TECH TITANS: US ANTITRUST SOLUTION TO DIGITAL MARKET CONSOLIDATION LIES ABROAD

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ABSTRACT

As large technology companies such as Google, Apple, Microsoft, Amazon, and Meta increase consolidation in digital markets on a global scale, many countries are struggling with the limitations of current antitrust law and coordination problems arising from international differences in regulating digital markets. In response, over seventeen governments have released reports analyzing modern antitrust laws and their ability to respond to the harm consumers face resulting from consolidation in digital markets, and at least four have passed legislation specifically regulating digital markets. This Comment compares antitrust laws, regulation, and litigation in the United States and the United Kingdom, using the litigation between Epic Games, Inc. and Apple, Inc. regarding monopolization in the app transaction market as a case study. The juxtaposition of these legal systems shows how US antitrust law has entrenched the use of specific economic tools that focus almost exclusively on price effects into legal tests such that large technology companies that cause non-price harm are able to sidestep antitrust scrutiny. This Comment concludes that the US antitrust law and litigation is ill-equipped to justly regulate the consolidation of large technology companies in digital markets and should follow the UK's example in creating specialized regulatory agencies and laws geared toward digital markets, as well as expand the type of economic evidence considered when assessing consumer harm in antitrust claims in US litigation.

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INTRODUCTION

As large technology companies such as Google, Apple, Microsoft, Amazon, and Meta increase consolidation in digital markets on a global scale, many countries are struggling with the limitations of current antitrust law and the coordination problems arising from global differences in regulating digital markets.[1] Antitrust laws and enforcement agencies around the world have very similar goals—promoting competition and enforcing laws preventing anticompetitive behavior.[2] However, countries use different economic tools to examine potential instances of antitrust violations and the choice of economic approach can be outcome determinative. The United States, for example, places great weight on specific economic tests for price effects, while other countries place a greater emphasis on consumer harm as a whole and analyze a broader range of factors.[3] The United States' overly narrow focus on only certain economic tools in antitrust litigation has resulted in a litigation stalemate for enforcement actions against technology companies in particular. US courts have struggled to define markets for digital goods and strictly adhered to economic reasoning that did not consider non-price harm.

In what has been referred to as "the Antitrust Superbowl," courts in at least five different countries began the work of defining the market for digital transaction platforms through litigation against Apple for monopolization of the digital transaction platform market operated by the App Store.[4] These lawsuits provide a legal "natural experiment" for testing

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[1] *See, e.g.*, *World Report on Digital Markets,* STIGLER CTR. FOR THE ECON. & STATE (May 15, 2019), https://www.chicagobooth.edu/research/stigler/events/antitrust-competition-conference/world-reports-on-digital-markets [https://perma.cc/R6XZ-N34V]; Jason Furman et al., UNLOCKING DIGITAL COMPETITION, REPORT OF THE DIGITAL COMPETITION EXPERT PANEL 4–5 (2019); AUSTRALIAN COMPETITION & CONSUMER COMMISSION, DIGITAL PLATFORMS INQUIRY (2018).

[2] *See, e.g.*, *Mission*, ANTITRUST DIV. OF THE U.S. DEP'T OF JUST., (Sept. 14, 2023), https://www.justice.gov/atr/mission [https://perma.cc/Z8HP-MDEY]; COMPETITION & MKTS. AUTH., CONSUMER PROTECTION: ENFORCEMENT GUIDANCE 2 (2016).

[3] *See infra* Part II.A.

[4] Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 966, 981 (9th Cir. 2023)(US litigation); Epic Games Inc v. Apple Inc [2021] CAT 4 [14] (UK litigation); Amrita Khalid, *Apple faces €5.5 billion lawsuit from Netherlands over its app store*, ENGADGET (Mar. 29, 2022), https://www.engadget.com/apple-faces-class-action-lawsuit-from-netherlands-over-its-app-store-001610098.html [https://perma.cc/2X2C-P7UV] (Netherlands litigation); Epic Games, Inc v Apple Inc [2022] FCA 341 (Australian litigation); Foo Yun Chee, *Apple faces $1 billion UK lawsuit by apps developers over app store fees*, REUTERS (July 24, 2023), https://www.reuters.com/technology/apple-faces-1-bln-uk-lawsuit-by-apps-developers-over-app-

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the effectiveness of different antitrust enforcement systems worldwide. The litigation brought in the US and UK between Epic Games and Apple, along with the accompanying consumer and app developer class action lawsuits against Apple in each country regarding the same allegations, highlight global differences in economic approaches to antitrust monopolization claims. As a result of this series of cases and other antitrust enforcement actions taken against Big Tech, over 49 governments and organizations have published economic reports on the state of digital markets[5], and laws regulating digital markets were passed that affect over 30 countries, with more likely to follow.[6] By exploring key differences in antitrust law internationally through the App Store monopolization claims brought against Apple in the US and UK and how this litigation influenced antitrust law and regulations, this Comment argues that conventional antitrust law in the United States is ill-equipped to justly regulate the consolidation of large technology companies in digital markets. This takeaway is even more salient as the US switches to a presidential administration that values de-regulation.

Part I introduces the contrasting language in US and UK antitrust law, which emphasizes different economic methodologies for determining monopolization. It also canvasses the main governing bodies responsible for antitrust enforcement in the US and UK and examines the key economic evidence promoted through case law. Part II compares and contrasts the use of economic analyses in antitrust enforcement in the US and UK and discusses how these differences played a part in the international litigation involving Apple's alleged monopolization of mobile app transaction platforms. Part III analyzes why digital markets pose a unique antitrust problem and explores solutions by comparing the US and UK response to anticompetitive conduct in digital markets. In Part IV, this Comment concludes that the U.S. should take a stricter approach to antitrust enforcement when it comes to digital markets—an approach

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store-fees-2023-07-24 [https://perma.cc/88BG-HBD5]; *see also* Diamond Naga Siu, *Apple's App Store is fighting a regulatory firestorm that stretches across the globe. Here are all the countries investigating its 'monopolistic' payment system.*, BUS. INSIDER (Jan. 28, 2022), https://www.businessinsider.com/apple-app-store-antitrust-investigations-regulations-around-the-world-payments-2022-1 [https://perma.cc/ZFX7-ZNMP] (noting regulatory antitrust enforcement actions in Japan, South Korea, India, and Russia as well).

[5] Stigler Center for the Economy and the State, *World Report on Digital Markets*, May 15, 2019, https://www.chicagobooth.edu/research/stigler/events/antitrust-competition-conference/world-reports-on-digital-markets [https://perma.cc/SSL7-V77C].

[6] Peter Alexiadis, *The UK's Digital Market, Competition and Consumers Act Passes into Law*, 25 BLI 271 (Sept. 2024).

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that more closely resembles the policy approaches advocated by the UK—and one that better incorporates non-price consumer harm.

I. BACKGROUND

This section discusses the history of antitrust enforcement and litigation in the US and UK, the elements needed to prove various antitrust claims in the US and UK, and antitrust law as it applies to emerging technologies specifically in the US and UK. While federal US antitrust law is created by two unchanging statutes and defined through common law, UK antitrust law involves a long history of antitrust enforcement through different agencies which influenced its policy considerations and specific laws and enforcement agencies for different markets.

