

Principles for platform mergers with an application to Microsoft-Activision

Fiona M. Scott Morton¹

5 December 2022

I am a contributor to the modern antitrust movement that aims to take on market power in all sectors of the economy, including digital platforms.² The largest digital platforms are enormous and there are a number of antitrust investigations and actions that indicate a widespread concern about competition problems with those platforms.³ However, it is not correct to equate “big” with “bad.” Economists have tools to identify consumer harm, or “bad.” These tools can locate and analyze the source of market power whether it lies in a small platform or a large one.⁴ Sometimes large firms have market power in a particular market. Sometimes competition problems arise in smaller markets with smaller firms, while other big markets are competitive. Every pattern is possible. The critical point is that consumers deserve to be protected from market power whatever its source. The merger between Microsoft and Activision Blizzard is an example that illustrates the difference between size and harm. The way competition will be affected by this merger forms the basis for my belief that the merger does not pose a competitive harm and, in contrast, is likely to promote competition in a variety of markets to the benefit of consumers and game developers.

Consumers and workers will be better protected if analysts and authorities can prevent market power from becoming established, and if they can erode market power that is already entrenched.⁵ This task has proven to be more difficult in the digital context than the industrial ‘smokestack’ context for a variety of reasons. The economics literature offers general principles that can help guide enforcement in

¹ Senior Consultant Charles River Associates and Professor of Economics Yale School of Management. Professor Scott Morton is serving as an economic expert on behalf of Microsoft in connection with their proposed acquisition of Activision Blizzard.

² For example: Scott Morton and Dinielli (2020) “Roadmap for a Digital Advertising Monopolization Case Against Google” <https://omidyar.com/wp-content/uploads/2020/09/Roadmap-for-a-Case-Against-Google.pdf>; Scott Morton and Dinielli (2020) “Roadmap for a Digital Advertising Monopolization Case Against Facebook” <https://omidyar.com/wp-content/uploads/2020/06/Roadmap-for-an-Antitrust-Case-Against-Facebook.pdf>; Scott Morton and Dinielli (2020) “Roadmap for a Monopolization Case Against Google Regarding the Search Market” <https://omidyar-network.ijzizzr3-liquidwebsites.com/wp-content/uploads/2020/09/Roadmap-for-a-Monopolization-Case-Against-Google-Regarding-the-Search-Market.pdf>; Heidhuis et al. (2021) “Digital Regulation Project: More Competitive Search Through Regulation” Yale Tobin Center for Economic Policy Discussion Paper No. 2 <https://tobin.yale.edu/sites/default/files/Competitive%20Search%20Through%20Regulation.pdf>.

³ See e.g., *United States, et. al. v. Google LLC*, 1:20-cv-03010-APM (D.D.C. 2021), *State of Colorado, et. al. v. Google LLC*, 1:20-cv-03715-APM (D.D.C. 2021), *FTC v. Facebook, Inc.* 560 F.Supp.3d 1 (D.D.C. 2021), *State of New York, et al. v. Facebook, Inc.* 549 F. Supp. 3d 6 (D.D.C. 2021), *In re Google Digital Advertising Antitrust Litigation*, 21-md-03010 (S.D.N.Y 2022), *United States v. Google Inc. and ITA Software, Inc.* (re algorithmic search services), the 2022 CMA investigation into Google’s conduct across parts of the ad tech stack, see <https://www.gov.uk/cma-cases/investigation-into-suspected-anti-competitive-conduct-by-google-in-ad-tech>, Bundeskartellamt, “Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing,” B6-22/16, 6 February 2019, *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898 (N.D. Cal. 2021), *California v. Amazon.com, Inc.*, CGC-22-601826.

⁴ For a non-technical explanation of competition in a platform context see Athey and Scott Morton (2022) “Platform Annexation” *Antitrust Law Journal* 84:3 677-703.

