. What prevented it from telling Giphy that it will rescue it if it were in trouble? It is of course possible that a guarantee of this kind could have driven Giphy to take excessive risks, knowing that in the worst case scenario it will be bailed out by Facebook. But then, there is no evidence that this was a real concern, nor that Giphy even had access to risky investments that would have given rise to a significant moral hazard problem that Facebook wanted to alleviate by acquiring Giphy.

It then seems that the "life-saving" motivation for acquiring Giphy is not very convincing. A more compelling explanation appears in Facebook's internal email chain, which states that the motivation for the acquisition was to "prevent competing social media services from acquiring Giphy" (CMA, 2021b, Paragraph 2.32). The risk from Facebook's perspective was that the acquirer may foreclose Facebook. The risk was particularly large in the case of Instagram, which relied exclusively on Giphy for GIFs (CMA, 2021b, Paragraphs 2.6 and 2.39). Other Facebook platforms (including WhatsApp and Messenger), which are integrated with Tenor, were also at risk: absent Giphy, these platforms would depend on Google (Tenor's owner), which would put Facebook at a strategic disadvantage.

4.2. Efficiency gains

A second motivation that Facebook's mentioned for Giphy's acquisition was to realize efficiency gains (CMA, 2021b, Paragraph 2.29). Indeed, a common justifications for vertical mergers (the merger had a vertical dimension) is that they can alleviate various frictions and inefficiencies that can arise in vertical relations. Given that Giphy's services were available for free, double marginalization was obviously not a concern. However, at least in principle, there could have been upstream or downstream moral hazard issues before the merger, such as insufficient investments by Giphy to improve the usages of GIFs on Facebook's platforms (as Giphy does not internalize the benefits that accrue to Facebook), or insufficient investments by Facebook to promote Giphy's services on its platforms (as Facebook does not internalize the benefits that accrue to Giphy).

In particular, the merging parties submitted that following the acquisition, "Facebook could enhance user experience by significantly investing in additional GIPHY services and by pursuing further integration of GIPHY's library into Facebook's services, thereby allowing Facebook to

offer more innovative products to users" (CMA, 2021b, Paragraph 9.110).[29] The CMA mentions in addition that the merger made it possible for Facebook to "personalize users' GIF searches across its user-facing platforms," which "may enable Facebook to provide a better quality service … and increased user engagement across its platforms" (CMA, 2021b, Paragraph 2.47).

While efficiencies can justify a vertical merger, there are at least two problems with the argument. First, the CMA claims that "we have not seen any evidence that there will be such efficiencies as a direct result of the Merger" (CMA, 2021b, Paragraph 9.111). Second, upstream or downstream moral hazard problems can be potentially solved with an alliance or with contracts. It is unclear why such arrangements were not enough, making a merger necessary. One possibility is that either Facebook or Giphy were concerned that jointly developed GIF products may leak to either Facebook's rivals (e.g., Snapchat or TikTok) which are clients of Giphy or to Giphy's rivals (e.g., Tenor) which supply GIF's to Facebook and Whatsapp. A merger can solve this problem.

4.3. Acquihire

A third possibility is that the merger was an acquihire: an acquisition intended to integrate Giphy's talent, especially its creative production specialists, as a team into Facebook (CMA, 2021b, Paragraph 2.29). This possibility is highly plausible as Mark Zuckerberg was quoted in the press as saying that "Facebook has not once bought a company for the company itself. We buy companies to get excellent people."[30] Chen, Hshieh, and Zhang (2023) find evidence that suggests that obtaining skilled labor is an important driver of acquisitions. In Giphy's case, the CMA argued that Facebook "saw the creativity of [GIPHY's] team as an important driver in its decision to acquire GIPHY" (CMA, 2021b, Paragraph 7.34) and that Facebook stated that "GIPHY's creative team would 'accelerate Facebook's efforts around other creative expression use cases across its services'" (CMA, 2021b, Paragraph 2.29).

In particular, the CMA (2021b, Paragraph 7.34) quotes Vishal Shah, VP and Head of Product at Instagram, who described Facebook's reasons for acquiring Giphy as follows: "…what's easier to find are engineers that can write code. What's hard to find is those who can do

[29] One specific investment mentioned in the case was a new ad format within the sticker "tray" on Instagram (the sticker tray enables search and retrieval of GIFs and stickers to be used as part of the Instagram "story."). See CMA (2021b, Paragraph 2.40).

[30] See "Mark Zuckerberg: 'We Buy Companies to Get Excellent People'," by Nathaniel Cahners Hindman, HuffPost, October 19, 2010, https://tinyurl.com/4a67djev.

that with a creative mindset, who understand how consumers think and can build products that are meaningfully important to consumers, and Giphy had those products… And it, it is very, very hard to go and build that culture and to do it in a way that aligns with the way that we think and we build. … the reason we even went anywhere with this conversation was because I believed in Alex [Giphy's CEO], I believed in his, his team, and I believed in the culture that they'd built."

While plausible, the acquihire story begs the following question: why is it necessary for Facebook to acquire Giphy in order to benefit from the talent of its creative team rather than continue to interact with this team at arms' length? One possibility is that there are some frictions that an acquisition can alleviate. But then, it is not entirely clear what these frictions are, nor if an acquihire is the most efficient way to alleviate them. Another possibility is that Facebook was concerned that it may lose access to Giphy's talent in the event that Giphy is acquired by a rival social media platform. By preemptively acquiring Giphy, Facebook eliminated this risk.[31]

It should be noted that if Giphy's talent is indeed unique, and if a merger leads to de facto foreclosure of rival social media platforms, then an acquihire may not be pro-competitive as the benefit that accrues to Facebook might come at the expense of rival social media platforms. Benkert, Letina, and Liu (2024) formalize this idea. They consider a duopoly model, where firms compete both in the product market and for acquiring a startup, which operates in an unrelated product market, and integrating it into their own operations. They show that while an acquihire may boost the acquirer's profit, it always lowers the rival's profit. As a result, the two firm engage in a race to preemptively acquire the startup. This race may result in a lower aggregate surplus than without an acquisition or under acquisition by the rival.

