A Fortnite and Odd Days: The Console Wars*

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ABSTRACT: The videogames industry is called to play a key role in the development and design of the future digital arena, ranging from the up-and-coming metaverse to the digital platforms' future innovation¹. At this point, projections show that video gaming can surpass \$220 billion in revenue in 2024, whereas the entertainment industry's revenues are rapidly decreasing².

Still, the video gaming sector has gone largely unnoticed by competition law authorities. A few skewed and inconsistent decisions have tried to set out the relevant product and geographical markets. However, the subsequent developments over the years do not show a linear sequence of events. Instead, several breakthroughs such as introducing cloud gaming and subscription video gaming services have contributed to blurring the lines of market delineation altogether³. The European Commission's approach through merger control has been instrumental to provide some guidance on the subject, although its *Vivendi/Activision*, *Activision Blizzard/King* and *Microsoft/ZeniMax* have not paid attention to the special characteristics of video gaming, namely differences between user experience when playing different game genres and when playing across platforms.

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¹ Steven Ma, "Video games' future is more than the Metaverse: Let's talk 'hyper digital reality'", *GamesIndustry.biz*, 2022, https://www.gamesindustry.biz/articles/2022-02-07-the-future-of-games-is-far-more-than-the-metaverse-lets-talk-hyper-digital-reality.

² "Report: Gaming revenue to top \$159B in 2020", *Reuters*, https://www.reuters.com/article/esports-business-gaming-revenues-idUSFLM8jkJMl.

³ Mitchell Longan et al., "Cloud gaming demystified: an introduction to the legal implications of cloud-based video games", *Queen Mary Law Research Paper* No. 369/2021 (2021); Kenneth S. Corts and Mara Lederman, "Software exclusivity and the scope of indirect network effects in the U.S. Home video game market", *International Journal of Industrial Organization* 27, no. 2 (2009), 121.

Given the foregoing, we will first address the videogame market's economic conditions and particularities overlooked by competition authorities when performing their analysis, namely in the preliminary stage of market definition. Based on these findings, the article builds on the calls for intervention with regard to the *Microsoft/Activision Blizzard*⁴ operation and instrumentalises it as a yardstick to measure the wider impact of acquisitions within the video gaming market.

KEYWORDS: Videogames, consoles, market definition, ecosystems, interoperability

1. Introduction

Stemming from its long-standing tradition, the video gaming industry is called to be one of the disruptive hubs in terms of innovation. Applications of video gaming capabilities range from the creation of the metaverse to the social field through technological breakthroughs in education and healthcare⁵. Within the video gaming market, these breakthroughs are given through generations of consoles, i.e., the time between breaking technology is rolled out in the market until it is discontinued in favour of the next successful application⁶.

Although the sector is expected to surpass \$220 billion in revenue, according to projections for 2024, it has not received much attention from competition authorities in the past. The intervention has mainly been circumscribed to occasional merger control procedures, conducted by the European Commission (EC), and particularly keen national competition authorities over renowned operations. For instance, the *Microsoft*/

⁴ Wash Redmond "Microsoft to acquire Activision Blizzard to bring the joy and community of gaming to everyone, across every device", *Microsoft News Center*, 2022, https://news.microsoft.com/2022/01/18/microsoft-to-acquire-activision-blizzard-to-bring-the-joy-and-community-of-gaming-to-everyone-across-every-device/.

⁵ Minhua Ma, Andreas Oikonomou and Lakhmi C. Jain, *Serious Games and Edutainment Applications* (Springer, 2011); Mallory Hackett, "Digital neurology startup MindMaze looks to the global market with slew of new deal", *Mobihealth News*, 2021, https://www.mobihealthnews.com/news/digital-neurology-startup-mindmaze-looks-global-market-slew-new-deals.

⁶ Joseph Mineo, "Console wars and software stores: Antitrust concerns in the world of video games", *JIPEL Blog*, 2021, https://blog.jipel.law.nyu.edu/2021/03/console-wars-and-software-stores-antitrust-concerns-in-the-world-of-video-games/.

ZeniMax deal was reviewed and cleared by the EC as well as by Brazilian⁷ and U.S. executive bodies⁸.

All in all, the EC has reviewed five mergers, although two of them fell into the scope of the simplified procedure treatment⁹. On the side of sanctioning proceedings, enforcement has also been scarce and skewed. In 2002, the EC fined *Nintendo* and seven of its European distributors for colluding to prevent trade in low-priced products¹⁰. Nearly 10 years after that, the EC fined *Valve* and five other game publishers for restricting cross-border sales through geo-blocking practices¹¹.

⁷ The merger was reviewed by the Administrative Council for Economic Defense (CADE), following Ana Paula Candil, "Microsoft-ZeniMax deal draws scrutiny in Brazil over vertical integration concerns", *MLex*, 2020, https://mlexmarketinsight.com/news/insight/microsoft-zenimax-deal-draws-scrutiny-in-brazil-over-vertical-integration-concerns.

 $^{^8}$ The operation received a green light by the U.S. Securities and Exchange Commission, following the notice of effectiveness, https://www.sec.gov/Archives/edgar/data/789019/9999999521000839/xslEFFECTX01/primary_doc.xml.

⁹ European Commission, Decision declaring a concentration to be compatible with the common market (Case No. COMP/M.5008 - VIVENDI/ACTIVISION) according to Council Regulation (EC) No. 139/2004, April 16, 2008, https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX:32008M5008; European Commission, Decision declaring a concentration to be compatible with the common market (Case No. COMP/M.5998 - BDMI/FCPI/BLUE LION MOBILE) according to Council Regulation (EC) No. 139/2004, November 23, 2010, https://eurlex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32010M5998; European Commission, Decision declaring a concentration to be compatible with the common market (Case No. COMP/M.8090 - TENCENT HOLDINGS LIMITED / SUPERCELL OY) according to Council Regulation (EC) No. 139/2004, July 20, 2016, https://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=CELEX%3A32016M8090; European Commission, Decision declaring a concentration to be compatible with the common market (Case No. COMP/M.7866 - ACTIVISION BLIZZARD/ KING) according to Council Regulation (EC) No 139/2005, February 12, 2016, https://eur-lex. europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016M7866; European Commission, Decision declaring a concentration to be compatible with the common market (Case No. COMP/M.10001 - MICROSOFT/ZENIMAX) according to Council Regulation (EC) No. 139/2004, March 5, 2021, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021M10001. ¹⁰ European Commission, Decision relating to a proceeding pursuant to Article 81 of the EC Treaty and Article 53 of the EEA Agreement (COMP/35.587 PO Video Games, COMP/35.706 PO Nintendo Distribution and COMP/36.321 Omega - Nintendo), October 30, 2002, https://eurlex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32003D0675; appealed before the Court of First Instance in Judgment of 30 April 2009, CD-Contact Data GmbH v. Commission of the European Communities, Case T-18/03, EU:T:2009:132 and later confirmed by the Court of Justice in Judgment of 10 February 2011, Activision Blizzard Germany GmbH v. European Commission, Case C-260/09, EU:C:2011:62.

¹¹ "Antitrust: Commission fines Valve and five publishers of PC video games €7.8 million for 'geoblocking' practices". *European Commission*, https://ec.europa.eu/commission/presscorner/detail/en/ip_21_170.

As a result, not much has been said about the industry in terms of competition law, nor has a *corpus* been developed around the cognisable market definitions and theories of harm applicable to the sector, irrespective of the renewed interest of competition authorities triggered by the *Microsoft/Activision Blizzard* merger. With this move, *Microsoft* will acquire the biggest video gaming publisher integrated with popular franchises such as *Call of Duty* or *Candy Crush* through the biggest U.S. tech deal in history¹².

Up until this moment, the Competition and Markets Authority¹³, the Federal Trade Commission¹⁴, and the European Commission¹⁵ have voiced their interest to analyse the merger's prospective consequences. In addition, over a dozen national competition authorities have also asserted their own jurisdiction to review the acquisition, including antitrust authorities from New Zealand¹⁶,

¹² Call of Duty has been one of the most lucrative video game franchises in the world, insofar as it has made over \$30 billion since 2003 for Activision Blizzard; Derek Strickland, "Call of Duty has made over \$30 billion in total earnings", TweakTown, 2022, https://www.tweaktown.com/news/86727/call-of-duty-has-made-over-30-billion-in-total-earnings/index.html. Candy Crush is one of the highest grossing games in mobile games; David Curry, "Candy Crush revenue and usage statistics (2022)", BusinessofApps, 2022, https://www.businessofapps.com/data/candy-crush-statistics/.