A. ANTITRUST LAW IN THE UNITED STATES

1. Enforcement and Litigation of Antitrust Claims

The United States relies on federal, state, and private enforcers to combat anticompetitive conduct. The beginning of modern federal antitrust law in the United States dates back to 1890 with the passage of the Sherman Act which bans conspiracies that unreasonably restrain trade and the monopolization of markets.[7] Twenty years after this landmark legislation, Congress passed the Clayton Act that specifically prohibits mergers or acquisitions that may substantially lessen competition.[8] Shortly after the Clayton Act was passed, President Woodrow Wilson established the Antitrust Division of the Department of Justice in 1919.[9] The Antitrust Division enforces antitrust laws through both civil and criminal cases and

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[7] *History of the Antitrust Division*, ANTITRUST DIVISION OF THE U.S. DEPARTMENT OF JUSTICE (updated Dec. 13, 2018), https://www.justice.gov/atr/history-antitrust-division [https://perma.cc/7PJH-23JS]; *The Antitrust Laws*, ANTITRUST DIV. OF THE U.S. DEP'T OF JUST. (updated Aug. 31, 2023), https://www.justice.gov/atr/antitrust-laws-and-you [https://perma.cc/88RE-BSDA]. Note that all states in the United States also have their own antitrust laws. Federal enforcement seeks to protect the interests of all consumers across the nation or within interstate commerce, while state enforcers focus their efforts on the consumers in their respective states. *See* United States, *Relationship Between Public and Private Antitrust Enforcement*, Org. for Econ. Coop. and Dev. [OECD] at 2, 7, DAF/COMP/WP3/WD(2015)11 (June 15, 2015), https://www.justice.gov/atr/file/823166/download [https://perma.cc/Q48G-UY7V].

[8] *The Antitrust Laws*, *supra* note 7.

[9] *History of the Antitrust Division*, *supra* note 7.

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provides guidance on the meaning of antitrust laws.[10] The Federal Trade Commission (FTC), created in 1914, also pursues anticompetitive conduct as violations of Section 5 of the Federal Trade Commission Act that bans "unfair methods of competition" and "unfair or deceptive acts or practices," and provides guidance to antitrust laws as well.[11] The FTC and Antitrust Division split up which agency will investigate which commodities.[12] However, the quick development of new technologies delayed the FTC and Antitrust Division's reaction to antitrust matters relating to Big Tech[13] since the two organizations needed to decide on which had jurisdiction over these developing markets.[14]

State governments regulated antitrust violations before the federal government passed the Sherman and Clayton Acts and are still free to pass their own supplementary antitrust legislation.[15] For example, California passed its Unfair Competition Law that prohibits business practices that constitute "unfair competition," which is defined as "any unlawful, unfair or fraudulent business act or practice."[16] To bring a claim under the California Unfair Competition Law, a plaintiff must establish economic injury and show that the economic injury was caused by the unfair business practice.[17] What is considered "unfair" in California is much broader than federal antitrust law. In California, an unfair business practice is conduct that "threatens an incipient violation of an antitrust law," "violates the policy or spirit of one of those laws because its effects are comparable to or the same as a violation of the law," or "otherwise significantly threatens or harms competition."[18]

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[10] *Mission*, *supra* note 2.

[11] *Our History*, FED. TRADE COMM'N, https://www.ftc.gov/about-ftc/history [https://perma.cc/LKX2-YR7B]; *Anticompetitive Practices*, FED. TRADE COMM'N, https://www.ftc.gov/enforcement/anticompetitive-practices [https://perma.cc/7UYV-2XPL].

[12] BakerHoestelter, *Antitrust Agency Turf War Over Big Tech Investigations*, ANTITRUST ADVOC., (Oct. 9, 2019), https://www.antitrustadvocate.com/blogs/antitrust-agency-turf-war-over-big-tech-investigations/ [https://perma.cc/VJ22-EMUY].

[13] Big Tech refers to large tech conglomerates. The term typically includes Apple, Microsoft, Amazon, Alphabet, and Meta. Diana L. Moss, The Record of Weak U.S. Merger Enforcement in Big Tech 1, AM. ANTITRUST INST. (July 8, 2019), https://www.antitrustinstitute.org/wp-content/uploads/2019/07/Merger-Enforcement_Big-Tech_7.8.19.pdf [https://perma.cc/XGA8-5TCY].

[14] BakerHoestelter, *supra* note 12.

[15] California v. ARC Am. Corp., 490 U.S. 93, 101 n.4 (1989).

[16] CAL. BUS. & PROF. CODE § 17200 (West 2023).

[17] Epic Games, Inc., v. Apple Inc., 559 F. Supp. 3d 898, 1051 (N.D. Cal. 2021), *aff'd in part, rev'd in part,* 67 F.4th 946 (9th Cir. 2023).

[18] Cel-Tech Comm'ns, Inc. v. L.A. Cellular Tel. Co., 20 Cal.4th 163, 187 (1999).

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Other than state and federal government-brought antitrust lawsuits, the Sherman Act allows private plaintiffs to bring civil actions for violations of antitrust laws, which can be undertaken by a single party or class actions of affected parties.[19]

2. Elements of Section 1 and Section 2 Sherman Act Claims

The elements required to bring a Section 1 or Section 2 claim under the Sherman Act differ. Section 1 of the Sherman Act prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States."[20] A Section 1 claim requires a showing that the alleged conspirators "had a conscious commitment to a common scheme designed to achieve an unlawful objective" and that the restraints on trade were undue or unreasonable.[21] A restraint on trade is unreasonable in two circumstances: if it fits within a class of restraints that has been held to be per se unreasonable, or if it has been judged to be unreasonable under a *rule of reason* test which involves a three step burden shifting framework.[22] Restraints that are illegal per se are limited, and usually involve horizontal price-fixing agreements.[23] In order to establish that a restraint on trade is unreasonable under the rule of reason, the parties conduct a fact-specific inquiry on the market power of the parties and the overall market structure to determine the restraint's actual effect on competition.[24] In the first step of the burden shifting framework, the plaintiff has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect that harms consumers in the relevant market.[25] If the plaintiff meets this burden, then the defendant is asked to give any procompetitive rationales of the restraint.[26] If the defendant has shown sufficient procompetitive rationale, then the final step in the rule of reason analysis is for the plaintiff

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[19] 15 U.S.C.A. § 15; United States, *Relationship Between Public and Private Antitrust Enforcement*, Org. for Econ. Coop. and Dev. [OECD] at 2, 7, DAF/COMP/WP3/WD (2015)11 (June 15, 2015), https://www.justice.gov/atr/file/823166/download [https://perma.cc/Q48G-UY7V].

[20] 15 U.S.C. § 1.

[21] Ohio v. Am. Express Co., 585 U.S. 529, 530 (2018); Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 764 (1984). Note that the statute does not explicitly specify "unreasonable" restraints on harm, but the word unreasonable is read-in by the courts.

[22] Ohio v. Am. Express Co., 585 U.S. 529, 530 (2018).

[23] *Id.* at 540–541.

[24] *Id*. at 541.

[25] *Id.*

[26] *Id*.

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to prove that the defendant could have achieved these procompetitive efficiencies through less anticompetitive means.[27]

Defining a market and calculating market share are perhaps the most important evidence to American courts under the rule of reason analysis. In step one of the rule of reason analysis, plaintiffs can show the restraint had undue or unreasonable anticompetitive effects through either direct or indirect evidence.[28] Direct evidence of anticompetitive effects is proof of actual adverse effects of the restraint on competition, such as reduced output or increased prices.[29] However, indirect evidence may also be used, such as proof of market power in addition to some evidence that the restraints harm competition.[30] While the courts require some actual evidence of harm to competition in addition to a showing of market share when establishing indirect evidence of anticompetitive effects, market power itself is often analyzed solely by calculating market share.[31]

Section 2 of the Sherman Act states that no person or business may "monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations."[32] A Section 2 monopoly claim requires two elements: the possession of monopoly power in the relevant market and the willful acquisition or maintenance of that power (as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident).[33] A Section 2 claim differs from a Section 1 claim in that it governs single-firm conduct and courts require a stronger showing of market power. Monopoly power is defined as the "power to control prices or exclude competition" and requires something greater than market power under a Section 1 claim.[34] The first step to determining market power is defining a market, which involves determining the correct product market and geographic market.[35] The court determines the boundaries of a product market by analyzing a variety of factors often provided by economists, such as industry or public recognition of the market, a product's peculiar

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[27] *Id* at 542.
[28] *Id.*
[29] *Id.*
[30] *Id.*
[31] *See, e.g.,* Tops Markets, Inc. v. Quality Markets, Inc., 142 F.3d 90, 97 (2d Cir. 1998).
[32] 15 U.S.C.A. § 2.
[33] Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 481 (1992).
[34] *Id.*
[35] Brown Shoe Co. v. United States, 370 U.S. 294, 324 (1962).