5. Evaluating the counterfactuals

A merger results in an SLC if it substantially lessens competition below the counterfactual level that would prevail absent a merger. Hence, a key element in assessing the Facebook-Giphy merger is the counterfactual scenario. The CMA considered two counterfactuals. Under the first, Giphy would have continued to operate independently of Facebook, and would fund its investments with revenues from its Paid Alignment service and from other means, such as a platform/license fee or

[31] Bar-Isaac, Johnson, and Nocke (2024) consider a third possibility: an acquihire might be intended to shut down the most relevant labor market competitor and thereby grant the acquirer monopsony power over employees. In their setting, acquihires may harm employees and be socially inefficient.

revenue sharing arrangements with API/SDK partners. Moreover, Giphy would receive further funding from existing or new investors (CMA, 2021b, Paragraphs 6.41, 6.53). Under the second counterfactual, Giphy would have found an alternative acquirer, possibly another social media platform (CMA, 2021b, Paragraphs 6.121-6.122).[32]

To be sure, developing a counterfactual scenario is always important in merger analysis. But unlike mergers between established firms in a mature industry where the status quo is a reasonable counterfactual, developing a counterfactual in a merger between an incumbent and a potential entrant is much more challenging. This is especially true in high-tech industries, where the market is evolving fast, and there is an inherent difficulty to predict which technologies will appeal to consumers. In fact, it is often hard to even predict the range of possible outcomes and how likely each outcome is.[33]

The screenwriter William Goldman famously described the ability of Hollywood executives to predict which movies would succeed by saying that "nobody knows anything." Arguably, the same can be said about the ability to predict the success of new products in the high-tech sector. For instance, Yoffie, Gawer, and Cusumano (2019) study over 250 U.S. platforms (all attracted large investments) and find that 83% of them failed. The average life of the failed platforms is only 4.9 years, albeit standalone firms tend to have shorter lives - only 3.7 years on average - than firms that were acquired (7.4 years on average) or were part of larger entities (4.9 years on average).

Jensen et al. (2023) use data on 4.1 million apps at the Google Play Store from 2016 to 2019 and find that following the introduction of the General Data Protection Regulation (GDPR) in the European Union in May of 2018, entry of new apps was cut in half, and the number of apps which achieve some (high) level of success within a year of entry fell roughly proportionally. These findings are consistent with the "nobody knows anything" view: the GDPR required developers to engage in potentially costly compliance activities. If success was predictable, then once the GDPR is introduced, only apps with low expected success would cease to enter, so the

[32] Giphy's internal documents show that "Giphy was looking to some of its API partners… as well as other strategic partners (such as Playtika) for a minority investment in Giphy in order to ensure its continued operation and to fund further expansion" (CMA, 2021b, Paragraph 6.65).

[33] Courtney, Kirkland, and Viguerie (1997) argue that in practice, the uncertainty facing most strategic-decision makers falls into one of four broad levels: a clear enough future, a few discrete scenarios, a range of futures, and a true ambiguity, where it is impossible to identify a range of potential outcomes. Determining how high-tech markets will evolve often falls into the last category, which is why predictions about it are highly speculative.

number of successful apps that enter should not have been affected by the introduction of the GDPR.

Despite this difficulty, the first counterfactual – Giphy would have remained independent – seems unlikely. Giphy argued that "there are indications of an overall decline in GIF use" and stated that (i) GIFs "have fallen out of fashion as a content form, with younger users in particular describing GIFs as meant "for boomers" and a 'cringe,'" and (ii) "Content creators are also finding less value in GIFs."[34] In fact, data shows that the percentage of websites using GIFs has steadily declined from 50.4% in 2014 to 18.1% in 2025.[35] Although this does not mean that the total usage of GIFs has declined, an online survey conducted by Zoom in November 2022 reveals that only 20% of the participants love GIFs, 28% hate them, and 53% are indifferent.[36]

It is also worth recalling that Giphy provides its services for free, and that a large fraction of its GIFs are accessed on API/SDK partner's platforms, so Giphy cannot monetize them with ads.[37] Although Giphy willingly allowed partners to use its content, it is still true that Giphy's partners were the ones who benefitted from the users' engagement generated by GIFs and were able to monetize it by showing ads to users.

In principle, Giphy can overcome the monetization problem by charging API/SDK partners a fee for using its services. However, according to the CMA, such a fee was never Giphy's "preferred option" and moreover, the evidence "is not conclusive on whether API partners would have ultimately agreed to pay a platform fee to GIPHY" albeit some key API partners "were actively discussing the terms of a platform fee/commercial arrangement" (CMA, 2021b, Paragraph 6.58-6.61).

Another way to monetize GIFs was to rely on the Paid Alignment service offered to brand partners. The CMA argued that "Because users are sending ads to their friends in conversation, Giphy Ads generate significant brand metrics lift" (CMA, 2021b, Paragraph 7.70).[38] Although one

[34] See "Giphy's Submission to the CMA on Remittal," 9 August 2022, https://tinyurl.com/f558x57
[35] See https://tinyurl.com/mtdfc5c4.
[36] See https://tinyurl.com/jszx8pm4. The survey was conducted online by Zoom using SurveyMonkey in November 2022 among 2,800 total respondents.
[37] In a sense, Giphy's situation is reminiscent to that of online news publishers that claim that news aggregators like Google news free ride on their content and monetize it with ads while they alone bear the cost of content creation (see e.g., Calzada and Gil, 2020).
[38] The CMA also mentions that an advertiser commented that "Advertising through private messaging comes with an air of credibility because you trust your friends and family" (see CMA, 2021b, Paragraph 7.71).

has to be cautious given the "nobody knows anything" view, there are several reasons to doubt the commercial potential of the Paid Alignment service.