¹³ Competition and Markets Authority, Commencement notice under Section 96(2A) of the Enterprise Act 2002 (The Act) published pursuant to Section 107(1)(1) of the Act (Anticipated acquisition by Microsoft Corporation of Activision Blizzard Inc., July 6, 2022, https://assets.publishing.service.gov.uk/media/62c5407cd3bf7f3002fadaf6/Commencement_notice.pdf.

¹⁴ Leah Nylen, "FTC is scrutinizing labor impact of Microsoft-Activision Merger", *Bloomberg*, 2022, https://www.bloomberg.com/news/articles/2022-06-16/ftc-scrutinizing-labor-impact-of-microsoft-activision-merger; David McLaughlin, "Microsoft deal for Activision to be reviewed by FTC in U.S.", *Bloomberg*, 2022, https://www.bloomberg.com/news/articles/2022-02-01/microsoft-deal-for-activision-to-be-reviewed-by-ftc-in-u-s?srnd=premiumeurope&sref=y3YMCJ4e.

¹⁵ Josh Sisco and Samuel Stolton, "EU quizzes rivals over Microsoft-Activision access", *Politico*, 2022, https://www.politico.eu/article/eu-regulator-scrutinizing-microsoft-activision-hear-competition-concern/.

¹⁶ Microsoft Corporation and Activision Blizzard, Inc., Notice seeking clearance of a business acquisition pursuant to Section 66 of the Commerce Act 1986, June 13, 2022, https://comcom.govt.nz/__data/assets/pdf_file/0034/285739/Microsoft-Corporation-and-Activision-Blizzard-Inc-Clearance-application-15-June-2022.pdf; Commerce Commission New Zealand, Statement of Preliminary Issues (Microsoft/Activision), July 13, 2022, https://comcom.govt.nz/__data/assets/pdf_file/0029/287534/Microsoft-Corporation-and-Activision-Blizzard-Inc-Statement-of-Preliminary-Issues-13-July-2022.pdf.

Japan¹⁷, Brazil¹⁸, Australia¹⁹, China²⁰, and South Korea²¹. However, not much precedent is available in terms of antitrust to build up a strong market definition to analyse, if any, the possible drawbacks of the takeover. Moreover, just recently *Microsoft* has started to downplay the relevance of the merger by indicating that *Activision Blizzard* does not own any 'must have' games²². Competitors within the video game market have started to voice their concerns in the opposite direction, regarding the importance of *Call of Duty* to gamers and the *Xbox* subscription service (*Xbox Game Pass*)²³.

Against this framework, competition authorities are at a crossroads to clear whether or not one of the sector's biggest acquisitions ever, considering they do not have much experience in the analysis of the industry. Therefore, this article strives to capture the essence of the few decisions that have analysed the video game market, starting from market definition. Later, the article will consider the latest contributions from the economic and legal perspective on the topic to provide an adequate roadmap for competition authorities to perform the task of defining the relevant

¹⁷ "The JFTC Seeks Information and Comments from Third Parties Concerning the Proposed Acquisition of Activision Blizzard, Inc. by Microsoft Corporation", *Japan Fair Trade Commission*, 2022, https://www.jftc.go.jp/en/pressreleases/yearly-2022/June/220616_2.html.

¹⁸ Conselho Administrativo de Defesa Econômica, "Pesquisa processual", 2022, https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_processo_exibir.php?1MQnTNkPQ_sX_bghfgNtnzTLgP9Ehbk5UOJvmzyesnbE-Rf6Pd6hBcedDS_xdwMQMK6_PgwPd2GFLljH0OLyFX6gl2sGKAL6BCslNvfGDcTA25PStaVelgicwm5iRue6.

¹⁹ Australian Competition & Consumer Commission, Market enquiries letter (Microsoft's proposed acquisition of Activision Blizzard), June 20, 2022, https://www.accc.gov.au/system/files/public-registers/documents/Microsoft_Activision%20-%20MI%20letter%20-%2020%20June%20 2022.pdf.

²⁰ Suggested by Microsoft Corporation, Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934, 19 January, 2022, https://www.sec.gov/Archives/edgar/data/1467858/000146785812000034/proxystatementform14-a.htm.

²¹ "South Korean Watchdog probes Microsoft takeover deal", *Competition Policy International*, https://www.competitionpolicyinternational.com/south-korean-watchdog-probes-microsoft-takeover-deal/.

²² CJ Wheeler, "Microsoft defend Activision-Blizzard buyout by saying the company don't make any 'must have' games", *Rockpapershotgun*, 2022, https://www.rockpapershotgun.com/microsoft-defend-activision-blizzard-buyout-by-saying-the-company-doesnt-make-any-must-have-games; Max Miceli, "Microsoft CEO confident Activision Blizzard acquisition won't be blocked", *DOTESPORTS*, 2022, https://dotesports.com/business/news/microsoft-ceo-confident-activision-blizzard-acquisition-wont-be-blocked.

²³ Anthony Jones, "Sony suspects Activision Blizzard acquisition could make Call of Duty fans jump to Xbox, Microsoft defends buyout", *Mmobomb*, 2022, https://www.mmobomb.com/news/sony-suspects-activision-blizzard-acquisition-could-make-call-of-duty-fans-jump-to-xbox-microsoft-defends-buyout.

market with ease (Section II). Once that first step of the review is performed, the article reviews the details of *Microsoft/Activision Blizzard* to propose a different approach toward market definition considering the video gaming market's idiosyncrasies (Section III).

2. Catching up with the video game industry through market definition

Video games are not what they used to be. They are far from those cartridges and CDs once purchased by users around the world. Nowadays, video games are purchased through PCs, consoles, dedicated portable devices, and smartphones via different channels, such as proprietary storefronts or digital marketplaces. At this point, the industry is larger than the rest of the entertainment markets combined: it produced \$180 billion in annual revenue worldwide in 2021²⁴. It is also the fastest growing sector within entertainment, growing at a 10% yearly rate²⁵.

The definition of relevant markets is instrumental to determine the existence of competitive constraints, in general for any infringement of competition law and especially for the prospective analysis performed in merger control. Even though market definition has been heavily criticised due to its malleable nature, competition authorities around the world still build up their theories of harm by performing this task first. This article sets out the generalframework that will be adopted by the EC considering the current legal background on video gaming, namely the Commission's Notice on the definition of relevant market for the purposes of Community competition law²⁶.

²⁴ Tom Wijman, "The games market and beyond in 2021: The year in numbers", *Newzoo*, 2021, https://newzoo.com/insights/articles/the-games-market-in-2021-the-year-in-numbers-esports-cloud-gaming; Eli Pales, "Microsoft and Activision-Blizzard: Examining the largest tech acquisition of all time", *SSRN* (2022).

²⁵ Tom Wijman, "The games market's bright future: Player Numbers will soar past 3 billion towards 2024 as yearly revenues exceed \$200 billion", *Newzoo*, 2021, https://newzoo.com/insights/articles/the-games-markets-bright-future-player-numbers-will-soar-past-3-billion-towards-2024-as-yearly-revenues-exceed-200-billion; Thierry Rayna and Ludmila Striukova, "Few to many': Change of business model paradigm in the video game industry", *Digiworld Economic Journal* 94, no. 2 (2014), 65-75; "Digital content evolution 2021-2025", *Telecoming*, 2022, https://www.telecoming.com/wp-content/uploads/2021/12/20211223-PAPER-DIGITAL-CONTENT-MARKET-2021-2026-EN-DIGITAL-LOW-2.pdf.

²⁶ European Commission, Commission Notice on the definition of relevant market for the purposes of Community competition law, 9 December, 1997, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31997Y1209(01)&from=EN; although it is undergoing review, as per;

The first level of the value chain in the industry is occupied by development studios. Traditionally, these studios tended to be independent creative studios which would develop video games for console makers in exchange for a price (third-party studios). Alternatively, if the party studios did not wish to lose control over their company, the main distributors would outsource the development of their games to specialised independent developers so that they were exclusively accessible through their ecosystem (second-party studios). The creative studios remained in control, but they were contractually bound to a particular distributor²⁷.