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characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.[36] Nevertheless, most courts approve of analyses defining a market by the reasonable interchangeability of substitute products, also known as cross-price elasticity.[37] Therefore, in both Section 1 and Section 2 claims, many cases primarily depend on analyses of market definition and subsequently market power, through which the details of calculation matter greatly.

The market definition analyses from Section 1 and Section 2 claims have changed over time as economic tools have evolved in scholarship. Prior to the 1970s, antitrust enforcement was rooted in economic structuralism.[38] Economic structuralism is based on the idea that concentrated market structures promote anticompetitive conduct.[39] Market analyses under a structuralist theory, therefore, focused more on the result of concentration in an industry and the harm that may have on consumers. Structuralism then gave way to the Chicago School approach to antitrust in the 1970s and 1980s, which advocated for a price theory approach to antitrust enforcement.[40] Price theory rests on a belief in the efficiency of markets propelled by economic actors. It posits that even if monopolies prevail, consumers will be protected when prices are low, markets are efficient, and companies offer many products.[41] Under price-theory analyses, market share is determined through cross-price elasticity, the approach most widely accepted today.[42] As a result of the Chicago School, US courts have therefore come to view the purpose of the Sherman Act and Clayton Act as protecting competition in the market, rather than protecting consumers from direct harm caused by over-concentrated markets.

3. Antitrust Law as Applied to Emerging Technologies

Market definition presents a unique problem for cases involving emerging technologies. Courts previously have shielded tech giants, like

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[36] *Id.* at 325.

[37] *Id.*; *see also*, Kaplan v. Burroughs Corp., 611 F.2d 286, 291 (9th Cir. 1979) ("The principle most fundamental to product market definition is 'cross-elasticity of demand' for certain products or services.").

[38] Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L. J. 710, 718 (2016).

[39] *Id.*

[40] *Id.* at 718–719.

[41] *Id*. at 719; Elaine McArdle, *(Anti)Trust Issues*, HARVARD L. BULL., Oct. 1, 2024 at 22.

[42] *See, e.g.,* United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956).

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Qualcomm, from monopoly claims for the sake of innovation.[43] This innovation can be a double-edged sword to consumers when the technology in question becomes necessary for everyday tasks and there are few alternatives. A recent series of antitrust litigation between Epic Games and Apple regarding the use of the App Store has brought this very problem to the forefront in courts around the world, with legal practitioners dubbing the matter "the Superbowl of Antitrust."[44] Consumers and app developers have few choices over which platforms they may use to conduct digital transactions on their mobile devices. Because Apple bundles its iOS operating system with Apple mobile phones, Apple customers and app developers can only use the App Store to conduct digital app transactions.[45] Apple also previously took a as much as a 30 percent commission on every transaction made through the App Store.[46] And, while certain apps may have their own web versions that host digital transactions, Apple instituted an anti-steering provision in its terms of use that prevented app developers from alerting consumers to these alternate payment methods.[47] Consumers brought a class action lawsuit against Apple for these provisions in 2012 and were granted class certification by a trial court on April 9, 2024.[48] The jury trial for the consumer class action is set for February 2026.[49] In 2021, developers, too, sought class certification for monopoly allegations against Apple and ultimately received a $100 million settlement.[50]

Before the consumer class action could be heard, Epic Games sued Apple under Section 1 and Section 2 of the Sherman Act on its own for

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[43] *See, e.g.,* Fed. Trade Comm'n v. Qualcomm Inc., 969 F.3d 974, 991 (9th Cir. 2020).

[44] Dorothy Atkins, *Epic-Apple's 'Superbowl of Antitrust' Trial May Be Watershed*, LAW360, May 22, 2021; Meng Jing, *Apple may face class action lawsuit over App Store monopoly in China*, S. CHINA MORNING POST (Apr. 20, 2017), https://www.scmp.com/tech/china-tech/article/2089257/apple-may-face-class-action-law-suit-over-app-store-monopoly-china [https://perma.cc/7L3X-WS6W]; Khalid, *supra* note 4.

[45] Malcom Owen, *Epic vs Apple trial – the whole story*, APPLE INSIDER, https://appleinsider.com/articles/20/08/23/apple-versus-epic-games-fortnite-app-store-saga——the-story-so-far (Apr. 2024) [https://perma.cc/RX2S-EX6V].

[46] Epic Games, Inc., v. Apple Inc., 559 F. Supp. 3d 898, 1012 n.555 (N.D. Cal. 2021), *aff'd in part, rev'd in part,* 67 F.4th 946 (9th Cir. 2023).

[47] Owen, *supra* note 45.

[48] *Apple Inc: Court OK's Class Certification Bid in Antitrust Suit*, CLASS ACTION REP., Apr. 9, 2024.

[49] *Apple Inc: Antitrust Class Action hearing Set February 2026*, CLASS ACTION REPORTER, Aug. 27, 2024.

[50] Developer Plaintiffs' Motion for Class Certification, Cameron v. Apple Inc., No. 4:19-cv-03074-YGR (N.D. Cal. June 1, 2021); Bryan Koenig, *$1B Class Action Brings Apple App Maker Litigation to UK*, LAW360 (Jul. 25, 2023), https://www.law360.com/articles/1703412/-1b-class-action-brings-apple-app-maker-litigation-to-uk [https:/perma.cc/Q5EL-8JYS].

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precluding its app, *Fortnite*, from alerting consumers to alternative payment methods, and for the commission Apple received on each in-app transaction of *Fortnite*.[51] Here, market definition played a large role as well, with options for product markets ranging from mobile transactions just on iOS devices, to any digital transaction platform for in-game purchases (including mobile, PC, and console platforms).[52] The district court defined the market as the market for mobile game transactions, and found: (1) that Apple's design to tie Apple products to the iOS ecosystem was not anticompetitive, and (2) that Apple lacked monopoly power in the mobile app games market.[53] The judge ruled that Apple's anti-steering provision was anticompetitive under California antitrust law and ordered its removal.[54] Both parties appealed and the Ninth Circuit affirmed the district court's decision that Apple did not illegally tie its products under Section 1 nor exert monopoly power under Section 2.[55] Facing these decisions in the US, Epic Games then took its case around the world, including to the UK.

B. ANTITRUST LAW IN THE UK

1. Enforcement and Litigation of Antitrust Claims

The UK also uses a combination of government enforcement and private litigation to combat anticompetitive behavior. The UK regulators currently responsible for antitrust enforcement are the Competition and Markets Authority (CMA) and the Competition Appeal Authority.[56] The

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[51] *See generally,* Epic Games, Inc., v. Apple Inc., 559 F. Supp. 3d 898, 921 (N.D. Cal. 2021), *aff'd in part*, *rev'd in part,* 67 F.4th 946 (9th Cir. 2023).

[52] Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 921 (N.D. Cal. 2021)., *aff'd in part, rev'd in part*, 67 F.4th 946 (9th Cir. 2023).

[53] *Id.* at 922, 1047 (finding that Apple did not tie its products because there were not separate products); Epic Games, Inc. v. Apple Inc., 67 F.4th 946, 994–99 (9th Cir. 2023) (finding Apple tying its products was not anticompetitive due to procompetitive effects and a lack of reasonable alternatives). The market in the litigation between Epic Games and Apple regarding Fortnite was confined to the mobile games market, but in other litigation involving the commission charged on App Store transactions the market may be considered all mobile app transactions.

[54] Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 922 (N.D. Cal. 2021)., *aff'd in part, rev'd in part*, 67 F.4th 946 (9th Cir. 2023).

[55] Epic Games, Inc. v. Apple Inc., 67 F.4th 946, 994–95, 999 (9th Cir. 2023).

[56] *Competition Law in the UK: Explained*, 360 BUSINESS LAW (Sep. 27, 2022), https://www.360businesslaw.com/blog/competition-law-in-the-uk-explained/ [https://perma.cc/9ENY-FBFD]; Richard Whish KC, *Institutional Architecture of UK Competition Law*, 18 COMPETITION L. INT'L 123 (2022).