First, advertising is generally viewed in the media and platforms literature as a nuisance and a price that users need to pay in order to access free online content. For instance, Anderson and Coate (2005) model competition in over the air broadcasting and assume that viewers' utility falls with the number of ads they receive. Huang, Reiley, and Riabov (2018) estimate the demand for ad-supported music listening on Pandora and, consistent with the view of ads as a price that consumers pay, find that the quantity of hours listened decreases linearly with the number of ads per hour. It is then unclear why users may wish to send friends in conversation commercial GIFs, at least on a large scale.[39] Moreover, there is nothing that prevents people from sending friends commercial ads even today, but other than influencer marketers who post ads in exchange for fees, I am not aware of individuals posting ads on social media or sending each other ads.[40]

Second, Giphy lacked a meaningful user base of its own, and could not provide advertisers with the ability to monitor and track return on investment closely, offer "direct response" ads with click through capability, which allows users to buy a product, or control third-party app environments, where the ads would be seen.

Third, the merging parties submitted that the demand of advertisers for the Paid Alignment service "was unproven, and to date had been limited to experimental ad budgets" (CMA, 2021b, Paragraph 7.51) and the CAT (2022, Paragraph 124) stated that GIPHY's investors were "sceptical as to whether GIPHY would succeed in making good its Paid Alignment advertising plans" and that "the perception was that GIPHY's was a business declining in value." The decision of Snap to shut down Gfycat 3 years after acquiring it in 2020 also points in this direction.

Moreover, Giphy's value has sharply declined over time: the company was valued in 2016 at $600M,[41] was acquired by Facebook in 2020 for $315M, and was then sold to Shutterstock in

[39] The CMA essentially argues that while viewers get disutility from viewing ads when they are sent by advertisers, they get a positive utility when sent by friends. While this may be true, I am not aware of a theoretical foundation for the claim that the utility from a product (like an ad) may depend on how the consumer obtains the product.

[40] Online influencers sign contracts with firms to promote the firms' offerings in their online posts in exchange for a fee. The cost of influencer marketing is considerable: Leung, Gu, and Palmatier (2022) report that firms invested $13.8 billion in influencer marketing in 2021 and McKinsey & Company (2023) report that the influencer marketing economy was valued at $21.1 billion in 2023.

[41] See "GIF Site Giphy is Valued at $600 Million," by Rolfe Winkler, Wall Street Journal, October 31, 2016, https://tinyurl.com/2wy3a8cr

2023 for about $53M.[42] This sharp decline is consistent with the idea that Giphy had a limited potential, albeit the price that Shutterstock paid may had been due to Facebook's reluctance to sell Giphy to a social media rival or the reluctance of social media rivals to acquire Giphy for fear of another antitrust intervention (both considerations would constrain Facebook's ability to find a suitable acquirer for Giphy and depress the selling price).

The above discussion suggests that it is unlikely that Giphy would have remained independent. And as I discussed in Section 4.1, it is also unlikely that Giphy would have collapsed and exited the market. The most likely counterfactual then is that Giphy would have been acquired by another company. Indeed, as I already mentioned, Tenor, which is the second largest GIFs provider was acquired by Google in 2018, and Gfycat, which was the third largest, was acquired by Snap in 2020. Moreover, Imgur, which is a smaller GIF provider, was also acquired - by Media Lab - in 2021.[43] To the extent that the acquirer would have been another social media platform, the merger might had raised, at least in principle, similar type of concerns for loss of potential competition in display advertising, or vertical foreclose of social media rivals.

One might argue that the risk of foreclosure would have been much smaller following an acquisition by a rival social media platform. After all, the Facebook group accounted for a 72% share of the time spent on social media in the UK, so foreclosing it would have meant a loss of access to 72% of users' time spent on social networks (albeit the resulting cost would have been indirect as GIFs were offered for free). But then, the acquirer's benefit of foreclosure would have been large as well, as the degradation of Facebook's services might have induced a large shift of usage from Facebook to the acquirer's platform. In other words, Facebook's size makes both the cost of foreclosing it, as well as the associated benefit, large.[44]

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[42] Interestingly, Shutterstock argued in a recent earnings call that "Giphy has the potential to be hundreds of millions of dollars in revenue." See "Shutterstock, Inc. (NYSE:SSTK) Q4 2023 Earnings Call Transcript," Insider Monkey Transcripts, February 22, 2024, https://tinyurl.com/4fztfvc5. It remains to be seen if that will turn out to be the case.

[43] See https://tinyurl.com/yc8eauye

[44] To illustrate, suppose that Giphy would have been acquired by TikTok, which was the second largest social media platform in the UK with a market share of 12%. If the cost and benefit of foreclosure are proportional to the market shares, then both the cost and benefit of foreclosure of TikTok by Facebook are 6 times larger than those of foreclosure of Facebook by TikTok. To be sure, telling whether the risk of foreclosure is larger when an upstream supplier is acquired by a large or by a small downstream firm requires a formal model, which is beyond the scope of this paper. But at least in principle, if one is concerned about Facebook foreclosing rivals, then one should be also concerned about rivals foreclosing Facebook.

6. The CMA's horizontal ToH

The CMA considered two ToH: one horizontal - loss of dynamic competition in display advertising - and one vertical - input foreclosure of social media platforms. Based on these, it concluded that "the Merger is more likely than not to give rise to an SLC" in display advertising in the UK and in social media worldwide (CMA, 2021b, Paragraph 18), which is the legal test used in the UK to determine whether a merger should be blocked (CMA, 2021b). In the next two sections, I discuss the two ToH in turn.