In the first set of console generations (1972-2013), we would find that large creative studios such as *Activision Blizzard* or *Ubisoft* would produce video games for the biggest three contenders in console making (*Microsoft*, *Nintendo*, and *Sony*). At this stage, both video gaming hardware and software were highly-priced, so video games were targeted at a relatively small base of users who could afford them.

However, over the last 10 years, the general trend has been that those companies in charge of distribution have increasingly bought out those independent studios to integrate them into their own parent companies (first-party studios). For instance, in 2017 *Microsoft* integrated 7 first-party studios into its creative team, although through its successive and latest mergers now it is parent to 35 creative studios, including video game producers *Bethesda* and *Mojang*²⁸. Over the span of 15 years, *Sony* has taken over 17 major third-party creative studios integrating their affiliates into the parent company. In 2018, it integrated two of the most acclaimed video games in history into the *PlayStation: Halo* and *Destiny*²⁹.

2.1. The relevant product markets

According to the Court of Justice's rulings and the Commission's Notice on the definition of the relevant market, market definition is essentially drawn

European Commission, Staff working document evaluation of the commission notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997, July 12, 2021, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A31997Y1209%2801%29. ²⁷ Pales: "Microsoft and Activision-Blizzard".

²⁸ Miranda Sanchez, "List of Xbox First Party Studios", *IGN*, 2022, https://www.ign.com/wikis/xbox-series-x/List_of_Xbox_First_Party_Studios.

²⁹ Jim Ryan, "Bungie to join the PlayStation family", *Sony Interactive Entertainment*, 2022, https://www.sie.com/en/blog/bungie-to-join-the-playstation-family/; Anshool Deshmukh, "Visualizing the biggest gaming company acquisitions of all-time", *VisualCapitalist*, 2022, https://www.visualcapitalist.com/visualizing-the-biggest-gaming-company-acquisitions-of-all-time/.

out from the interchangeability of goods and services. If they are deemed interchangeable, they fall within the same product market, whereas if they are not, they will be delineated into separate product markets. In terms of economic criteria, interchangeability is measured through the elasticity of demand and supply³⁰.

The video game market has traditionally been divided into two great groups in terms of the relevant product market. On one side, we can find game software development and publishing which is defined according to the creative component of making a video game, i.e., art, programming, or testing, available to the public. On the other side, game distribution is analysed within a separate product market. This article will assess the changes that have arisen within the industry stemming from the three major merger decisions adopted by the EC subsequently in 2008 (*Vivendi/Activision*), 2016 (*Activision Blizzard/King*) and 2021 (*Microsoft/ZeniMax*), as well as through the EC's 2003 decision in *Omega-Nintendo*³¹.

By analysing these decisions, the article will later identify the current competitive relationships between the main competitors in the video game market due to their upstream and downstream presence – *Microsoft*, *Sony*, and *Nintendo* – according to the provisions contained in the EC's Guidelines both from a horizontal and a non-horizontal perspective³².

2.1.1. Video game development and publishing

A video game publisher makes video games available to the public either for a fixed price or for free³³. Before the EC's *Vivendi/Activision* decision, there was no Commission precedent for the market for the publishing of games software. The notifying party in that operation proposed that the product market was to be segmented based on: i) the platforms in which

³⁰ Judgment of 21 February 1973, Europemballage Corporation and Continental Can Company Inc. v. Commission of the European Communities, Case 6-72, EU:C:1973:22.

³¹ Although the infringement found in Cases AT.40413, 40414, 40420, 40422 and 40424 (*Video Games*) is the most recent decision issued by the European Commission (in January 2021), no public version is available at the moment, last accessed 5 August 2022.

³² European Commission, Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, February 5, 2004, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52004XC0205%2802%29; European Commission, Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, October 10, 2008, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52008XC1018%2803%29.

³³ Definition extracted from Microsoft Corporation and Activision Blizzard, Inc., Clearance Application before New Zealand Commerce Commission, paragraph 7.16.

they were catered (PCs and video game consoles on one side, and mobile handsets on the other side); ii) and their Internet connectivity³⁴. Later on, within the *Activision Blizzard/King* merger, a further segmentation of the platforms was proposed, namely a division into PC games, console games and mobile games. In *Microsoft/ZeniMax*, a lack of conclusive results from the market investigation performed by the EC amounted to the finding that this delineation was no longer relevant. By this token, the relevant product market definition was left open.

In the next few lines, the article will show how the European Commission's line of decision has been undecisive, at best. Later, it will draw out some of the essential characteristics of the video game industry that have been left unnoticed and out of the scope of antitrust authority's scrutiny up to this moment³⁵.

2.1.1.1. Cross-platform availability of video games: separation between PCs, handhelds, consoles, and mobile phone video games?

Distribution channels and devices in the video gaming industry have become increasingly diversified. Video games can be played across a range of platforms such as tablets, smartphones, PCs, and consoles. There is a significant number of competitors within the video game development and publishing market³⁶.

Although demand-side substitutability occupies a prominent role when defining the product market, little attention has been paid to users' perceptions within the EC's precedent concerning video games. As for the demand side, the notifying party in *Vivendi/Activision* simply upheld that PCs, consoles and handhelds were substitutable from a gamer's perspective regarding user experience³⁷. Contrary to that finding, the EC's market investigation demonstrated that console games are much more stable and easier to use than PCs for gamers³⁸.

From the supply side, according to the notifying party in *Vivendi/Activision*, gaming platforms were to be regarded as a whole, insofar as

³⁴ Vivendi/Activision, paragraphs 9 and 15.

³⁵ Fabian Ziermann, "*Microsoft/Activision* – market definition and theories of harm under EU competition law", *SSRN* (2022).

³⁶ According to Microsoft Corporation and Activision Blizzard Inc., Clearance application before the New Zealand Commerce Commission, paragraph 1.4(a), competitors are *Tencent*, *Nintendo*, *Electronic Arts (EA)*, *Sony*, *Take-Two Interactive* and *Epic Games*, apart from *Microsoft*.

³⁷ Vivendi/Activision, paragraph 11.

³⁸ Vivendi/Activision, paragraph 21.

game publishers do not work exclusively for a particular platform, i.e., PCs, video game consoles or mobile handsets. Instead, they publish different versions of the same game for multiple platforms to maximise the potential number of customers 39 . Following this trend, the main publishers are pressured to launch their games in multiple environments, even those producing AAA 40 video games 41 .

Moreover, the notifying party addressed the peculiarities of porting a game across platforms and highlighted that the necessary cost for reprogramming a game for a different platform is relatively low compared to the total cost of publishing any game, by applying the legal test of supply substitutability⁴². Mobile handsets were drawn out as an exception to the low costs produced due to porting, insofar as they have limited file size, limited screen size and less functionality. In this sense, the undertaking established that video games cannot be easily adjusted to mobile handsets, due to their technical specificities⁴³.

The EC did not agree with the notifying party on the point that gaming platforms, other than mobile handsets, are substitutable. The market investigation showed that generalised porting across platforms as the rule was a wild overstatement on the notifying party's side. Instead, when a multi-platform release was planned, the evidence demonstrated video games were independently developed for different platforms right from the development stage, insofar as porting from one platform to another one was quite costly and complex⁴⁴. The most staggering failures within the industry were related to porting. For example, hyped-up-for-years *Cyberpunk 2077* suffered massive unpopular reviews from professional critics and millions of players demanded refunds due to the presence of

³⁹ Shinichi Yamaguchi, Kotaro Iyanaga, Hirohide Sakaguchi and Tatsuo Tanaka, "The substitution effect on mobile games on console games: An empirical analysis of the Japanese video game industry", *The Review of Socionetwork Strategies* 11 (2017), 95.

⁴⁰ AAA videogames signify high-budget and high-profile games produced by large and well-known publishers which render extremely popular.

⁴¹ Mitchell Longan et al., "Cloud gaming demystified: An introduction to the legal implications of cloud-based video games", *Queen Mary Law Research Paper* No. 369/2021 (2021).

⁴² Commission Notice on the definition of relevant market for the purposes of Community competition law, paragraphs 20-23.

⁴³ Vivendi/Activision, paragraph 11.