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CMA is an independent, non-ministerial department created in 2013 through the Enterprise and Regulatory Reform Act of 2013.[57] The CMA investigates industries and brings cases while the Competition Appeals Authority hears appeals.[58] The CMA investigates mergers, takes actions against cartels, investigates entire markets, and provides information to people and businesses regarding obligations under competition and consumer law.[59] There are also specific industry regulators, such as the Office of Communications, the Office of Gas and Electricity Markets, and the Financial Conduct Authority which are empowered to investigate anti-competitive behavior in their specific sectors.[60] The main antitrust laws in the UK currently are Chapters I and II of the Competition Act 1998 (CA 98).[61] CA 98 Chapter 1 Section 2 prohibits "agreements . . . preventing, restricting or distorting competition," mirroring a Sherman Act Section 1 claim, while CA 98 Chapter 2 Section 18 prohibits "any conduct on the part of one or more undertakings which amounts to an abuse of a dominant position in the market," mirroring a Sherman Act Section 2 claim.[62]

The history of antitrust enforcement in the UK demonstrates how UK antitrust law reflects the different policy goals of the UK government over time. From the 1940s-1950s, antitrust enforcement fell under the purview of the Board of Trade.[63] In 1965, the UK reconstituted the antitrust regulatory commission into the Monopolies and Merger Commission and extended its powers.[64] When required by the Board of Trade, the commission inquired into and reported on the existence of monopoly conditions in the supply and export of specified goods and services, on mergers or proposed mergers of specified enterprises, and on how mergers and monopolies affected the public interest.[65] Oversight of the commission then passed to the Department of Employment and

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[57] *Competition Law in the UK: Explained*, *supra* note 56; Richard Whish KC, *supra* note 56 at 123, 126.

[58] Richard Whish KC, *supra* note 56.

[59] *About us*, COMPETITION & MKTS. AUTH., https://www.gov.uk/government/organisations/competition-and-markets-authority/about [https://perma.cc/QYH6-MPHS].

[60] Whish KC, *supra* note 56, at 130. Other examples include: the Water Services Regulation Authority (OFWAT), the Office of Rail and Road (ORR), the Northern Ireland Authority for Utility Regulation (NIAUR), the Covil Aviation Authority (CAA), Monitor (now part of NHS Improvement), and the Payment Systems Regulator (PSR).

[61] OFFICE OF FAIR TRADING, COMPETING FAIRLY, 2005 (UK).

[62] Competition Act 1998, c.41, §§ 2, 18 (UK) [https://perma.cc/A787-FSJN].

[63] Whish KC, *supra* note 56 at 123–24.

[64] *Id.* at 124.

[65] *Id.* at 123–24.

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Productivity in 1969, and then to the Department of Trade and Industry in 1970.[66] The UK joined the European Economic Community, the predecessor of the European Union, in 1973, leading to more changes to UK antitrust enforcement.[67]

In 1976, the UK consolidated its antitrust legislation, effectively making two separate systems for monopolies and mergers and for restrictive trade practices.[68] However, after joining the EU, the UK was also subject to the European Economic Community antitrust legislation and Articles 101 and 102 of the Treaty on the Functioning of the European Union.[69] After twenty-five years of concurrent domestic and European antitrust enforcement, the UK then passed the Competition Act of 1998 to create domestic versions of Articles 101 and 102.[70] The enforcement agencies also followed this change. The Office of Fair Trading (OFT) replaced the Director General of Fair Trading, and the Competition Commission replaced the Monopolies and Mergers Commission through the Enterprise Act of 2002.[71] These two entities were once again replaced with a new commission, the CMA, through the Enterprise and Regulatory Reform Act of 2013.[72]

The CMA and Competition Act 1998 (CA 98) are what make up modern antitrust law in the UK, even after the UK left the EU in January of 2020.[73] During the transition period between when the UK announced its intention to leave the EU and the day the UK-EU Withdrawal Agreement was signed, the UK continued implementing EU competition law.[74] At the end of the transition period, the UK implemented the European Union Withdrawal Agreement Act 2020, which created a body

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[66] Whish KC, *supra* note 56, at 123–24; *Records of the Monopolies and Mergers Commission, Predecessors and Successors*, THE NAT'L ARCHIVES, https://discovery.nationalarchives.gov.uk/details/r/C166 [https://perma.cc/7XX8-MCT8].

[67] Whish KC, *supra* note 56, at 125.

[68] *Id.* at 123–24.

[69] *Id.* at 125.

[70] *Id.*

[71] *Id.* at 123, 125–26.

[72] *Id.* at 123, 126.

[73] Holly Ellyatt, *UK Formally Leaves the European Union and Begins Brexit Transition Period*, CNBC (Jan. 31, 2020), https://www.cnbc.com/2020/01/31/brexit-day-uk-formally-leaves-the-european-union.html [https://perma.cc/3RTY-TPRD].

[74] Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, art. 92, June 13, 2020 [hereinafter U.K.-E.U. Withdrawal Agreement], https://www.legislation.gov.uk/eut/withdrawal-agreement/contents/adopted [https://perma.cc/GG2X-4LXB].

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of UK law known as "Retained EU Law."[75] Section 60 of CA 98 imposed a duty on UK courts and the CMA to apply UK competition law consistently with this retained EU case law.[76] Under Section 8 of the EU Withdrawal Agreement, the UK enacted statutory instruments amending the retained EU competition law.[77] In particular, the UK implemented a new section 60A of CA 98.[78] The new Section 60A maintained the benefits of Section 60, namely the ability to retain the breadth of binding EU competition law precedent and interpretation assistance, but gave the CMA and UK courts discretion to depart from EU case law in certain circumstances.[79]

UK antitrust laws leave open the possibility for private antitrust litigation, though this strategy of antitrust enforcement was contemplated much later. The European Commission began encouraging private enforcement in the early 1990s, partly to enhance the deterrence and effectiveness of EU competition law and to alleviate its own burden.[80] In March 2015, the UK passed the Consumer Rights Act 2015 to reform how private actions were carried out in response to infringements on competition law.[81] The law gave the Competition Appeals Tribunal (CAT) the ability to hear stand-alone actions, introduced new procedures for collective proceedings, introduced both opt-in and opt-out proceedings, and provided new procedures for collective statement and voluntary redress.[82] Prior to this act, third parties could only enter into damages proceedings, as opposed to collective damages lawsuits.[83] Despite broadening the scope of private antitrust litigation, the UK has seen very

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[75] *Retained EU law and assimilated law dashboard*, DEP'T FOR BUS. AND TRADE (Jan. 23, 2025), https://www.gov.uk/government/publications/retained-eu-law-dashboard [https://perma.cc/4WNB-QVNL].

[76] Competition Act 1998, c. 41, § 60 (UK) [https://perma.cc/A787-FSJN].

[77] U.K.-E.U. Withdrawal Agreement*, supra* note 74, at art. 8.

[78] Exiting the European Union Competition 2019, SI 2019/93 (UK).

[79] Competition Act 1998, *supra* note 76.

[80] *See, e.g.*, Barry J. Rodger, *Private enforcement of competition law, the hidden story: Part II: competition litigation settlements in the UK, 2008-2012*, 8 GLOB. COMPETITION LITIG. REV. 89–108 (2015).

[81] Whish KC, *supra* note 56, at 128.

[82] *Id.* at 132.

[83] OFFICE OF FAIR TRADING, AGREEMENTS AND CONCERTED PRACTICES, 2004 at 33 (UK); *Agreements and concerted practices: OFT401*, GOV.UK (Dec. 1, 2004), https://www.gov.uk/government/publications/agreements-and-concerted-practices-understanding-competition-law [https://perma.cc/KX2D-2HRD].