Before discussing the horizontal ToH in detail, it is worth noting that until recently, antitrust agencies did not commonly raise potential competition ToH (the loss of dynamic competition is a specific type of loss of potential competition) when reviewing high-tech mergers. Robertson (2022) studies 69 national digital and technology merger cases from 17 selected EU Member States and the UK during the 2015-2022 period. She finds that only 6 cases out of the 57 cases that raised horizontal concerns also raised concerns about the loss of potential competition. Of the 6 cases, 5 were from the UK (including the Facebook-Giphy merger) and one was the Facebook-Giphy merger that was reviewed in Austria.[45] The remaining 51 cases that raised horizontal concerns focused on the loss of an actual competitor.[46] The CMA's willingness to consider concerns about the loss of potential competition may not be surprising given that the 2021 MAG extensively discuss this concern as one of the main ToH due to mergers, alongside the loss of existing competition, and the possibility for coordinated, vertical, and conglomerate effects.[47]

6.1 Future competition vs. dynamic competition

In its Phase 1 decision, the CMA emphasized both the loss of "future competition" and the loss of "dynamic competition" (CMA 2021a, Paragraphs 188-194), but in Phase 2, it focused only on the latter (CMA 2021b, Paragraphs 7.4, 7.6). The distinction between the two types of losses derives from the 2021 MAG. It defines the loss of the future competition as the loss of competition

[45] The other four cases which raised concerns about the loss of potential competition are PayPal Holdings–iZettle in 2019, Amazon-Roofoods in 2020, Adevinta-eBay Classifieds Group in 2021, and Uber International-GPC Computer Software in 2021.

[46] Motta and Peitz (2021) discuss recent ToH of big tech mergers which remove actual competitors and stress that they rely on features that figure prominently in digital industries, including network effects, two-sidedness, free services to one side, and the prominence of big data.

[47] See https://tinyurl.com/tv9t2y97. It should be noted that the 2023 U.S. Merger Guidelines also state in Guidelines 4 that "mergers can violate the law when they eliminate a potential entrant in a concentrated market."

"between the merger firms after the potential entrant would have entered or expanded" (CMA, 2021b, Paragraph 5.2) and the loss of dynamic competition as the loss of efforts or investments of firms that "may eventually lead to their entry or expansion" or "mitigating the risk of losing future profits to potential entrants" (MAG, Paragraph 5.3).[48]

The 2021 MAG emphasizes that while future competition benefits consumers only once entry has occurred, dynamic competition "can increase the likelihood of new innovations or products being made available, and therefore has economic value in the present" (MAG, Paragraph 5.20). Hence, the loss of dynamic competition may lead to an SLC "even where entry by that entrant is unlikely and may ultimately be unsuccessful" (MAG, Paragraph 5.23). Walker (2023) emphasizes that when considering whether a merger might harm dynamic competition, "the focus of the analysis is likely to be more on the capabilities of the firms involved, and of other firms, than on the specific products that firms currently produce."

In the context of the Facebook-Giphy merger, the CMA argued that absent a merger, entrants like Giphy "are making efforts or investments that may eventually lead to their entry or expansion," while incumbents like Facebook invest in order to "mitigate the risk of losing future profits to potential entrants such as GIPHY" (CMA, 2021b, Paragraph 7.14). The decision stresses that the process of dynamic competition "can also increase the likelihood of new innovations or products being made available, whether this would have been by GIPHY, Facebook or other firms" and that the resulting benefit can accrue in the present rather than only in the future (CMA, 2021b, Paragraphs 7.14-7.15). The CMA concludes that the merger may weaken the incentives to invest and will therefore result in SLC in display advertising in the UK (CMA, 2021b, Paragraph 7.255).

Four comments are now in order. First, the distinction between the loss of future competition and the loss of dynamic competition does not seem to be particularly useful. To an IO economist, it seems obvious that at least in principle, a merger with a potential entrant can harm competition both because the entrant will no longer compete as an independent firm, and because the merger may weaken the incentives of the merging firms to innovate even before entry occurs.[49]

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[48] Examples of these efforts or investments include "developing new products or improving existing ones; introducing more efficient or disruptive business models; introducing new features that benefit customers but also increase customer stickiness; or sacrificing short-run margins (or even operating at a loss) in order to attract users to their platform and benefit from network efficiencies, to achieve a minimum efficient scale, to scale up a distribution network, or to establish a reputation" (MAG, Paragraph 5.17).

[49] Indeed, the CMA admits that the losses of future competition and dynamic competition are interrelated and may depend on overlapping evidence (MAG, Footnote 102). See also Bon et al. (2023, Footnote 4).

More importantly, the incentives of firms to innovate depend on the difference between their expected future profits with and without innovation. These profits depend in turn on the likelihood of entry and on how intense future competition is expected to be.[50] Clearly, if the likelihood of entry and/or the strength of competition conditional on entry are not high, neither will be the incentives to innovate. For these reasons, it is unclear how the assessment of dynamic competition can be separated from that of future competition.

Second, as the CAT (2022, Paragraphs 33-35) recognized, dynamic competition requires a much more involved analysis than static or even future competition because by definition, innovation implies that the market keeps evolving and hence it is not easy to state or justify the analytical framework used to evaluate the merger. The CAT (2022, Paragraph 109) offered a number of factors that may help to identify mergers which are likely to lessen dynamic competition, including the motivation for the merger (e.g., killer acquisitions vs. "life-saving" acquisitions), the acquisition value (a high value may indicate that an SLC is more likely),[51] the degree to which the market is contestable (i.e., the likelihood that entry will replace the acquired firm), and monetization (i.e., how strong the entrant would be but for the acquisition). However, all four factors are also indicative of the likelihood and intensity of future competition. For example, contestability makes future competition more likely, monetization makes it more intense, and in both cases, the acquirer may be more interested in killing the target firm and may be willing to pay more to acquire it.

Third, unlike the effects of mergers on quantities and prices, which have been extensively studied, the literature on the effects of mergers on innovation is still in its infancy.[52] In particular, Lefouili and Madio (2025) review the existing literature and note that empirical studies on mergers and acquisitions in digital markets are scarce, and that in any event, the results on the effect of horizontal mergers on firms' investments, both theoretically and empirically, are mixed.[53] One

[50] In fact, according to the 2021 MAG (Paragraph 5.18) "existing firms may invest in the present in order to protect future sales from dynamic competitors. Dynamic competitors making investments in the present will do so in order to win new sales in the future, including by winning sales from other suppliers."

[51] Fumagalli, Motta, and Tarantino (2023) study a model in which a high acquisition price indicates that the target is more likely to succeed as an independent firm and therefore the acquisition is more likely to harm welfare due to a suppression of competition if the target is not killed and also the suppression of innovation if the target is killed.