⁴⁴ *Vivendi/Activision*, paragraph 21. Also mentioned by Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 7.11.

in-game bugs and glitches because porting across platforms suffered from major flaws⁴⁵.

Progress was made in terms of market definition in the EC's *Activision Blizzard/King* decision. Different platforms were thoroughly considered in the context of demand by the notifying party. First, the undertaking established mobile games on smartphones were to be differentiated right off from the rest of the platforms because they were generally offered for free or at a cheaper price as opposed to PCs and console games, as well as due to the flexibility they offered customers through their 'play on-the-go' ability. As a means of comparison, in 2021 free-to-play games brought around 85 per cent of the revenue for the video gaming industry⁴⁶.

Moreover, the notifying party in *Activision Blizzard/King* upheld that mobile games were less advanced as opposed to the rest of the platforms in terms of graphics, music, and gaming options. Due to this reason, they require a considerably lower investment in terms of money, time and resources for their development as opposed to those needed for the development of PC/console games⁴⁷.

The EC confirmed these findings and added a differential feature between the three types of platforms: distribution channels. Mobile games are distributed via application stores, PC games are acquired through digital download platforms, whereas console games are offered through proprietary websites or online platforms, such as *PlayStation Network* and *Xbox Live*. Moreover, gaming platform alternatives such as cloud gaming are also progressively being introduced as viable distribution channels within the market⁴⁸. However, the EC also argued that the differences between platforms are also blurring, because games are released across platforms, and there is substantial substitutability between the same game catered on different platforms, although the characteristics of each

 $^{^{45}}$ Mike Isaac and Kellen Browning, "Cyberpunk 2077 was supposed to be the biggest video game of the year. What happened?", *The New York Times*, 2020, https://www.nytimes.com/2020/12/19/style/cyberpunk-2077-video-game-disaster.html#:~:text=the%20main%20story-,Cyberpunk%20 2077%20Was%20Supposed%20to%20Be%20the%20Biggest%20Video%20Game,a%20 possible%20class%2Daction%20lawsuit.&text=As%20a%20subscriber%2C%20you%20 have,articles%20to%20give%20each%20month.

⁴⁶ Deyan Georgiev, "How many people play video games [video game statistics]", *Review* 42 (2022), https://review42.com/resources/video-game-statistics/#:~:text=85%25%20of%20the%20 video%20gaming,total%20revenue%20of%20%24151.9%20billion.

⁴⁷ Activision/Blizzard, paragraphs 12 and 13; reproduced in Microsoft/ZeniMax, paragraphs10-11.

⁴⁸ Mitchell Longan et al., "Cloud gaming demystified".

platform might influence user experience⁴⁹. In fact, in 2020, although 3 billion people identified as gamers, only 8 per cent of them exclusively identified as console gamers⁵⁰. For the moment being, in *Activision Blizzard/King*, the EC segmented the video game publishing market into PC, console and mobile games.

Although it has certainly remained unnoticed by competition authorities, the pricing mechanisms for mobile games are highly based on the player, and therefore the cost of entry for contenders within it is much lower as opposed to PC and console games. Only two per cent of players spend any money at all after starting a game on a smartphone, but this small segment of users makes up 90 per cent of free-to-play video game revenue⁵¹. The power of attraction of mobile game developers is centred in a niche within the whole set of gamers playing the game, whereas the contrary is true for video game developers for PCs and consoles. In 2021, mobile gaming accounted for 52 per cent of revenues produced in the market, whereas console and PC gaming produced 28 per cent and 20 per cent of revenue, correspondingly⁵².

The attrition rate of games played on PCs and consoles is much lower, insofar as at the point of starting to play the game the user has already spent quite some money⁵³. First, an appropriate and sophisticated PC for

⁴⁹ *Activision/Blizzard*, paragraphs 20-22. The same conclusion was reached in its decisions in competition law cases AT.40413 – *Focus Home*, AT.40414- *Koch Media*, AT.40420 – *ZeniMax*, AT.40422 – *Bandai Namco* and AT.40424 – *Capcom (Video Games)*, paragraphs 62-66 and 77-79. Rayna and Striukova, "Few to many": 75. Economic research and modelling has proposed that mobile gaming plays the role of a complementary product, rather than a substitutable one, in Xiaowei Cai, José Javier Cebollada Calvo and Mónica Cortiñas Ugalde, "Complementarity or substitutability between traditional and mobile gaming. An empirical study among players of traditional gaming in China", *SSRN* (2020).

Joel Hruska, "3 billion people worldwide are gamers, and nearly half play on PCs", Extremetech, 2020, https://www.extremetech.com/gaming/314009-3-billion-people-worldwide-are-gamers-and-nearly-half-play-on-pcs.

⁵¹ "Swrve finds 0,15% of mobile gamers contribute 50% of all in-game revenue", *Swrve*, 2014, https://www.swrve.com/company/press/swrve-finds-015-of-mobile-gamers-contribute-50-of-all-in-game-revenue#:~:text=THE%20PRESS%20RELEASE%20%C2%BB-,Swrve%20 Finds%200.15%25%20of%20Mobile%20Gamers%20Contribute%2050,of%20All%20 In%2DGame%20Revenue&text=San%20Francisco%2C%20Calif.,ever%20Mobile%20Games%20 Monetization%20Report; Pales: "Microsoft and Activision-Blizzard".

⁵² Tom Wijman, "Global games market to generate \$175.8 billion in 2021; Despite a slight decline, the market is on track to surpass \$200 billion in 2023", *Newzoo*, 2021, https://newzoo.com/insights/articles/global-games-market-to-generate-175-8-billion-in-2021-despite-a-slight-decline-the-market-is-on-track-to-surpass-200-billion-in-2023/.

⁵³ Pales: "Microsoft and Activision-Blizzard".

gaming might be quite costly (around \$1,000) and a video game console might cost \$500 at retail, whereas AAA games sell for \$60-\$70⁵⁴. Once they have made that initial investment, users will tend to make the most out of the money they have spent. For instance, they will complete the whole story of the video game they are playing, which will take a limited number of hours⁵⁵. Based on demographics, some authors have proposed that two distinct markets should be drawn out on the basis of audience types defined according to their purchase behaviour and user experience: i) mobile phone video games played by a larger base of users (but making their revenues from a small niche of users who spend high quantities of money); and ii) PC and console video games played by a smaller base of users by comparison, but who have spent a quantifiable amount of money only by running the particular video game⁵⁶.

Following the discussion on the substitutability between platforms, in *Microsoft/ZeniMax* the notifying party reproduced the same arguments around substitutability between PCs and consoles, whereas mobile games should remain distinct and separate in terms of market definition. In this sense, the notifying party believed that substitutability between PCs and consoles will be further reinforced through the vigorous introduction of subscription services across platforms⁵⁷. Contrary to its previous findings, the EC found in its market investigation that no clear support demonstrated the relevant market should be segmented into the three types of platforms, although it worked based on that provisional delineation since it did not have any real impact on the analysis of the merger⁵⁸.

⁵⁴ Francis Locknear, "Average cost of a gaming PC (2022)", *TheCostGuys*, 2022, https://thecostguys.com/gaming/average-cost-of-a-gaming-pc.

⁵⁵ Matt Morgans, "More than 50% of people who own God of War have completed the game's story", *VGR*, 2018, https://www.vgr.com/people-god-war-completed-story/; Hub Research, "2021 videogame consoles report", 2021, https://hubresearchllc.com/reports/?category=2021&title=2021-videogame-consoles.

⁵⁶ Pales: "Microsoft and Activision-Blizzard".

⁵⁷ *Microsoft/ZeniMax*, paragraph 13. The same has been recently put forward by Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, para 8.9(b).

⁵⁸ *Microsoft/ZeniMax*, paragraphs 16 and 17. Ironically, this is the same conclusion – for different reasons – stated by the European Commission in its *Omega-Nintendo* decision, paragraphs 19-23. Economic research supports a lack of substitution effects between them, in Yamaguchi et. al, "The substitution effect of mobile games on console games". Also in Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 7.12.

The transition from pay-to-play to subscription-based video games is expected to peak in the coming years, like the emergence of this same paying mechanism in the film, music, and TV industries⁵⁹. Today, the device-agnostic video gaming subscription services and cloud-based streaming services are further eroding the already 'blurred' differences between hardware and platforms⁶⁰.