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little increase in private enforcement.[84] Some legal experts hypothesize this is due to a large proportion of private matters ending in mediation or settlement.[85]

2. Elements of Chapter 1 and Chapter 2 CA 98 Claims

As mentioned above, Chapter 1 Section 2 of the CA 98 prohibits agreements that restrict or distort competition in the UK.[86] In 2004, the OFT provided a set of guidelines for when an agreement might be considered anticompetitive, which was subsequently adopted by the CMA.[87] Chapter 1 regulates both oral and written agreements.[88]

CA 98 also applies to concerted practices, which the OFT advises can exist where there is informal cooperation without any formal agreement or decision.[89] Factors the OFT may consider to determine informal cooperation include the following:[90]

(1) Whether the parties knowingly entered into practical co-operation

(2) Whether behavior in the market is influenced as a result of direct or indirect contact between undertakings[91]

(3) Whether parallel behavior is a result of contact between undertakings leading to conditions of competition that do not correspond to normal conditions of the market

(4) The structure of the relevant market and the nature of the product involved

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[84] *See* Barry J. Rodger, *Private enforcement of competition law, the hidden story: competition litigation settlements in the United Kingdom, 2000-2005*, 29 EUR. COMM'N L. REV. 96-116 (2008); Rodger, *supra* note 80.

[85] Rodger, *supra* note 80.

[86] OFFICE OF FAIR TRADING, AGREEMENTS AND CONCERTED PRACTICES, *supra* note 83, at 8.

[87] *Id*.

[88] *Id.* at 6.

[89] *Id.* at 7.

[90] *Id*.

[91] *Id.* at 5. CA 98 refers to "undertakings," which are roughly defined as any person or business engaged in economic activity.

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> (5) The number of undertakings in the market and where there are only a few undertakings, whether they have similar cost structures and outputs.

The OFT will look to a variety of factors to determine whether the agreement or concerted practice had an appreciable effect on competition, including market share, the content of the agreement, and the structure of the market or markets affected by the agreement (such as entry conditions or the characteristics of buyers and the structure of the buyers' side of the market).[92] While market share calculations are not conclusive, the UK does not consider there to be an appreciable effect when the aggregate market share of the parties with an agreement between competing undertakings is less than 10 percent and when the market share of parties with non-competing undertakings is less than 15 percent.[93] The OFT also provides guidance for market definition, providing that the relevant market share is as follows:

> . . .the combined market share not only of the parties to the agreement but also of other undertakings belonging to the same group of undertakings as the parties to the agreement. These will include, in the case of each party to the agreement: (i) undertakings over which it exercises control; and (ii) undertakings which exercise control over it as well as any other undertakings which are controlled by those undertakings.[94]

CA 98 Chapter 2 Section 18 prohibits any conduct on the part of one or more undertakings that amounts to an abuse of a dominant position in the UK market.[95] The CMA similarly adopted the OFT guidance for abuse of dominance in 2004.[96] The OFT guidance explains that Chapter 2 involves two inquiries: whether an undertaking is dominant in the relevant market and whether it is abusing its position.[97] Before assessing whether the undertaking is dominant, the relevant market must be identified.[98]

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[92] *Id.* at 10.

[93] *Id.* at 8–9.

[94] *Id.* at 10.

[95] Competition Act 1998, c.41, §§ 2, 18 (UK), https://www.legislation.gov.uk/ukpga/1998/41/contents [https://perma.cc/A787-FSJN].

[96] OFFICE OF FAIR TRADING, ABUSE OF A DOMINANT POSITION, 2004 (UK); Competition and Markets Authority, *Abuse of a dominant position: OFT402*, GOV.UK (Dec. 1, 2004), https://www.gov.uk/government/publications/abuse-of-a-dominant-position [https://perma.cc/H5G7-GVD4].

[97] OFFICE OF FAIR TRADING, ABUSE OF A DOMINANT POSITION, 2004 at 3.

[98] *Id.* at 11.

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According to the OFT, the relevant market needs to include the relevant product market and the geographic market calculated through a hypothetical monopolist test.[99] The OFT suggests using demand-side and supply-side substitution tests in order to identify the relevant market, which involve looking at the closest substitute products consumers or suppliers would switch to if the price rose.[100] The OFT recommends geographic markets be determined in a similar way: by testing whether some customers would switch a sufficient volume of purchases to the same products sold in other geographic areas in response to a price increase above competition levels.[101] Interestingly, even if the CMA has previously investigated or defined a market, that market definition may not be determined to be correct in subsequent cases and the CMA need not adhere to past precedent regarding market definition.[102]

For courts or regulators to find dominance in a market requires a showing of substantial market power.[103] The European Court of Justice defines a dominant market position as "a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers."[104] To assess market power, the OFT recommends looking at measures of existing competition in the relevant market (such as market share), measures of potential competition (such as barriers to entry), and other factors (such as strong buyer power and economic regulation).[105] The OFT made sure to note that "an undertaking's market share is an important factor in assessing dominance but does not, on its own, determine whether an undertaking is dominant," suggesting it necessary to also consider the position of other undertakings operating in the same market and the change in market shares over time.[106]

Last, the OFT focuses more on the likely effect of a dominant undertaking's conduct than the specific form of the conduct in question when determining whether there was any abuse of a dominant market

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[99] *Id.*
[100] *Id.* at 11–12.
[101] *Id.* at 12.
[102] *Id.* at 13.
[103] *Id.*
[104] Case 27/76, United Brands v. Commission, 1978 E.C.R. 00207.
[105] OFFICE OF FAIR TRADING, ABUSE OF A DOMINANT POSITION, 2004 at 15.
[106] *Id.* at 14.

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position.[107] Therefore, conduct can be abusive both directly, such as through charging excessive prices, and indirectly, such as engaging in conduct that reduces the intensity of competition.[108] While abuse of a dominant position is not excused by producing benefits, it could be excused, even if it restricts competition, if there is an objective justification for the conduct.[109] CA 98 lists some broad categories of behavior in which both abusive conduct and agreements restricting competition are most likely to be found.[110]

While the OFT recommends certain economic tests such as hypothetical monopolist tests and market share analyses, UK government agencies and UK courts consider other economic evidence as well. For example, the CAT in *GlaxoSmithKline v. Competition and Markets Authority* proposed a shifting market definition that would include some products during the period when GlaxoSmithKline had patent protection, and a different set of products when generic versions became potential competitors because of the use of the same active ingredient.[111] Further, UK courts are free to disregard CMA guidance for market share thresholds. CMA guidance provides that it is unlikely that an undertaking is dominant if its market share is below 40 percent. However, the UK Office of Communications investigated British Telecommunications (BT) and found market dominance even though BT occupied only 31 percent of the market, since market shares were not "a reliable indicator of whether or not BT can act independently of its competitors and customers."[112] The CMA and UK courts also consider other economic tests in addition to the ones specifically mentioned by the OFT. One example is the *Cost-Plus* test, which compares the margin of a particular good (calculated with the cost of production and the selling price of a particular good) to some

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[107] *Id.* at 18.

[108] *Id.*

[109] *Id.*

[110] Competition Act 1998, §§ 2(2), 18(2) (UK). Some examples include but are not limited to: (1) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; (2) limiting production, markets or technical development to the prejudice of consumers; (3) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; and (4) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of the contracts.

[111] Note that legal scholars in the United States have similarly advocated for a "multiple markets" application of market definition. *See, e.g.,* David Glasner & Sean P. Sullivan, *The Logic of Market Definition*, 83 ANTITRUST L.J. 293, 330–331 (2020).

[112] Alexander Waksman & Henry Mostyn, *United Kingdom*, 16 DOMINANCE 235, 236 (2020).