[52] For theoretical models of the effect of merger and acquisitions on innovations, see for example, Cabral (2023), Letina, Schmutzler, and Seibel (2024), and Polo and Denicolò (2024).

[53] They note that theoretical results on the impact of horizontal mergers on innovation depend on numerous factors, such as the initial level of competition in the industry, the technological landscape, whether investments are cost-reduction or quality-enhancing, and whether the target firm is an actual or a potential competitor. They also note that

reason for this is that in general, a merger boosts profits both with and without innovation, so its overall effect on the incentive to innovate (which depends on the difference between the two) is not obvious. Moreover, when assessing the effects of a merger on quantities and prices, one can use various quantitative measures like market shares, markups, and price changes. It is less clear which measures can be used to quantify and assess the effects of mergers on innovation.

It is true that the 2021 MAG state 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" (MAG, Paragraph 5.20). I also agree with Kokkoris and Valletti (2020) that the fact that innovation is by definition an uncertain process should not necessarily imply that it "cannot and should not be assessed" and with Gilbert (2022) that antitrust enforcement should put more emphasis on innovation and challenge mergers and firm conduct that are "likely to harm innovation and competition for products that do not presently exist."[54] My point however is that one has to be extra cautious when applying ToH based on the loss of dynamic competition, given the current state of the literature.

A fourth and related comment is that one cannot take it for granted that innovation necessarily benefits consumers.[55] In the context of the Facebook-Giphy merger, the innovation in question was the Paid Alignment service and competition was in display advertising. As I have already mentioned, advertising is viewed in the media and platforms literature as a nuisance and a price that users need to pay to get free access to content. Accordingly, if innovation leads to more display advertising, it may harm users rather than benefit them. One can argue that innovation may lower the cost of advertising and the resulting cost savings will be passed on, at least in part, to consumers through lower prices of goods and services, or that it can make ads less intrusive. These possibilities however are not immediately obvious and cannot be taken for granted.[56]

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the empirical literature finds that similar consolidation practices may yield different outcomes across different industries. See also Gilbert (2022).

[54] It is also important to bear in mind that the dynamic effect of innovation on consumers can be orders of magnitude larger than the static effect of higher prices or lower quantities. See Cabral (2017).

[55] For example, innovations in cyber intelligence, spyware, or face recognition technologies raise serious ethical concerns and many commentators warn that they may cause more harm than good.

[56] For example, Varian (2022) claims that at least in a simple model, the cost of advertising does not affect the prices of goods. In his model, each consumer has a willingness to pay v which is distributed in the population according to a distribution function F(v). Consumers buy only if $v \geq p$, so the probability of buying is 1-F(p). The number of consumers, a, can be increased by advertising at a cost of $k \times m(a)$, where k is a shift parameter and m is increasing and convex. The firm's profit then is $\pi = a(1-F(p))(p-c) - km(a)$, where c is the per-unit cost. By inspection, π is separable in p and a, so an increase in k, which increases the cost of advertising, has no effect on the profit-maximizing price.

As far as I can tell, the CMA implicitly assumed that more innovation in display advertising is necessarily beneficial to internet users. This may not be surprising given that the current antitrust paradigm "generally has no capacity for taking into account a market's harmful nature" (Crane, 2005). However, similarly to mergers in the tobacco, alcohol, sweetened beverages, and gambling industries, it may be a good idea to align antitrust policy with other public policies which are often intended to restrict output through taxes, entry restrictions, or bans on advertising, rather than encouraging output expansion.

6.2 Evaluating the CMA's arguments

Turning to the CMA's concern about the loss of dynamic competition in display advertising, it is worth recalling that in 2020, Facebook's advertising revenues exceeded $84bn, whereas Giphy's advertising revenue (from the Paid Alignment service) was estimated at merely $27.5m, which is 0.03% of Facebook's advertising revenues. Moreover, the merging firms argued that Giphy's maximum potential revenues with Paid Alignments in the UK (based on its UK user traffic) would have accounted for less than 0.01% market share in the UK digital advertising space (CMA, 2021a, Paragraph 181). This sounds negligible. One can of course argue that Paid Alignment was only in its infancy and with time, it would have grown up substantially. However, as I already discussed above, there are several reasons why this is doubtful.

First, Giphy relies on API/SDK partners' apps to distribute its GIFs, and Facebook's platforms alone account for more than half of Giphy's API traffic (CMA, 2021b, Paragraph 8.94). It then seems that Giphy's ability to compete with Facebook when it actually relies on Facebook to host its GIFs is limited. In principle, if Facebook believes that competition from Giphy becomes a problem, it can always stop working with Giphy or demand that Giphy shares its advertising revenue with Facebook. Second, Giphy's ads are of low commercial value because Giphy cannot provide advertisers with the ability to monitor and track return on investment closely, offer "direct response" ads, or control third-party app environments, where the ads appear. Third, Giphy's business model was based on the idea that users will send friend commercial ads, despite the fact that ads are considered in the media and platforms literature as a nuisance. Finally, the commercial potential of the Paid Alignment service was "unproven" and investors were "skeptical" about its likely success.

Given the above considerations, it is hard to imagine that but for the merger, Giphy would have become more than a minor player in the display advertising market. It is then not be surprising that the CMA dropped its claims about the loss of future competition in Phase 2 of the investigation. And, although the CMA still argued that the Paid Alignment service "had the potential to become an important alternative to Facebook for at least some advertisers' display advertising budgets" (CMA 2021b, Paragraph 7.254(c)), it no longer argued that eliminating the service following the merger would substantially lessen future competition in display advertising. What is unclear is how or why a merger that was not expected to have a substantial effect on future competition would have had a substantial negative effect on innovation.