⁵ This paper will not cover the economics of the merger on the worker side. Interested readers are referred to union support for the transaction which is described Communication workers of America press release of June 30, 2022. See “CWA Supports Microsoft’s Proposed Acquisition of Activision-Blizzard,” CWA Press Release, June 30, 2022, <https://cwa-union.org/news/releases/cwa-supports-microsofts-proposed-acquisition-of-activision-blizzard>.

digital markets.⁶ For example, it is generally beneficial to prevent markets with network effects from tipping to one supplier as that preserves competition in the market.⁷ Encouraging multihoming is good for consumers as that intensifies head-to-head competition between platforms.⁸ And, of course opening up existing bottlenecks increases competition.⁹

Consider the console market. Sony's PlayStation has an installed base that is two times as big as Microsoft's Xbox worldwide and 50 percent larger in the United States.¹⁰ While recent Xbox sales have at times been close to par with PlayStation, PlayStation's share of the latest generation of consoles is expected to be more similar to its share of the installed base once chip shortages ease. Both Xbox and PlayStation (and indeed Nintendo's Switch as well) rely on their own vertically integrated content as well as content written by independent developers. Owned content can be written to run on multiple platforms, like Microsoft's *Minecraft*, or can be exclusive, like Sony's *God of War Ragnarök*, which is exclusive to PlayStation. A platform sometimes compensates independent developers to make a game exclusive on their platform and withhold it from competitors. For example, the current version of Square Enix's *Final Fantasy VII Remake* is available on PlayStation and Windows PC, but not on Microsoft's Xbox. A platform's exclusive content attracts users to the platform and investing in exclusive content is part of the way in which Sony and Microsoft have been competing for years. Sony's large collection of exclusive content and roughly two thirds of the installed base of the two platforms is evidence of Sony's effectiveness at using this strategy.

Gaming platforms have positive indirect network effects because developers wish to write for platforms with players, while players want to use a platform with lots of attractive content. However, when users want to join the platform where other users are, markets are "tippy" and are at risk of collapsing to a monopoly market structure. For this reason, a regulator might be concerned that transactions or contracts by the larger platform could exclude the smaller one. A smaller platform, should it become further disadvantaged, could lose more users to the larger platform and end up in a downward spiral and out of the market. So far, the strategy of investing in exclusive games has not led to tipping in the console market as, despite its smaller share, Microsoft has been able to attract users and content to Xbox and put competitive pressure on Sony's PlayStation. And Sony has continued to invest in additional exclusive content for PlayStation in recent times, without review by regulators. Clearly, if the dominant platform's acquisition of content does not raise competitive concerns, the smaller platform's acquisition of content does not either. Indeed, to the extent a regulator wants to promote competitive balance

⁶ For a comprehensive review of issues involving platform competition and multi-sided markets, see, for example, Rietveld and Schilling, "Platform Competition: A Systematic and Interdisciplinary Review of the Literature," *Journal of Management*, Vol. 47 No. 6, July 2021, 1528–1563 and cites therein. Seminal papers include: Rochet and Tirole, "Platform competition in two-sided markets," *Journal of the European Economic Association*, June 2003, 1(4):990–1029; Armstrong, "Competition in two-sided markets," *The RAND journal of economics*, Sep. 2006, 37(3):668-91; and Weyl, "A price theory of multi-sided platforms," *American Economic Review*, Sep. 2010, 100(4):1642-72.

⁷ See the papers above as well as Dubé, Hitsch, and Chintagunta, "Tipping and Concentration in Markets with Indirect Network Effects," *Marketing Science*, 2010, 29(2):216-249; Doganoglu and Wright, "Multihoming and compatibility," *International Journal of Industrial Organization*, Jan. 2006, 1;24(1):45-67; Jeitschko and Tremblay, "Platform competition with endogenous homing," *International Economic Review*, Aug 2020, 61(3):1281-305; Choi, "Tying in two-sided markets with multi-homing," *The Journal of Industrial Economics*, Sep. 2010, 58(3):607-26; Jullien and Sand-Zantman, "The economics of platforms: A theory guide for competition policy," *Information Economics and Policy*, Mar. 2021, 1;54:100880;

⁸ See the papers above as well as Athey and Scott Morton (2022) "Platform Annexation" *Antitrust Law Journal* 84:3 677-703.