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appropriate benchmark to determine whether it is excessive.[113] A price is considered excessive when it bears no reasonable relation to the economic value of the good or service.[114]

3. Antitrust Law as Applied to Emerging Technologies

Apple's alleged monopolization of the App Store was also subject to both litigation and investigation in the UK. In February of 2021, the CAT dismissed Epic Games's lawsuit against Apple.[115] In the ruling, the court explained that the case was dismissed because the main target, the UK arm of Apple, provides research and development and other technical services to other companies within the Apple group, but it "does not provide support for technological or systems related issues" and therefore does not choose which apps go on the App Store.[116] Epic Games also sued the US entity in the same action, but the court ruled it improper to serve proceedings outside of the jurisdiction.[117] However, just a year and a half after the CAT dismissed Epic Games's case, the CAT certified a class of developers suing Apple for the excessive price Apple charges as commission on App Store transactions under both Chapter 1 and Chapter 2 of CA 98.[118] Apple lost its motion to dismiss the case on April 12, 2024 and the matter is still ongoing.[119]

In March of 2021, the CMA opened its own investigation into Apple's conduct in relation to the distribution of apps on iOS and iPadOS devices in the UK, with a particular focus on the terms and conditions governing app developers' access to Apple's App Store.[120] While Epic Games was unable to sue Apple on its own in the UK, Epic Games did file a complaint with the CMA supporting its investigation a few weeks after

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[113] Competition & Mkts. Auth. v. Flynn Pharma [2020] EWCA Civ 339, at ¶ 62.

[114] *Id.*

[115] Epic Games, Inc. v. Apple Inc. [2021] CAT 4 (UK).

[116] *Id.*

[117] *Id.*

[118] Kent v. Apple Inc. [2022] CAT 28 (UK).

[119] Sam Tobin & Martin Coulter, *Apple loses bid to throw out UK lawsuit over App Store fees*, REUTERS (Apr. 12, 2024), https://www.reuters.com/technology/apple-loses-bid-throw-out-uk-lawsuit-over-app-store-fees-2024-04-12/ [https://perma.cc/472B-RAVV].

[120] *Investigating into Apple AppStore*, COMPETITION AND MKTS. AUTH. (Mar. 4, 2021) (last updated Aug. 2, 2023), https://www.gov.uk/cma-cases/investigation-into-apple-appstore [https://perma.cc/LNA2-8M9X].

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the CMA announcement.[121] As a result of all the antitrust claims regarding the App Store and antitrust concerns over similar technology, the CMA ultimately published a report on "the CMA's provisional support approach to implement the new Digital Markets competition regime," in January 2024. This, in part, lead to the UK passing the Digital Markets, Competition and Consumers Act of 2024.[122]

The Digital Markets, Competition and Consumers Act will give the CMA the power to designate firms as having *strategic market status* in relation to digital activity. This law is designed to affect only the very largest firms, so firms are considered as having strategic market status if they have the all of the following three qualities: a UK turnover of more than 1 billion pounds or global turnover of more than 25 billion pounds, if they have substantial and entrenched market power, and if they have a position of strategic significance.[123] Notably, the act can designate firms as having a position of strategic significance if they exert market power even outside the digital activity in question.[124] If a firm is given strategic market status, the CMA can set requirements for how those firms conduct themselves in relation to the digital activity in question.[125]

The CMA ultimately closed its investigation into Apple on August 21, 2024, but plans to continue its investigation if authorized to by the authority it was given under Digital Markets, Competition and Consumers Act.[126]

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[121] *Epic Games files complaint to support CMA Apple investigation*, EPIC GAMES (Mar. 30, 2021), https://www.epicgames.com/site/en-US/news/epic-games-files-complaint-to-support-cma-apple-investigation [https://perma.cc/B8WR-LQPV].

[122] COMPETITION & MKTS. AUTH., CASE 60015 – APPLE – IN-APP PAYMENT SYSTEM: STATEMENT REGARDING THE CMA'S DECISION TO CLOSE AN INVESTIGATION ON THE GROUNDS OF ADMINISTRATIVE PRIORITY 3 (2024), https://assets.publishing.service.gov.uk/media/66c5991067dbaeb97a13e513/Case_closure_statement.pdf [https://perma.cc/YD7S-AB89].

[123] *How the UK's digital markets competition regime works*, COMPETITION & MKTS. AUTH. (Jan. 23, 2025), https://www.gov.uk/guidance/how-the-uks-digital-markets-competition-regime-works [https://perma.cc/5BBE-ZCWW].

[124] *Id.* A firm has a position of strategic significance it at least one of the following apply: meet any of the following criteria: a significant size or scale in the digital activity, a significant number of other firms use the digital activity to carry out business, it can extend its market power to a range of other activities, or it can substantially influence how other firms behave with respect to that digital activity or in general.

[125] COMPETITION & MKTS. AUTH., *supra*, note 122, at 3.

[126] *Id.*; *CMA looks to new digital markets competition regime to resolve app store concerns,* COMPETITION & MKTS. AUTH. (Aug. 21, 2024), https://www.gov.uk/government/news/cma-looks-to-new-digital-markets-competition-regime-to-resolve-app-store-concerns [https://perma.cc/4X28-6SGX].

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II. A COMPARATIVE REVIEW OF THE ECONOMIC ANALYSES USED IN ANTITRUST LITIGATION IN THE US AND UK

This section compares and contrasts the use of economic analyses in US and UK antitrust litigation, using the antitrust litigation against Apple for monopolization of the market for transaction platforms as a case-study. Overall, the UK presents a more flexible approach when considering non-price harm and less-conventional economic evidence which may result in different market definitions in the US and UK for the same product.

A. DIFFERENCES IN ECONOMIC ANALYSES USED IN ANTITRUST ENFORCEMENT IN THE US AND UK

One reason for the differences in monopoly enforcement between the US and UK is that antitrust law in the US arose through common law, which was responsive to advancements in economic literature, while the UK antitrust laws were more responsive to changing goals of enforcement, which augmented black letter antitrust law ad hoc.[127] This is illustrated by the difference between US and UK antitrust statutes. The US federal antitrust statutes are brief and readable because considerable interpretation happened through decades of case law, while the UK competition regulations are lengthy and specific.[128] However, this Comment argues that the United States' rigid reliance on price effects in establishing market power goes too far and that US antitrust enforcement could benefit from incorporating some of the other effects-based approaches adopted by the UK.

US common law interpretations of the Sherman Act and Clayton Act evolved with the changing economic theories of monopoly. The shift from economic structuralism to pure price theory left no middle ground for broader policy goals in antitrust enforcement, the effects of which are seen prominently today in the context of digital markets.[129] Under the structuralist theory, courts blocked mergers they thought would *lead* to

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[127] See *supra* Part I.B.1. above for a history of how the CMA came to be from many different government agencies and ministers administering antitrust enforcement in response to specific policy goals and industry pressures.

[128] RICHARD POSNER, ANTITRUST LAW 1–2 (2d ed., 2001); Tânia Luísa Faria & Guilherme Neves Lima, *Abuse of a dominant position in the digital economy in the EU and the US: the Big Four and the war of the worlds*, 41(3) EUR. COMM'N L. REV., 144–151, 145–146 (2020).

[129] Khan, *supra* note 38, at 717–718.

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anticompetitive conduct and in some instances blocked horizontal deals and vertical mergers.[130]

However, price-theory rests on an assumption that the efficiency of markets propelled by economic actors will lead to just antitrust outcomes.[131] According to Richard Posner, the essential assumptions of antitrust law should be as follows:

> that economic welfare should be understood in terms of the economist's concept of efficiency; that business firms should be assumed to be rational profit maximizers, so that the issue in evaluating antitrust significance of a particular business practice should be whether it is a means by which a rational profit maximizer can increase its profits at the expense of efficiency.[132]

Speaking of the time before courts adopted price theory, Posner said, "much of antitrust law in 1976 was an intellectual disgrace."[133]

This increased attention to price effects resulted in US antitrust law that rests solely on a battle between economic experts over market definition demonstrated by the use of price-related economic measurements. As noted above, Sherman Act Section 1 and Section 2 claims involve some showing of market power. Through the influence of price theory, all other methods of demonstrating market power have essentially been sacrificed in favor of the singular calculation of cross-price elasticity. Indeed, when describing the use of cross-price elasticity in market definition, the court in *United States v. E.I. du Pont de Nemours & Co.* said there is "no more definite rule."[134]

One reason for the confusion over whether non-price harm to consumers is relevant is a general disagreement over the purpose of antitrust enforcement. Nearly all antitrust professionals agree that the antitrust system can be understood as an effort to protect the process of competition and establish boundaries for ways that market power can be created or maintained to promote the public interest.[135] The most common view among courts, enforcers, and scholars currently is to confine antitrust to improving consumer welfare with respect to their buying and selling

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[130] *Id.*; *see, e.g.*, Brown Shoe Co. v. United States, 370 U.S. 294, 328-34 (1962).