Moreover, the CMA's conclusion that "the merger is more likely than not to give rise to an SLC" in display advertising in the UK begs two additional questions regarding the likelihood of harm and its extent. The first question is how the CMA can respond to the claim "based on the evidence, the probability that the merger will result in an SLC is below 50%"? Obviously, the response "you may well think so, but we think otherwise" is not very convincing.[57] Indeed, the Austrian Cartel Court, which also reviewed the merger, saw no horizontal competition concerns because of the merger.[58]

As for the extent of harm, the CMA based its decision that the harm is substantial on several factors, including (i) Facebook's significant market power in display advertising; (ii) Giphy's strong position as a leading provider of "an important social media engagement tool"; (iii) Giphy's efforts to monetize its services; (iv) evidence that Facebook and other market participants were also interested in monetizing "the same or similar social media features"; (v) the positive externality of the Paid Alignment service on Facebook's rival social media platforms "leading them to invest more in attracting new users"; and (iv) the high barriers to entry in display advertising (CMA, 2021b, Paragraph 44). These factors notwithstanding, the question remains how significant the Paid Alignment service is. If, as the evidence suggests, it is only a marginal outlet for display advertising, then it is hard to argue that eliminating it substantially lessened the incentive to innovate.

[57] The CAT noted that assessing whether there is more than 50% chance that the merger will result is an SLC "involves difficult questions of judgement" (CAT, 2022, Paragraph 125). However, the CMA did not consider "whether the CMA has "got it right", but whether the decision it made was lawful or not."
[58] See https://tinyurl.com/4ym44nv8

It is true that in the past, the OFT (the CMA's predecessor) approved the Facebook-Instagram and the Google-Waze mergers due to "the uncertainty surrounding whether Instagram's and Waze's potential would have been realized" (Argentesi et al., 2019). In retrospect, these decisions seem to have been way too cautious. It is also true, as Argentesi et al. (2019) argue, that "potential competition ToHs will always entail a certain degree of uncertainty. If the Authorities wish to pursue this type of ToH in the future, then they should be willing to accept a greater degree of uncertainty in their evaluations."

Nonetheless, it seems that in the Facebook-Giphy case, the CMA took an optimistic view about Giphy's prospects as an independent firm, its ability to innovate or induce other firms to innovate, and the benefits of the resulting innovations to users. Moreover, although GIFs enhance users' engagement on social media platforms, they are merely an add on and as such, seem far less important than a photo and video sharing platform like Instagram or a turn-by-turn navigation platform like Waze.

7. The CMA's vertical ToH

The vertical ToH advanced by the CMA was one of input foreclosure. Unlike the dynamic competition ToH, this ToH is often raised in digital and technology merger cases. For instance, Robertson (2022) finds that 29 mergers of the 69 that she studies raised vertical concerns, of which 27 raised concerns about input foreclosure. Another 11 cases raised concerns about customer foreclosure and 15 cases raised concerns about conglomerate foreclosure (e.g., due to bundling).

Specifically, the CMA argued that "the Merger may lead to Facebook foreclosing access to GIPHY's services to rival social media platforms in order to harm its rivals' current and future ability to compete in social media and, as a result, in display advertising" (CMA, 2021b, Paragraph 8.2). The CMA argued that foreclosure could be complete and involve an outright refusal to supply GIFs via Giphy's API/SDK partners, or partial and involve a degradation of the quality of Giphy's service to rivals. The latter could take the form of (i) worsening the terms of Giphy's supply or limiting the ability of rivals to benefit from revenue sharing agreements with Giphy, (ii) reprioritising innovation and development of Giphy's API/SDK services towards the requirements of Facebook's own social media services over those of rival social media platforms, or (iii) requiring rivals to provide more user data to access Giphy.

Needless to say, foreclosure of social media rivals is profitable for Facebook only if its benefit exceeds the associated cost. The latter seems limited because Giphy did not monetize GIFs, except for the Paid Alignment service, which was still in its infancy and was discontinued anyway by Facebook after the merger. Moreover, the CMA argued that there is only a small risk that foreclosure will reduce Giphy's traffic (which could undermine network effects advantages) and materially affect the quality of its services (CMA, 2021b, Paragraph 8.118-8.119, 8.154).

As for the benefit from foreclosure, the CMA argued that it could be both direct, due to the diversion of users from social media rivals to Facebook, as well as indirect due to harming the ability of rivals to innovate, grow, and develop. Both types of benefits depend in turn on how effective foreclosure is in harming rivals. The CMA considered three factors that are likely to make foreclosure effective.

The first factor is the importance of GIFs for social media platforms. The CMA found that GIFs are considered by Facebook, as well as by some of its main rivals, as a "significant driver of engagement and advertising revenue" and one of Facebook's largest rivals argued that that removing Giphy would unavoidably degrade user experience (CMA, 2021b, Paragraphs 8.62-8.63, 8.79-8.83).[59]

The second factor was the lack of good substitutes for Giphy's services. The CMA found that among existing GIF suppliers, the only effective alternative to Giphy was Tenor (owned by Google), and even then its share of API/SDK searches in the UK in 2019 was merely 10-20%, compared with 80-90% for Giphy (CMA, 2021a, Paragraph 22). Other GIF providers, such as Gfycat, Gifbin, Imgur, Vlipsy, and Holler, were considered less attractive by third parties as they lacked the attractive and current content library, the sophisticated search algorithm, and the wide distribution network of API/SDK partners that Giphy and Tenor maintain.

Another potential substitute for Giphy is new entry. The CMA considered entry into the supply of searchable GIF libraries unlikely in the near future due to significant barriers to entry and expansion. These are associated with developing a high-quality large content library, a sophisticated search algorithm, a strong brand name, and a monetization strategy. Moreover, while the merging parties submitted that GIFs have become a commodity and that "less than 1% of

[59] Not all platforms however viewed GIFs as essential: some third parties told the CMA that having a significantly worse GIF offering would have "some impact on their competitiveness and ability to win and retain users" (CMA, 2021a, Paragraph 200) and two platforms characterized GIFs as "nice to have but not critical or foundational for their growth or user engagement" (CMA, 2021b, Paragraph 8.86).

Giphy's content is exclusive" (CMA, 2021b, Paragraph 8.44), Giphy's API partners have noted the importance of working with a GIF provider that has the required licenses for its content (CMA 2021b, Paragraph 9.62). Moreover, according to Giphy's internal documents, determining the intent of a GIF search term is complex and requires sophisticated search algorithms to cater for a myriad of possible meanings of what a search term may represent. In turns out that Giphy made specific innovations in relation to the ranking of search terms, which require large datasets, engineering time, and cost to develop (CMA 2021b, Paragraph 9.33-9.34).