⁹ See the papers above as well as Armstrong and Wright, "Two-sided markets, competitive bottlenecks and exclusive contracts," *Economic Theory*, Aug. 2007, 32(2):353-80.

¹⁰ Based on 2021 IDG estimates.

between platforms, it would prefer that attractive content be obtained by the smaller platform; this works against tipping and is procompetitive.

One important reason why the console market has not tipped is because of the popularity of games that users play with their friends (or with other unknown players). A game has positive direct network effects when players and friends can play with each other. To take advantage of the network effects, many games (and platforms) enable “cross-platform play.” This is essentially interoperability across platforms so that gamers from different platforms can play the same game together, undercutting the need for gamers to buy the same console.¹¹ For example, a group of friends can play *Call of Duty* together when two play on a PC, several have an Xbox, and the rest own a PlayStation. The more friends who can play together, the higher the quality of the game and the more players it attracts. Cross-platform play and the quality of service it creates is so highly valued by players that today it is very hard for a multiplayer game to be a big hit without it. Withholding the game from a rival platform causes both a drop in revenue due to lost sales from the excluded platform as well as reductions in usage on the *home* platform by groups of friends who want to play together and other players adversely impacted by the reduced play quality.¹² Those friends will simply choose another game with cross-play functionality – and there are many. By contrast, a single-player game does not need cross-platform play to create match quality. This may be why we see much of the exclusive content on consoles being single-player games. And these are the reasons why it is in Microsoft’s interest to distribute *Call of Duty* widely across multiple platforms and why it has committed to regulators to do so.

Consider video distribution today and the fact that households multihome across many services like Netflix, Disney, and Hulu. This kind of multihoming works smoothly because the TV is a general-purpose device that is not specific to the content of any service: it can be used to watch all of them. There is some chance that part of the gaming market demands similar video game subscription services and is willing to play on a general-purpose device. Of course, hard-core gaming enthusiasts will probably want a fancy dedicated piece of hardware and there may always be products specifically for them. And casual gamers may be happy to play puzzles and simple games on less sophisticated devices, like their mobile phones. But there could be a group of households that want to subscribe to a broad collection of games of different types that provide an engaging user experience without investing in a top-of-the-line gaming computer. Microsoft’s Game Pass - its multi-game subscription service - is designed to appeal to this group and will become more appealing with the addition of Activision content.

One advantage of a multi-game subscription service is there is no cost for subscribers to trying a new game included in the package. This ability to try additional games at zero marginal cost encourages players to explore new content and increases output. A multi-game subscription service also creates incentives for the provider to make additional investments in niche content. This is because subscriber behavior generates useful data about what the subscribers like, and this can be used by the provider to create and promote appealing content. To the extent device-agnostic gaming develops, for example

¹¹ See for a discussion of how interoperability promotes competition, Scott Morton et al. (2021) “Equitable Interoperability: the ‘Super Tool’ of Digital Platform Governance” Yale Tobin Center for Economic Policy Discussion Paper No. 4 <https://tobin.yale.edu/sites/default/files/Equitable%20Interoperability.pdf>.

¹² The quality created by good matchmaking in multiplayer games is well-recognized in the industry, <http://joostdevblog.blogspot.com/2014/11/why-good-matchmaking-requires-enormous.html> (November 22, 2014); <https://www.gamedeveloper.com/design/the-requirements-of-good-matchmaking> (September 05, 2017); <https://subspace.com/resources/multiplayer-matchmaking> (May 3, 2021)

through a multipurpose controller attached to a smart TV, users will easily be able to multihome and the network effects due to the device will disappear leaving the network effects due to the game to predominate. Multihoming intensifies competition between providers of games because users do not have switching costs associated with different devices. That more intense competition manifests itself in lower game prices and better game content. And users whose tastes or free time changes can switch from a subscription on a generic device to a subscription on a console, or buy single games to play on a dedicated console if that is a more appealing package.