[131] Khan, *supra* note 38, at 719.

[132] POSNER, *supra* note 128, at ix.

[133] *Id.* at viii.

[134] United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956).

[135] DANIEL FRANCIS & CHRISTOPHER JON SPRIGMAN, A.B.A. ANTITRUST L. SECTION, ANTITRUST PRINCIPLES, CASES, AND MATERIALS 2 (American Bar Association ed., 2d ed. 2024).

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activities by improving the efficiency of markets.[136] However, as Part III.A. describes below, consolidation and market power touch many other aspects of consumer welfare.

This overly narrow focus on market definition analyses as the sole method for establishing market power and therefore anticompetitive harm in Section 1 and Section 2 cases is actually at odds with past case law and current economic thought. As mentioned above, the US Supreme Court provided a framework in *Brown Shoe* for antitrust analysis that considered factors outside of cross-price elasticity of demand, such as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.[137] The Supreme Court then later interpreted its decision in *Brown Shoe* as showing that "statistics concerning market share and concentration, while of great significance, [are] not conclusive indicators of anticompetitive effects."[138]

Economists have also noted how contemporary market definition analyses fall short of their intended goal of analyzing market power and commented on how entrenched they are in US case law.[139] In particular, recent economic studies have shown that mergers allowed based on market power analyses focused on price effects have resulted in great consumer harm, sometimes outside of price.[140] For example, one study showed that between 5 and 7 percent of pharmaceutical acquisitions per year are done with the intention to shelve a product in development that could potentially compete with the current products offered by the incumbent firm.[141] This has a huge non-price harm of reducing innovation in the pharmaceutical industry and killing potential treatments.[142] Furthermore, ignoring non-price effects of mergers has proven to be deadly. A study on mergers of dialysis companies exempt from pre-merger notification to authorities

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[136] *Id.* at 4–5.

[137] Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962).

[138] United States v. Gen. Dynamics Corp., 415 U.S. 486, 498 (1974).

[139] *See, e.g.,* Louis Kaplow, *Why (Ever) Define Markets?*, Discussion Paper No. 666, HARVARD JOHN M. OLIN DISCUSSION PAPER SERIES, 1–4, 58–63 (2010).

[140] *See generally* Retrospective Studies by the Bureau of Economics, FEDERAL TRADE COMMISSION, https://www.ftc.gov/policy/studies/merger-retrospective-program/retrospective-studies-bureau-economics [https://perma.cc/LMJ6-YRR7].

[141] Collen Cunningham, Florian Ederer, and Song Ma, *Killer Acquisitions*, 129 J. POLITICAL ECONOMY (2021) 649–702, 649.

[142] *Id.* at 652. After the acquisition, the acquired firm is 23.4% less likely to continue development on an overlapping drug with the incumbent firm.

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showed that consolidation in the dialysis market caused prices to increase and survival rates to decrease.[143]

In the UK, antitrust policies and enforcement arose from a broader array of concerns than just promoting competition and free markets, and antitrust law was changed ad hoc. The Monopolies and Restrictive Practices (Inquiries and Control) Act 1948 was passed by the Labour Government that came to power at the end of the Second World War.[144] The government at the time had a policy goal of full employment and considered competition as a means to this end.[145] From 1957 until 2002, the minister appointed by the government to advance these policy goals for the public interest continued to be the most important figure in antitrust enforcement, though the laws became more specific towards different types of anticompetitive behavior.[146] The focus on broader goals can also be seen through the changing structure of the Competition Commission. For example, though the CMA is currently an independent, non-ministerial department, at one point it reported to the Department of Employment and Productivity and, later, to the Department of Trade and Industry, as the focus of antitrust law changed.[147] In 1973, the UK joined the European Economic Community which illuminated the differences between UK antitrust enforcement and antitrust enforcement in Europe. While the UK continued to amend its antitrust laws and create new enforcement agencies from 1973 to 1998, infringement of antitrust laws did not attract penalties domestically, and the EU antitrust rules were much more effective in policing behavior.[148] As a result, the UK brought its own antitrust enforcement laws in line with the competition provisions from the Treaty for Functioning of the European Union, now Article 101 and Article 102, through the Competition Act of 1998.[149]

The UK's approach to economic analyses in antitrust cases allows for evidence of anticompetitive harm outside of price effects,

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[143] Thomas G. Wollmann, *How to Get Away with Merger: Stealth Consolidation and its Effects on US Healthcare* 13, 18–20, 31 (Nat'l Bureau of Econ. Rsch., Working Paper no. 27274, 2024).

[144] Whish KC, *supra* note 56.

[145] *Id.*

[146] *Id.* at 124–126.

[147] *About us*, COMPETITION & MKTS. AUTH., https://www.gov.uk/government/organisations/competition-and-markets-authority/about [https://perma.cc/QYH6-MPHS]; *Records of the Monopolies and Mergers Commission, predecessors and successors*, THE NATIONAL ARCHIVES (accessed Nov. 26, 2023) [https://perma.cc/7XX8-MCT8].

[148] Whish KC, *supra* note 56, at 125.

[149] *Id.*

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demonstrated by strict market share evaluations and hypothetical monopolist tests, and provides a viable alternative to the US's rigidity. While UK antitrust case law relies on price theory for market definition, it applies the economic principles more flexibly across markets and considers factors other than market share when determining market dominance. For example, the CAT in *GlaxosSmithKline v. Competition Markets Authority* proposed a separate market definition during the period when GlaxoSmithKline had patent protection, and a different market definition for when generic versions became potential competitors due to the use of the same active ingredient.[150] Once the relevant product and geographic market is decided, market share does not appear to be outcome-determinative. While the CMA applies the EU presumption that the undertaking is dominant if it has a market share above 50 percent, the CAT declined to presume dominance when the defendant had a market share over 89 percent immediately following the defendant's loss of its statutory monopoly.[151] Similarly, CMA guidance provides that it is unlikely that an undertaking is dominant if its market share is below 40 percent. However, the UK Office of Communication's abuse of dominance investigation into British Telecommunications demonstrated that particular market shares are not outcome determinative. The Office of Communication found market dominance where BT occupied only 31 percent of the market, since market shares were not "a reliable indicator of whether or not BT can act independently of its competitors and customers."[152] The Office of Communications noted that BT's power instead came from the particular features of the market, including barriers to rivals expanding and inelastic demand for BT's services. [153]

While the UK's abuse of a dominant position claim is more flexible than federal antitrust law in the US, it is worth noting that it bears some similarities to California's Unfair Competition Law. For example, an abuse of dominance claim "covers the imposition of not just unfair prices but, expressly, 'unfair trading terms.'"[154] This allows for antitrust

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[150] GlaxoSmithKline PLC v. Competition & Mkts. Auth., [2021] CAT 9 (UK) at 27–28. Note that legal scholars in the Unites States have similarly advocated for a "multiple markets" application of market definition. *See, e.g.,* David Glasner & Sean P. Sullivan, *The Logic of Market Definition*, 83 ANTITRUST L.J. 293, 330–331 (2020).

[151] Alexander Waksman & Henry Mostyn, *United Kingdom*, 16 DOMINANCE at 236 (2020).

[152] *Id*.

[153] *Id.*

[154] Sir Peter Roth, High Court Judge, The Continual Evolution of Competition Law, Blackstone Lecture at Pembroke College, Oxford (Nov. 9, 2018), in https://www.catribunal.org.uk/sites/default/files/2018-

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claims to be brought in the UK for what seems to be more like public policy concerns, such as the requirement that consumers permit the use of their data in exchange for access to a digital platform.[155] Similarly, California's Unfair Competition Law prohibits unfair practices that violate the "policy or spirit" of federal antitrust law when its effects are comparable to, or the same as, a violation of federal law.[156] This is a great example of how individual states can supplement slow-moving federal law to address consumer harm resulting from companies' market power in key industries when that market power might not reach the rigid thresholds required by the Sherman Act.