Following the EC's line of action, cross-platform availability has been accounted for when defining the relevant product market for video game publishing, but two concepts have not merited the same attention: crossplay and cross-progression. From the user experience, it is not only important that they can play their own games across different platforms, but also that gamers can play together when using different gaming devices (cross-play) and that they can continue a different platform without losing the progression they performed on the game (cross-progression). The latest versions of *Ubisoft* video game *Rainbow Six* and the most recent *Call of Duty* titles incorporated these features⁶¹.

Thus, as it is, cross-platform availability analysed throughout the EC's decisions is an expression of substitutability, and, therefore, PCs, consoles and mobile phone video games are deemed to be in the same and only product market within the wider publishing and development market.

2.1.1.2. Capturing video games alongside the 'console wars' paradigm and the importance of social interaction

Moving forward, in the *Vivendi/Activision* decision, a first hint on the difference between online and offline games was demonstrated. In other words, the user's experience was argued to be different when a connection on the Internet was made through the videogame. This remains to be true today, insofar as the most popular video games are those played online⁶². The notifying party believed that the sense of creating a gaming

⁵⁹ Mitchell Longan et al., "Cloud gaming demystified".

⁶⁰ According to Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 8.9(a)(iii), the most relevant services are offered by Xbox Game Pass, PlayStation Now, Google Stadia, Nintendo Switch Cloud, Amazon Luna, Nvidia GeForce Now and Facebook Gaming.

 $^{^{\}rm 61}$ Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 7.12.

⁶² Ziermann, "Microsoft/Activision - market definition"; Josh Coulson, "Gamers Still spend more time playing offline than online, according to Sony", TheGamer, 2020, https://www.thegamer.com/playstation-more-offline-than-online/.

'community' through online interaction is a key pull-factor grouping several thousands of players together⁶³. For instance, *Vivendi*'s popular *World of Warcraft* brought 10 million active players worldwide. In addition, the fact that gamers can play for an indefinite amount of time a particular video game is to be deemed critical when differentiating between the kinds of user experiences produced through video gaming. Hence, in the notifying party's opinion, offline and online video games could not be said to be substitutable from the user's perspective as they carved out a completely different experience based on time and social interaction. The EC confirmed this conclusion, although other factors were considered to differentiate online and offline games, such as the possibility of users to role-playing through online games or the fact that online gaming could better capture the user's attention for a longer period⁶⁴.

At the moment of the analysis of the merger between *Vivendi* and *Activision* no further delineation within the market of online and offline games was merited based on the difference between pricing models for online games. The notifying party held again, from the supply side, that different pricing structures could be followed by the same publisher across different platforms. Thus, pricing was not relevant in terms of supply interchangeability.

In addition, the EC considered a further delineation of offline games based on the console platform they were accessed from (*Microsoft's Xbox*, *Sony's PlayStation*, and *Nintendo's Wii*). The market investigation showed that consumers will rarely have more than one console so they will buy their games for that console and will unlikely switch from the console altogether when a small, permanent increase in the price of a particular game is produced⁶⁵. The demand for PC games and consoles and video games is relatively inelastic, insofar as consumers do not consider price as the most important factor when making their purchasing decision⁶⁶.

⁶³ In this same vein, Susan Krauss Whitbourne, Stacy Ellenberg and Kyoko Akimoto, "Reasons for playing casual video games and perceived benefits among adults 18 to 80 years old", *Cyberpsychology, Behavior, and Social Networking* 16, no. 12, 892.

⁶⁴ Vivendi/Activision, paragraph 16.

⁶⁵ One of the few instances where the notifying parties follow an orthodox approach according to the Commission's Notice on the Definition of the Relevant Market for the Purposes of EU Competition Law, by applying the SSNIP test, paragraph 17.

⁶⁶ Omega-Nintendo, paragraphs 36, 37 and 49; Avus C.Y. Hou, Ching-Chin Chern, Houn-Gee Chen and Yu-Chen Chen, "'Migrating to a new virtual world': Exploring MMORPG switching through human migration theory", Computers in Human Behaviour 27, no. 5 (2011), 1892.

In this sense, prior market investigation on the composition of console manufacturers has also been mainly overlooked by EC precedent. During the last 20 years, *Nintendo*, *Microsoft*, and *Sony* have dominated the console video game market and new entrants have repeatedly been expelled from it⁶⁷. Economic operators such as *Amazon* and *Google* have not managed to enter the market, irrespective of their undisputable high income and accessibility to resources⁶⁸.

The methods through which console manufacturers heavily compete with each other to win over consumers on consoles are addressed as 'console wars'. They mainly compete through the release of video games and how these games interact with their own hardware⁶⁹. Preferably, they will do that with games developed in-house by first-party developers. In the past, that investment in developing state-of-the-art video games was backed up by exclusivity deals. In other words, some games were only available within their own platform and hardware, and nowhere else. Another manifestation of *de facto* exclusivity came when the platform-holder released the game a few months earlier, irrespective of its launch later in the rest of the ecosystems and platforms⁷⁰.

As means of example, the low number of operators for console making has determined that they alternate in being the most successful firm in video gaming. For instance, in August 2021, revenue produced through the sales of *Xbox* and *PlayStation* consoles was quite close, whereas by March 2022 *PlayStation* nearly doubled its market share and *Xbox* proportionately decreased.

⁶⁷ Pales: "Microsoft and Activision-Blizzard".

⁶⁸ Rishi Iyengar, "Google will stop making video games for its Stadia platform", CNN Business, 2021, https://edition.cnn.com/2021/02/01/tech/google-stadia-sge-shutdown/index.html; "Xbox faces stiff competition from browsers if Amazon Luna sees success", The Xbox Hub, https://www.thexboxhub.com/xbox-faces-stiff-competition-from-browsers-if-amazon-luna-sees-success/.

⁶⁹ Pales: "Microsoft and Activision-Blizzard".

⁷⁰ Jason Ganos, "Guide: All the first party games coming to Nintendo Switch in 2022", NintendoWire, 2021, https://nintendowire.com/guides/switch/2022-first-party-games/; Mack Ashworth, "PS exclusives in 2022: The biggest PlayStation-only launches", PlayStationLifestyle, 2022, https://www.playstationlifestyle.net/2022/01/07/all-ps5-exclusives-2022-list-only-on-playstation/; Mehrdad Khayyat, "All Xbox exclusive games coming out in 2022", DualShockers, 2022, https://www.dualshockers.com/all-xbox-exclusive-games-coming-out-in-2022/; Pales: "Microsoft and Activision-Blizzard".

2.1.1.3. The unresolved debate on further delineation over video game software With regard to game software, the notifying party in Vivendi/Activision proposed a further segmentation of the video game market according to different genres, i.e., card, puzzle, arcade, shooter games, real-time strategy games, etc71. The EC discarded this separation insofar as the division was considered to be merely subjective. The competition authority demonstrated that most gamers would buy video games across several game genres and could respond to a significant price rise by easily switching to another neighbouring genre with ease⁷². However, this outright conclusion is not coherent at all with the existing literature on the topic of sustaining game genres do act as moderators to delineate video gaming markets⁷³. In this same vein, scholars have already made the point that consumers do express their preferences regarding genres: they do care about what game genre they will be playing for the next hours, and not any game from the large range of genres will do to satisfy their consumer need. Thus, if no delineation of the market for video game software is done based on game genres, there is a clear risk of enforcement falling into the trap of false negatives74.

As for coordinated effects, the EC established that games software, by themselves, are highly differentiated products. In this sense, each game, alongside its concept and artwork has unique features to appeal to different gamers. Although they can be considered substitutable, they do not seem to be as interchangeable as one would expect from a customer's perspective. The market investigation showed that the average life cycles of games are relatively short, and publishers are pressed to attend to the increasing expectations of gamers to provide new games containing innovative features⁷⁵. Following this line of thought, the number of games released each year has been increasing. In 2021, 1,700 titles were launched for *Nintendo*

⁷¹ Vivendi/Activision, paragraph 13.

⁷² Vivendi/Activision, paragraph 23; reproduced in Microsoft/ZeniMax, paragraphs 14 and 18. Supporting this argument; Rachel Ivy Clarke, Jin Ha Lee and Neils Clark, "Why video game genres fail: A classificatory analysis", *Games and Culture* 12, no. 5 (2015), 445. The same conclusion is presented by Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 8.9(c).