Lastly, consider the monopoly app stores on mobile devices – the Apple App Store on iOS devices and Google Play on Android devices. These stores take a 30% cut of all in-app purchases such as costumes, powers, functionality, subscriptions, and other content.¹³ That is a sizeable fraction of an app developer’s revenue and lowers the return to investing in these businesses. Competition between stores that want to distribute popular games would lower developer distribution costs and increase quality. Stores would compete for developers with lower fees and better functionality, and stores would compete for consumers through innovation, curation, and design. For example, perhaps Disney would offer a store with only content suitable for children. Perhaps a green organization would offer a store with a variety of apps designed to help users reduce their carbon footprint. The gaming company Epic (maker of *Fortnite*) wants to offer its own store with games and apps that will help Epic market its metaverse. In general, app store operators can have different business models and goals that are attractive to end users as well as developers.

In Europe, the Digital Markets Act (DMA) will require operating systems to allow alternative app stores, sideloading of apps, and provide FRAND prices and conditions.¹⁴ It seems likely that Apple and Google’s mobile operating systems will be designated given their high usage in Europe. While in an ideal world the DMA would just smoothly lead to the entry of app stores, the real world is likely to be bumpier. The mobile operating systems will have to create technical standards and rules for entering stores. There will be technical requirements to meet in order to preserve security and privacy. Additionally, the DMA is a new law and there will likely be legal hurdles to surmount. A successful app store entrant will need technological and legal skills to succeed as well as a significant financial incentive to make the effort worthwhile. The combination of Microsoft and Activision fits that description and is therefore likely to help break the mobile app distribution bottleneck in Europe. Once there is competition in mobile app stores in Europe, global platforms may decide it is simpler and lower cost to roll out the technology in the United States as well. Alternatively, if they maintain the status quo, governments and regulators in the US may decide that app store competition should be mandated in order to benefit consumers and developers in the United States.

¹³ Subscription revenue may be charged at a lower rate of 15% in some cases.

¹⁴ See Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), Article 6, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2022.265.01.0001.01.ENG (“The gatekeeper shall allow and technically enable the installation and effective use of third-party software applications or software application stores using, or interoperating with, its operating system and allow those software applications or software application stores to be accessed by means other than the relevant core platform services of that gatekeeper. The gatekeeper shall, where applicable, not prevent the downloaded third-party software applications or software application stores from prompting end users to decide whether they want to set that downloaded software application or software application store as their default. The gatekeeper shall technically enable end users who decide to set that downloaded software application or software application store as their default to carry out that change easily.”).

Microsoft's popular products like Windows are hard to link to gaming in a way that generates a theory of harm. Cloud gaming is a nascent technology that does not yet have a compelling use case. The quality of general purpose devices like mobile handsets is growing so fast that many complicated games can be played locally on the device and do not need extra computational power from the cloud. Latency – how long it takes for the instruction to shoot my opponent to get from my finger, to the server, into the game, and back to my screen – can be significant and degrade the quality of fast-paced games run in the cloud. No one likes their character to be killed immediately every time they enter the game. Furthermore, running cloud servers is expensive (electricity and carbon), so unless cloud gaming provides a significant competitive advantage, providers will not build a business model around it. Microsoft, Google, Amazon, Tencent, IBM, Sony and others have assets they could use to potentially enter and compete to provide cloud services in gaming if the right use case arose.

Microsoft is a large company by revenue and market capitalization, and this acquisition, at almost \$70 billion, is certainly big. But corporate size is not what determines the nature of competition that affects consumers, nor the nature or existence of any harm caused by a particular merger. Rather, it is necessary to analyze competition in a specific setting -- which might be a conventional existing market with known competitors like the console market. But alternatively, the setting could be an existing market with a nascent entrant preparing to create competition for incumbents; or the setting could be a future market, but one where we can see competitors developing products today. Many manifestations of competition are possible. But regardless of the size of the corporations involved, we can use economic tools to analyze competition and determine whether a merger is likely to harm consumers and competition. It is important to distinguish between size and harm, lest our efforts to address the very real concerns posed by digital platforms are misplaced and wasted.