The CMA also concluded that backward integration by social media platforms into searchable GIF libraries cannot substitute Giphy because Giphy "is not easily replicable" as this "would require a significant resource and time commitment" (CMA, 2021b, Paragraph 8.50).

The significant barriers to entry and expansion into searchable GIF libraries leave Tenor as the only effective alternative to Giphy. The CMA concluded however that Tenor alone is not enough to alleviate the concern for vertical foreclosure (CMA, 2021b, Paragraphs 8.29-8.32, 8.83). One reason for this is that, as in the Ordover, Saloner, and Salop (1990) model of input foreclosure, Tenor, as the only significant provider of GIFs, may exploit social media rivals.[60] For example, Tenor may request more data from API/SDK partners, worsen the terms of supply, and prioritize innovation and product development to benefit Google's own commercial interests and product requirements over those of social media platforms. Other reasons why Tenor alone may not be enough to alleviate the concern for vertical foreclosure are that for some social media platforms it is important to have more than one GIF provider (CMA 2021b, Paragraphs 8.31), some platforms viewed Giphy as distinctive in terms of quality (CMA 2021b, Paragraphs 8.32), and Google's incentives to develop Tenor may be different from those of Facebook, as Google is not a social media platform (CMA 2021b, Paragraphs 8.27, 8.30).

The third factor that is important for making foreclosure effective is the ability of Facebook to disadvantage rivals by using the provision of Giphy's services as a means of acquiring data on user behavior or wider trends on these platforms. This data advantage could further weaken the competitors' ability to compete in social media and digital advertising and could further raise barriers to entry (CMA, 2021b, Paragraphs 8.92).

[60] In the Ordover, Saloner, and Salop (1990) model of input foreclosure, a vertically integrated firm commits not to supply an input to a downstream rival in order to increase the bargaining power of a rival upstream supplier vis-a-vis the downstream rival and thereby weaken it.

The merging parties submitted that Giphy's data would not be useful for targeted advertising for several reasons. First, the data is narrow in scope as Giphy does not have access to detailed user, context, or activity data that could provide meaningful insights to advertisers. Moreover, Giphy's API partners can and do use proxy servers and content caching servers to prevent Giphy from accessing user-level data.[61] Second, data on GIF search terms contains substantial noise, as the meaning or sentiment of GIFs can depend on the context. Third, user search queries appear largely uniform across Giphy's API partners and Facebook already accounts for more than half of Giphy's API traffic, so the incremental information that Facebook can derive from seeing queries originating from other API partners is small (CMA, 2021b, Paragraphs 8.94).

The CMA noted however that some platforms expressed concerns over Facebook's data advantage (CMA, 2021b, Paragraphs 8.96). It also pointed out that although Facebook already has significant amounts of aggregate data on the usage of competitor apps, Giphy's user-level data may boost Facebook's ability to identify competitive threats, react to emerging market trends ahead of rivals, or target efforts in certain narrow areas where it identifies stronger rivalry "such that overall innovation (and competition) in other areas (where rivals are weak) would be reduced." (CMA, 2021b, 8.102).

Although the main concern was that Facebook would foreclose social media rivals, it is also possible that the merger could have induced social media rivals to switch away from Giphy in order to ensure that their data does not leak to Facebook, thus resulting in a de facto foreclosure. The CMA argued that the leaked data could be consumer data which would weaken the privacy of the users of social media rivals (CMA, 2021b, Paragraph 8.102(b)). Another possibility, along the lines of Allain, Chambolle, and Rey (2016), is that the leaked data could be the rivals' own technical data.[62] That is, after the merger, Giphy may leak to Facebook technical information that

[61] The CMA argued in response that Giphy may prevent API/SDK partners from using proxying and/or caching to hide their data by making the availability of data a requirement for supplying GIFs at the same quality level as they are supplied to Facebook (CMA, 2021b, Paragraphs 8.100-8.104).

[62] Allain, Chambolle, and Rey (2016) consider two competing downstream firms which first make value-enhancing investments and then buy an input from two upstream suppliers. To buy the input, downstream firms need to share technical information with their supplier. Hence, when upstream supplier U1 merges with downstream firm D1, downstream firm D2 is reluctant to deal with U1, because it anticipates that U1 would leak its technical information to D1, which can use it to gain a strategic advantage in the downstream market.

it obtains in its dealings with Facebook's social media rivals. Likewise, Facebook may leak to Giphy technical information it obtains in its dealings with Giphy's rivals like Tenor.[63]

Given the limited cost of foreclosure, the concern for input foreclosure seems plausible, even if the associated benefit to Facebook was not large. The resulting harm to social media users is the loss of access to Giphy's GIFs, which by revealed preferences, users like and benefit from. The merging parties did not have good counterarguments, and although Meta appealed the CMA's decision to the CAT, it did not seek to review the vertical SLC finding. Moreover, the vertical ToH was upheld by the Austrian Cartel Court and the Austrian Supreme Court of Justice.

Although the concern for input foreclosure seems real, Facebook submitted that an open access remedy could have alleviated it as effectively as a full divestment of Giphy, but at a lower cost. In particular, Facebook proposed the following commitments: (i) existing and new API users will still have access to Giphy's library under the same terms and conditions as pre-Merger; (ii) access would not be conditional on sharing user-specific information with Facebook, and Giphy's API users will remain free to use proxy servers or cache Giphy traffic, as they are permitted to do pre-merger, and (iii) Facebook would not use, without the consent of API users, any individually identifiable user-level or aggregate data obtained through the Giphy API for Facebook's advertising business in the UK (see CMA 2021b, Paragraph 11.206).[64]

Kwoka (2017) argues that in general, conduct remedies have inherent limitations because of the difficulty to "write, monitor, and enforce a conduct remedy against a party whose incentives lie elsewhere and who has the ability to undermine the remedy." However, he argues that conduct remedies can work in some cases. For examples, in the case of must-supply agreements when the product or service is simple and standardized, the technology is stable, and the price and other important terms of the contractual agreement are easier for an outside party to evaluate. It seems that the conduct remedies proposed by Facebook fall into this category. Indeed, the Austrian Cartel

[63] The concern that data leakage may result in de facto foreclosure was not merely hypothetical. The CMA stated that at least one third party platform chose to switch away from Giphy to a different provider following the merger "as a result of the perceived risk of Facebook collecting more data on its users." Another third party platform told the CMA that instead of investing resources to prevent 'data leakage' to Facebook, it would "rather stop using GIPHY's service altogether." See CMA (2021b, Paragraph 8.103).