⁷³ Ziermann, "Microsoft/Activision – market definition"; Wooyoung Jang and Kevin K. Byon, "Antecedents of esports gameplay intention: Genre as a moderator", Computers in Human Behaviour 109 (2020), 1; Dominic Arsenault, "Video game genre, evolution and innovation", Journal for Computer Game Culture 3, no. 2 (2009), 149.

⁷⁴ Ziermann, "Microsoft/Activision – market definition".

⁷⁵ Vivendi/Activision, paragraphs 66 and 67.

Switch, 980 games for *PlayStation* and around 725 for $Xbox^{76}$. In any case, the EC did not follow through with its own statements and preferred to leave this passage completely detached from its market definition.

The undertakings in *Activision Blizzard/King* proposed a different approach to capture the dynamics of the industry: a qualitative distinction concerning the type of gamer for each video game (casual, mid-core, and hardcore). By this token, the three categories of gamers would be established based on difficulty, strategic thinking, and time commitment⁷⁷. Respondents to the EC's market investigation believed this sub-division was unwarranted⁷⁸. In *Microsoft/ZeniMax*, the EC also regarded whether game software could be further segmented by game type based on the type of game and the degree of investment put into it (AAA, casual, standalone, browser, free-to-play, freemium and social network⁷⁹). The results of the market investigation were inconclusive in this respect.

Irrespective of the fact that the EC was eager to find that game genres were not a valid characteristic to further delineate the video game software market, *obiter dictum* within its several decisions it acknowledged the idiosyncrasy of each game, regardless that it did not read too much into that claim, either.

The article has already outlined that scholars have highlighted video game software could be segmented into game genres without much complexity and that user experience can also be measured against pricing mechanisms based on the platform they operate from. Later, the article will apply these proposals to the pertinent market definition for the *Microsoft/Activision Blizzard* merger.

⁷⁶ Eddie Makuch, "Here's how many video games released in 2021 – and how few had physical editions", *Gamespot*, 2022, https://www.gamespot.com/articles/heres-how-many-video-games-released-in-2021-and-how-few-had-physical-editions/1100-6499333/.

⁷⁷ Activision/Blizzard, paragraphs 16 and 17.

⁷⁸ Activision/Blizzard, paragraph 24.

⁷⁹ Causal games target a mass audience, are relatively simple, and less costly to develop. Standalone games are installed as separate applications on gaming devices and may be played without connecting to the Internet. Browser games run directly in the web browser, using standard technologies for interactive multimedia. Free-to-play games are free for the player to acquire, and generally advertising-funded. Freemium games offer basic game-play that is free, but certain aspects of play may require purchases. Social network games use capabilities of social network services, are generally causal games and may be played individually or as multi-player. Definitions extracted from *Microsoft/ZeniMax*, paragraph 20.

2.2. The relevant geographic market

The definition of the relevant geographic market for video game publishing and video game distribution has not changed much since the European Commission's *Vivendi/Activision* decision. Within the whole set of decisions, the markets were defined at least to be European Economic Area (EEA)-wide, if not global⁸⁰. Nevertheless, in *Vivendi/Activision* the EC confirmed the market investigation pointed out several elements that could drive the geographic dimension into the national scope, such as national consumer preferences, local support services provided in the local language and national product specifications⁸¹. The competition authority did not consider these elements to establish a national market for the publishing and distribution of video games across the Member States.

In Activision Blizzard/King, respondents to the market investigation agreed on the definition of the geographic market at least considering an EEA-wide scope, due to uniform pricing, purchasing, and game dynamics. Some respondents even indicated that gaming should be globally considered with the advent of digital content distribution⁸². The same points were raised by respondents to the market investigation in *Microsoft/ZeniMax*⁸³. Authors have argued that a global definition would be more adequate, insofar as the game ecosystem is global in nature and geographic metrics such as price differences are highly irrelevant considering the inelasticity of price across platforms and video games. In addition, gaming capabilities do not hamper the ability of gamers to play in a different geographic region than the EEA, but rather limitations are imposed by Internet connections. The EC subsequently chose to leave open the exact geographic market, given that the mergers were rendered compatible with the internal market. Thus, the definition of a geographic market to the EEA scale seems inappropriate considering the current state of things and the scale and scope of video game publishing and distribution on the global scale⁸⁴.

⁸⁰ Activision Blizzard/King, paragraphs 28-32; Microsoft/ZeniMax, paragraph 46; Vivendi/Activision, paragraphs 26 and 34.

⁸¹ Vivendi/Activision, paragraph 27.

⁸² Activision Blizzard/King, paragraph 30.

⁸³ Microsoft/ZeniMax, paragraphs 49 and 50.

⁸⁴ Ziermann, "*Microsoft/Activision* – market definition". The same conclusion was upheld by Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraph 8.9(d).

3. Applying precedent and beyond into market definition for the Microsoft/Activision Blizzard merger

The article strives to incorporate the peculiarities of the video game sector into the analysis of market definition into one of the most promising merger cases for the time being: the *Microsoft/Activision Blizzard* takeover. To do that, the article will first define the parties involved in the acquisition. Then, it will provide a brief overview of the proposed definition that the parties already outlined before the New Zealand Commerce Commission. Last, the proposed analysis will be reviewed from a critical perspective, considering the already outlined pitfalls of the current market definition as drawn out by the European Commission in the past.

3.1. The proposed transaction and the parties

Microsoft Corporation is a publicly listed global technology company offering a wide range of products and services around personal computing. Microsoft's gaming activities comprise the development, publishing, and distribution stages of video games, and the company does that successfully, according to its 2021 Annual Report⁸⁵. Within the first stage of the value chain, Microsoft develops and publishes in-house its own video games for PCs, game consoles and mobile devices through its proprietary Xbox Game Studios. Some of the video games developed in this manner include the Minecraft⁸⁶ and Halo⁸⁷ franchises.

Distribution of its first-party studio video games as well as of independent developers' video games is performed across different platforms: through *Microsoft Store* on PCs (an app store on PCs operating on *Windows*) and on its proprietary digital storefront *Xbox Store*⁸⁸, which is accessible via

⁸⁵ As per the Annual Report, gaming revenue increased by \$3.8 billion, from which \$2.3 billion came from the distribution of video games from in-house and independent developers as well as from *Xbox Game Pass* subscriptions; Satya Nadella, "Annual report 2021: Shareholder letter", *Microsoft*, 2022, https://www.microsoft.com/investor/reports/ar21/index.html.

⁸⁶ Minecraft is one of the most popular video games in the world and the video gaming industry as a whole; Michael Beckwith, "Minecraft more popular than ever at 141 million players a month – still dwarfed by Roblox", Metro, 2021, https://metro.co.uk/2021/10/18/minecraft-more-popular-than-ever-at-141-million-players-a-month-15441710/; "Most popular PC games – global", Newzoo, accessed 2 August 2022, https://newzoo.com/insights/rankings/top-20-pc-games.

⁸⁷ One of the franchise's latest releases, *Halo Infinite*, was one of the most popular game releases in 2021; Matt Porter, "How many people are playing Halo Infinite? 2022 player count", *Charlieintel*, 2022, https://charlieintel.com/halo-infinite-player-count/155462/.

⁸⁸ As of June 2020, it announced that it was closing its final 83 brick-and-mortar retail locations around the world and would no longer distribute at physical storefronts.

the *Xbox* console, web browser, or the app for Windows. Video games have been incorporated into distribution on native mobile games, such as the mobile version of *Minecraft*.

The pricing mechanisms range over *Microsoft*'s proprietary platforms. Traditional prices apply over some video games on their own (pay-to-play), whereas multi-title gaming subscription services cater for access to first and third-party games (*Xbox Live Gold* and *Xbox Game Pass*). Particular video game franchises are subject to single-game subscriptions for specific game titles and content such as *The Elder Scrolls Online* and *Fallout 76*. Other than being distributed through the *Xbox Store*, these games are available through the digital storefront *Bethesda.net*⁸⁹. The subscription service has grown to capture 60-70% of the global subscription services market. Some of its competitors sustain that the subscription service's success is based on *Microsoft*'s prior acquisitions, insofar as since 2017 it took over several third-party studios, including *Double Fine*, *Obsidian Entertainment*, *Ninja Theory*, and *Bethesda*. Once those mergers were completed, their content was automatically and exclusively added to the *Xbox Game Pass* content⁹⁰.