[64] In addition, Facebook proposed two more remedies: (i) making it possible for Giphy's rivals to use Giphy's library to offer their own paid alignment service based on Giphy's database, and (ii) creation and sale of a white label copy of Giphy's content library and a license to use Giphy's search algorithm (and/or other essential technology) for five years. See CMA (2021b, Paragraphs 11.212-11.217).

Court has approved the Facebook-Giphy merger subject to similar remedies arguing that they were sufficient to alleviate the concerns for vertical SLC.[65]

The CMA rejected the open access remedy that Facebook proposed. It argued that the remedy will not address the vertical SLC effectively, mainly because "the development and innovation of GIPHY's business under the Open Access Remedy is likely to be directed in the interests of its owner, Facebook, rather than the interests of the third parties seeking access" (see CMA, 2021b, Paragraphs 11.252). This argument rests however on the importance of innovation. But then, the main innovation in question was the Paid Alignment service, which seems rather modest. It is also unclear to what extent there are differences between the interests of different social media platforms and hence how large this potential problem is. It is therefore not obvious that the open access remedy would have been so ineffective that blocking the merger was the only viable solution.

8. Conclusion

Merger control involves both type I errors - a pro-competitive merger is blocked – and types II errors - an anticompetitive merger is allowed to go through. Until recently, antitrust agencies have adopted a very lenient approach and avoided type I errors by not opposing any big tech merger. This lenient approach was met with a lot of criticism and many commentators argue that it has led to excessive amount of type II errors. Examples for mergers that were criticized on this ground include Google-Doubleclick or Facebook-Instagram.

Needless to say, errors are inevitable in merger review because the process involves predictions about an uncertain future. It is quite natural to argue that the balance between type I and type II errors was tilted for too long in favor of avoiding type II errors and that it is now time to restore the balance by putting more weight on avoiding type I errors.[66] The Facebook-Giphy merger indicates that the CMA is willing to listen and respond to the plea. Indeed, Smith and Erciyas (2022) write in their review of the Facebook-Giphy merger that the CMA has made it clear

[65] See https://tinyurl.com/4ym44nv8

[66] Devlin and Jacobs (2010) write that "courts, agencies, and academics have reacted to antitrust's unusual vulnerability to error by adopting a bias in favor of false negatives (Type II errors)" and argue that this bias stems from Judge Easterbrook's view Type I errors are perpetual and hence worse than type II errors which are ephemeral due to the market's "self-correcting" nature (Easterbrook, 1984).

that "it intends to prevent the accumulation of further market power through acquisitions by a company that already has a strong position."

Although the writing was on the wall and it was evident that it is only a matter of time until an antitrust agency will oppose a big tech merger, it is hard to escape the feeling that the Facebook-Giphy merger was not a natural candidate to start this trend. Regarding the horizontal concern, it is not clear from the case how one can tell if the merger was more likely than not to give rise to an SLC; the actual harm to consumers had the merger been allowed to go through would have probably been limited, and in any event, most of it would have affected consumers outside the UK; and the innovation that the CMA was concerned about - the Paid Alignment service - seems very modest with unclear benefits to social media users. And, while the vertical concern was based on a standard input foreclosure ToH, it is not entirely clear why it could not have been alleviated by appropriate conduct remedies.

The question of course is "Ok, suppose the decision was incorrect, but what was the resulting harm?" This is a good question because in hindsight, Giphy was eventually acquired by Shutterstock, which provides access to a library of audio, image, and video content that are arguably complementary to Giphy's library of GIFs. The outcome then seems efficient. The caveat though is that the price that Shutterstock paid for Giphy - $53M - is only a fraction of the $315M paid by Facebook and a fraction of the amount invested in Giphy, which is around $150M.[67] Hence, while users still get access to Giphy's services as the CMA expected, without Facebook's acquisition, Giphy might have been a commercial failure.[68] This would certainly have had negative implications for the incentives of entrepreneurs to innovate and on their ability to raise funding from outside investors.

Moreover, it seems that the CMA's decision generates considerable uncertainty regarding antitrust policies. For instance, Smith and Erciyas (2022) argue that following the decision, "the threshold for finding an SLC is now set so extremely low by the CMA that the CMA has handed itself the ability to prohibit almost any merger it chooses to." Needless to say, uncertainty regarding

[67] See https://tinyurl.com/2yd22r2s (reporting that Giphy raised $147.52M) and https://tinyurl.com/mr5xnrap (reporting that Giphy raised $152M).

[68] In fact, even the amount that Facebook paid for Giphy is not very high: Jin, Leccese, and Wagman (2022) find that the average deal value of a GAFAM acquisition during the 2010-2020 period was $1,548M which is almost 5 times higher than the amount paid by Facebook.

the enforcement of antitrust policies is not a good thing and may adversely affect the incentives of entrepreneurs, who rely on an acquisition by an established firm as an exit strategy, to innovate.

In sum, it seems that the CMA sent a strong signal to big tech firms that future acquisitions will be heavily scrutinized and that even if merging firms manage to escape scrutiny in one jurisdiction they may still be scrutinized in another jurisdiction. But then, the decision also have negative implications for the incentives of entrepreneurs to innovate. Only time will tell what the legacy of the case will be: will it be remembered as a case that helped taming the excessive power of big tech giants or a case that had a chilling effect on future innovations?

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