The target of the acquisition, *Activision Blizzard*, is the largest third-party developer and publisher. It does not distribute video games in digital storefronts directly, but it is dedicated to gaming in all major markets worldwide. Their games are developed for PCs, consoles, and mobile devices through its main units across game genres and audiences: *Activision*, *Blizzard* and *King*⁹¹. *Activision* and *Blizzard* mainly develop games for PC and consoles, such as those within the *Call of Duty* and *World of Warcraft* franchises, whereas *King* devotes itself to mobile game development with great success, namely through the *Candy Crush* saga⁹². Over the last two

⁸⁹ Information extracted from Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraphs 2.5-2.17.

⁹⁰ "The document reveals Sony's opinion on Microsoft's purchase of Activision Blizzard", *Newsfounded*, https://newsfounded.com/brazileng/the-document-reveals-sonys-opinion-on-microsofts-purchase-of-activision-blizzard/.

⁹¹ King was incorporated into the parent company after Activision Blizzard's acquisition in 2015; "Activision Blizzard to acquire King Digital Entertainment for \$5.9 billion", Activision Blizzard, 2022, https://investor.activision.com/news-releases/news-release-details/activision-blizzardacquire-king-digital-entertainment-59.

⁹² Candy Crush is the most popular game of all time on Android smartphones; Joshua Fruhlinger, "Candy Crush addiction is real – and can lead to destructive results", *Observer*, 2019, https://observer.com/2019/02/candy-crush-addiction-real-problem/.

years, these top three franchises have collectively accounted for 82% of its net revenue⁹³.

Even though *Activision Blizzard* is not particularly dedicated to distribution, it does sell directly to end consumers through *Battle.net*, irrespective that the majority of its sales are channelled through mobile phone apps owned by *Apple* (17% of net revenue) and *Google* (17%), and platform providers such as *Microsoft* (20%) and *Sony* (22%). As opposed to its acquirer, *Activision Blizzard* does not offer a multi-game subscription service, despite its key video game *World of Warcraft* operates on a pay-to-play subscription model⁹⁴.

On 18 January 2022, *Microsoft* announced via press release it would acquire *Activision Blizzard* for \$95.00 per share, in a transaction valued at \$68.7 billion. The planned acquisition would include *Activision Blizzard*'s iconic library of titles, to boosting *Microsoft*'s subscription service portfolio, which has already peaked at 25 million subscribers. The deal had been approved by the board of directors of both companies when it was first announced, and in April 2022 it was also approved by the target's stockholders. The proposed transaction is expected to close in *Microsoft*'s fiscal year ending June 2023⁹⁵.

Within the larger video game market, both firms overlap in development and publishing, although *Microsoft* is also present in distribution through its multi-platform presence on PCs, consoles, and mobile phones.

3.2. The impact of past experience on market definition

As expected, the notifying parties before the New Zealand Commerce Commission strived to define the relevant geographic and product markets as widely as possible, so that any significant overlap in the horizontal or vertical level remained minimal for the competition authority.

In terms of the relevant product market, PCs and consoles were included in the same market within development and publishing, whereas mobile device games were left aside based on the lack of substitutability with the rest of the platforms. Notwithstanding that video game distribution is

 $^{^{93}}$ Activision Blizzard, "2021 annual report", 2022, https://investor.activision.com/static-files/d7b4f08d-213b-4bd5-a41b-7497baa9c106.

 $^{^{94}}$ Information extracted from Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraphs 2.30-2.40.

 $^{^{95}}$ "Activision Blizzard stockholders approve proposed Microsoft Transaction", *Investor Activision*, https://investor.activision.com/news-releases/news-release-details/activision-blizzard-stockholders-approve-proposed-microsoft.

principally performed through digital storefronts, the notifying parties also propose that a single video game distribution market must be defined. Concerning the merger's geographical scope, the undertakings underscore that a global market should be considered to assess the operation's competitive constraints⁹⁶.

Hence, the proposed market definition takes some of the EC's precedents into account, even though it purposefully forgets most of its relevant conclusions. Surprisingly, the notifying party's definition does not start with the same spirit of the EC's *Microsoft/ZeniMax* approach regarding hardware. Although in its prior decision the competition authority highlighted the lines differentiating user experience based on the platform were blurring, the notifying party upholds its segmentation of PCs and consoles on one side and mobile phone games on the other side. On top of that, although cross-platform availability is mildly credited in the notifying party's clearance application, the concepts of cross-progression and crossplay are once again forgotten, even though the *Call of Duty* franchise has been well known for allowing its users to game across different platforms with ease⁹⁷.

Besides, most of the elements repeatedly mentioned in the EC's decisions, such as market segmentation based on Internet connectivity or game genre, were completely overseen. Doing that would have meant performing a tiresome task: listing up their libraries in full and analysing whether they fell into one category or the other. In addition, it would have posed major problems when performing the competitive assessment. For instance, it would have led to the conclusion that *World of Warcraft* is one of the biggest franchises in terms of active players in the world within the MMORPG⁹⁸ genre⁹⁹. Thus, within the MMORGP genre, the acquisition would have triggered a red flag in terms of anticompetitive constraints right away, insofar as one of the main console makers would have the capacity to foreclose access to the genre altogether if it wished to. Likewise, categorisation into a market for offline games on mobile phones would

⁹⁶ Conclusions extracted from Microsoft Corporation and Activision Blizzard, Inc., Clearance application before New Zealand Commerce Commission, paragraphs 8.7-8.22.

⁹⁷ "Crossplay and cross-progression in Call of Duty: Modern warfare", *Activision Support*, https://support.activision.com/uk/en/modern-warfare/articles/crossplay-and-cross-progression-in-call-of-duty-modern-warfare.

⁹⁸ MMORPG stands for massively multiplayer online role-playing game.

^{99 &}quot;Most played MMOs", Mmopopulation, https://mmo-population.com/activity.

have prompted a major challenge, insofar as *King's Candy Crush Saga* is one of the most popular games played on iOS and Android devices¹⁰⁰.

Furthermore, the differentiated pricing mechanisms imposed by the merging parties were not observed either to delineate a sub-division of the wider development and publishing market. Subscription services such as *Xbox Game Pass* are assimilated into pay-to-play games, although they do not have anything in common in terms of their user base. In this sense, scholars have already indicated that user purchasing behaviour does not follow the same path when acquiring a particular game on its own as opposed to the rationale behind signing up for a subscription service¹⁰¹. On one side, users are willing to spend up to \$60-\$80 for a single game, whereas through a subscription they will access a catalogue of more than 500 game titles for \$9.99 a month (in the case of *Xbox Game Pass*)¹⁰². Not only that, but through the subscription service, the user is catered for access to every single first-party *Microsoft* game on their release date at no extra cost¹⁰³.

The return for money obtained by the consumer through the two different options is astronomically different. In terms of inelasticity, nothing indicates that subscription services should remain within the same relevant product market compared to regular access to video games through individualised purchases. They do not seem to be substitutable. Following the SSNIP test, purchasing a game will be quite inelastic compared to acquiring a full-on subscription service. The user wants to purchase that game and that game only, irrespective of a moderate and consistent increase in price concerning the rest of the games available in the market. However, when signing into a subscription service, a small increase in price might shift the user to consider other subscription services catered by different providers, i.e., *PlayStation Plus*, insofar as gamers tend to play across platforms, including PCs, and are not hampered from accessing titles and content provided by different brands¹⁰⁴.

 $^{^{100}}$ John Koetsier, "The top 50 mobile games of 2022 (so far)", $\it Singular$, 2022, https://www.singular.net/blog/top-mobile-games/.

¹⁰¹ Pales: "Microsoft and Activision-Blizzard".

¹⁰² Jez Corden, "Xbox Game Pass: Price, features, and everything you need to know", WindowsCentral, 2022, https://www.windowscentral.com/xbox-game-pass-faq.

¹⁰³ Ari Notis, "Game Pass finally gets its first Xbox exclusive of 2022", *Kotaku*, 2022, https://kotaku.com/game-pass-finally-gets-its-first-xbox-exclusive-of-2022-1849190439.

¹⁰⁴ Nicholas De Leon, "Best video game subscription and streaming services" ConsumerReports, 2022, https://www.consumerreports.org/gaming/best-video-game-subscription-streaming-services-a5008588137/.

All things considered, the notifying party takes a conservative approach toward market definition so that when analysing the merger's consequences, only clearance will follow. By choosing that line of action, both the target and the acquirer miss out on the key characteristics distinguishing the video game market by game genre, pricing mechanisms, as well as on cross-platform availability. At this early stage where competition authorities have not yet drawn out their proposed market definitions, it is up to them to introduce these attributes into the markets they consider relevant in terms of the concentration. Once they decide on maintaining the existing definitions or updating them to the current state of things, different cognisable theories of harm will be applicable.

If the video gaming market continues to be defined considering the widest approach possible, *Microsoft* will be, once again, considered a mere spectator amid the 'console wars', where many operators compete with each other. In terms of hardware, *Microsoft* has completely admitted defeat against *Sony*, even though the anticompetitive constraints of the merger could be caused elsewhere, i.e., within the software side of the market¹⁰⁵. *Microsoft* would only hold 10.7 per cent of the gaming market, although the acquisition will boost its competitive capacity within the market for the development of video games, namely the biggest contender in that downstream market will be integrated into its parent company¹⁰⁶.

Nevertheless, if competition authorities decide to narrow down the relevant product markets for video game development and publishing, the merger may encounter greater regulatory hurdles in line with the concentration's real scope. Both scholars and *Microsoft*'s competitors have voiced out the major risk posed by the merger: that the acquirer pursues an input foreclosure strategy post-acquisition, profiting from its success on *Xbox Game Pass* and displacing the whole *Call of Duty* franchise into *Microsoft*-exclusive platforms, just as it did with the library of games it acquired from *Bethesda*¹⁰⁷. *Microsoft* vehemently answered the calls for blocking

¹⁰⁵ Rhiannon Bevan, "Microsoft reveals PS4 sold over double the Xbox One, admits defeat in the 'console wars'", *TheGamer*, 2022, https://www.thegamer.com/ps4-sold-over-double-xbox-one-console-wars/.

 $^{^{106}}$ Samson Amore, "Why antitrust concerns won't block Microsoft Activision acquisition", dot.LA, 2022, https://dot.la/activision-microsoft-antitrust-2656470772.html.

¹⁰⁷ Pales: "Microsoft and Activision-Blizzard"; Ziermann, "Microsoft/Activision – market definition"; "The document reveals Sony's opinion on Microsoft's purchase of Activision Blizzard"; Danielle Partis, "The Elder Scrolls 6 confirmed as Xbox and PC exclusive", Gamesindustry. biz, 2021, https://www.gamesindustry.biz/the-elder-scrolls-6-confirmed-as-xbox-exclusive;

the merger by saying that foreclosing access to the *Call of Duty* franchise would not be profitable at all. However, it also highlighted that the strategy would only be feasible if *Xbox Game Pass* peaked with a mass of users so high that it would outweigh the lost sales as a result of not distributing these games on rival consoles and ecosystems¹⁰⁸. Analysts have agreed that if the acquisition got cleared from antitrust scrutiny, *Xbox Game Pass* would go up to 100 million subscribers as a result of incorporating the target's library of games to the service, from the 25 million it has now¹⁰⁹.

Stemming from the conclusions we drew out on inelasticity between subscription services and individualised purchases on hardware, it seems quite sound that, even if the foreclosure was not performed on *Xbox Game Pass*, the dynamics of the market pointed towards that same direction. In this sense, *Microsoft* has assured that *Call of Duty* will remain multiplatform. However, the merger would not leave the scenario untouched, from the perspective of gamers. Instead, when the subsequent titles of *Call of Duty* were launched, a subscriber to *Microsoft*'s subscription service would have access to every title in the franchise and the latest releases once launched, whereas *PlayStation* gamers would have to buy each title separately, on top of those already owned¹¹⁰. Again, building up on the power of attrition in the hands of *Microsoft*, gamers would not be left with two equally economically attractive options to choose from when playing the blockbuster game.

The extent to which the range of competition authorities analysing the merger will apply this theory of harm will be pre-empted by market definition. Contrary to the thought that the construction of the theory of harm

Christopher Dring, "Is Sony right to be worried about Call of Duty?", *Gamesindustry.biz*, 2022, https://www.gamesindustry.biz/is-sony-right-to-be-worried-about-call-of-duty.

¹⁰⁸ Chris Schullion, "Microsoft claims it 'simply wouldn't be profitable' to make Call of Duty Xbox exclusive", *Videogameschronicle*, 2022, https://www.videogameschronicle.com/news/microsoft-claims-it-wouldnt-be-profitable-to-make-call-of-duty-xbox-exclusive/.

¹⁰⁹ Brian Cheung, "Microsoft-Activision merger: 'I think this deal closes', analyst says", *Yahoo!Finance*, 2022, https://news.yahoo.com/microsoft-activision-merger-think-deal-191911381. html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cud2luZG93c2NlbnRyYWwuY29tLw&guce_referrer_sig=AQAAADzoRVvV6TzV74OrJUOco61lujTWCGlsrJF24Z4OkpnL6sqxtux8fl3qTFZKEVF0BzTPPOS7_vE32tcc5cH1nAr_fNnWPIyIjn3mUCrcLIGeggbn715XflSIlfGfjH-PqaM6OI-DmKolxVCKjri5plzV1wbhbtFCU-LVD-FrWNmsh.

¹¹⁰ Jonathan Lee, "Microsoft and Sony clash over Call of Duty and Game Pass in legal docs", Washington Post, 2022, https://www.washingtonpost.com/video-games/2022/08/11/xbox-sony-call-of-duty/.

merits most of the authority's attention from a policy perspective, in this case, it all boils down to market definition.

4. Conclusions

The video game market has remained hugely unnoticed by competition law. At least, in terms of enforcement. Hence, not many sanctioning proceedings or merger control procedures have analysed the relevant product and geographic markets of the sector in detail. At the European Union's scale, we can count as many as five cases in total: two sanctioning proceedings, as well as three merger control procedures (which resulted in the acquisition's clearance without any further commitments imposed). After a few major movements merger-wise in the video gaming market, Microsoft's takeover of Activision Blizzard has attracted the attention of several competition authorities across the world, due to its scale and scope. One of the main console makers will acquire the biggest and most important third-party video game developer. Some competition authorities have already started their own procedures, whereas others such as the Federal Trade Commission and the European Commission are still reviewing the information they received from third parties to the merger through public consultation. However, measuring with accuracy the anticompetitive constraints triggered as a consequence of the merger will not come as an easy task. The existing precedent on the definition of relevant product markets in the video game industry is scarce, skewed, and inconclusive.

This article subsequently analysed the European Commission's decisions on the *Vivendi/Activision*, *Activision Blizzard/King* and *Microsoft/ZeniMax* mergers, to present a roadmap of the progress made until now.

First, the video gaming market is principally divided into publishing and development on one side and distribution on the other side. Regarding the first market, most of the discussions between the notifying parties of these mergers and the European Commission have been centred on the real expression of cross-platform availability. In other words, PCs, consoles, and mobile phones are substitutable as means to access and play video games. Although *Activision Blizzard/King* acknowledged the lack of substitutability between them, in its last decision the European Commission set out that market respondents expressed just the contrary. The lines between playing video games on one platform or another are progressively blurring, and therefore substitutability should be established as a primer. Second, the European Commission has also been reluctant to

maintain a sub-division of the market based on Internet connectivity. In its *Vivendi/Activision* decision, it acknowledged the difference, irrespective that it later diluted into nothingness. Finally, the notifying parties of the mergers have been keen on proposing different sub-divisions for video game software, based on types of gamers or game genres. The European Commission stopped any attempt of delineating the relevant product market in this way on its tracks.

Against this background, the article proposes some ideas to incorporate into the analysis of market definition concerning the video gaming market, namely the consideration of pricing mechanisms as a meter to measure the inelasticity of demand from subscription services to pay-to-play games, as well as the incorporation of game genres as a yardstick to measure differences between user experiences. In light of the *Microsoft/Activision Blizzard* merger, the article suggests this approach could help to narrow down market definition in the particular case to capture the cognisable input foreclosure strategy that many predict to happen in the immediate future from the subscription service viewpoint.

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