UK case law also allows courts to consider other economic tests. For example, the tests used to establish an abuse of dominance through unfair pricing further demonstrate the flexibility with which the UK analyzes monopolies. A price is unfair when the dominant undertaking has reaped trading benefits it could not have obtained in conditions of normal and sufficiently effective competition.[157] In *Competition and Markets Authority v. Flynn*, the leading authority on unfair pricing under Chapter 2 of the CA 98, the court summarized the relevant case law and concluded that "there is no single method or 'way' in which abuse might be established and competition authorities have a margin of manoeuvre or appreciation in deciding which methodology to use and which evidence to rely upon."[158] The competition authorities can use one or more alternative economic tests available depending on the facts and circumstances of each case.[159] In addition to market share analyses and hypothetical monopolists tests, the US could also incorporate other tests, such as the Cost-Plus test introduced in *Flynn*, which involves calculating the margin on a product and comparing it to some appropriate benchmark to determine whether it is excessive. Some may argue the Cost-Plus test is too far a nod back to economic structuralism, but, when combined with other economic evidence, it could provide a fuller picture of the realities of the market in question. Just as there are multiple ways to value a company, it makes

12/The%20Continual%20Evolution%20of%20Competition%20Law.pdf [https://perma.cc/XC3B-46C5].

[155] Alexandra Malina & Deba Das, *UK and EU competition regimes: where will we see divergence post-Brexit?*, 42 EUR. COMPETITION L. REV. 357, 359 (2021).

[156] Cel-Tech Commc'ns, Inc. v. Los Angeles Cellular Tel. Co., 973 P.2d 527, 544 (1999).

[157] CMA v Flynn Pharma [2020] EWCA Civ 339.

[158] *Id.*

[159] *Id.*

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sense there would be multiple ways to measure the effect of a company's actions on a market.

B. EPIC GAMES V. APPLE AND COMPARATIVE OUTCOMES IN ANTITRUST LITIGATION OF BIG TECH

The different courts' approaches to Apple's alleged monopolization of transactions through the App Store demonstrate the different economic tools preferred by each court and the need for greater flexibility in the economic factors US courts consider when evaluating harm in antitrust litigation. The first iPhone came to market in 2007 and the App Store launched in 2008.[160] At that time the App Store allowed third-party app developers to offer native apps to all Apple device users.[161] Apple phones use an operating system unique to Apple called iOS, which is bundled with the hardware of the phone.[162] This vertical integration means the App Store is the only place to download mobile apps.[163] Over 90 percent of apps are free to download, and the rest either charge a price for downloading, offer in-app purchases, or offer subscriptions.[164] For the most part, Apple has charged a 30 percent commission on each digital transaction made through the App Store.[165] In order to use the App Store, developers must sign a Developer Product Licensing Agreement, which requires developers to pay a commission fee and refrain from encouraging consumers to download the apps from other sources or providing a link to purchase in-app digital goods from stores other than the App Store.[166] Knowing this, Epic Games purposefully engineered a "hotfix" to covertly introduce code that would enable additional payment methods for in-app purchases of digital content in the game *Fortnite*.[167] After Apple took *Fortnite* down from the App Store for violating the terms and conditions of the Developer Product Licensing Agreement, Epic Games sued Apple alleging unlawful restraint of trade and monopoly maintenance in the iOS

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[160] Kent v. Apple Inc. [2022] CAT 28 (UK).
[161] *Id.*
[162] *Id.*
[163] *Id.*
[164] *Id.*
[165] *Id.*
[166] Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 934 (N.D. Cal. 2021), *aff'd in part, rev'd in part and remanded*, 67 F.4th 946 (9th Cir. 2023).
[167] *Id.* at 936.

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app distribution market and iOS in-app payment solutions market under Sections 1 and 2 of the Sherman Act.[168]

The US cases involving Epic Games and Apple further demonstrate the US's focus on market share. The federal district court in the US found that Apple did not unlawfully restrict trade in or monopolize the mobile game transaction market.[169] Though the court defined the market through the *Brown Shoe* factors analysis, the court still did not find that Apple's market power rose to the status of monopoly power in the mobile gaming market.[170] However, the judge did note that "Apple is near the precipice of substantial market power, or monopoly power, with its considerable market share," and was "only saved by the fact its share is not higher."[171] Notably, Apple's market share in mobile gaming transactions fluctuated between 52 and 57 percent, the EU threshold for signaling market dominance.[172] Epic Games appealed the decision to define the market as mobile game transactions and the Ninth Circuit affirmed the district court's decision that Apple did not illegally tie its products under Section 1 nor exert monopoly power under Section 2.[173] Overall, it took US courts nearly five years to get any focus on the ultimate merits of the case only to find no violation of federal antitrust law, though Apple's considerable market share and market power was acknowledged.

Though no case involving Apple's alleged abuse of dominance in the App Store has been decided on the merits in the UK, the CAT decisions in *Epic Games v. Apple* and *Kent v. Apple* provide excellent clues as to the court's priorities in discussing the merits in the future. First, the CAT in *Epic Games v. Apple* was sympathetic to Epic Games's claims, though it dismissed the case on procedural grounds.[174] Based on allegations of violations of Chapters 1 and 2 of the CA 98, the judge noted "that there is a serious issue to be tried in the claims against the US defendants."[175] He opined that "the potential restrictive effects on competition should be apparent from the description of the impugned conduct set out above," and that the markets claimants put forward (the market for the distribution of iOS apps, the market for the distribution of apps to users of all mobile

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[168] *Id.* at 1033.
[169] *Id.* at 1017, 1019.
[170] *Id.* at 1017–1018.
[171] *Id.* at 1031.
[172] *Id.* at 1030.
[173] Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 981 (9th Cir. 2023).
[174] Epic Games Inc. v. Apple Inc. [2021] CAT 4 [45] (UK).
[175] *Id.* at [27].

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devices, and the market for the processing of payments for the purchase of digital content within iOS apps) were arguable.[176]

Second, the decision to certify a collective action proceeding of app developers gave a nod to the fact that the developers had colorable claims. At this stage of litigation, the claimants needed only to prove they had a realistic claim that carries conviction.[177] Though the standard is not high, the method through which the Plaintiff developed the claim sheds light on which factors will be most important during the subsequent proceeding on the merits. At issue was whether the unfair pricing test and related Cost-Plus analysis of the App Store were appropriate and arguable. Apple argued that Cost-Plus analyses were inappropriate for the App Store since the economic value of the commission on mobile app transactions was clouded by intangibles such as "the real economic value which developers and consumers derive from fifteen years. . . of innovation in the iOS ecosystem."[178] The court ruled that the unfair pricing test was arguable and that the Cost-Plus analysis was a conventional starting point, noting that the parties argued over the meaning of economic value in this context.[179] These cases show that the UK could very well develop a different market definition for the same technology used in the US, where US courts deemed US consumers safe from anticompetitive practices.

Rote application of economic reasoning focused on price effects has become entrenched in US case law, sometimes operating as a crutch for courts attempting to reason through cases of market dominance. This is not to say that economics does not hold a very important place in creating just outcomes in antitrust lawsuits worldwide. Richard Posner, a foremost voice in law and economics, wrote in his book *Antitrust Law, Second Edition*:

> Almost everyone professionally involved in antitrust today—whether as litigator, prosecutor, judge, academic, or informed observer—not only agrees that the goal of antitrust laws should be to promote economic welfare, but also agrees on the essential tenets of economic theory that should be used to determine the consistency of specific business practices with that goal. Agrees, that is, that economic welfare should be understood in terms of the economist's concept of efficiency; that business firms should be assumed to be rational profit maximizers, to that the issue in evaluating antitrust significance of a

[176] *Id.*
[177] Easyair v Opal Telecom [2009] EWHC 339 (Ch), at [15].
[178] Epic Games Inc. v. Apple Inc. [2021] CAT 4.
[179] *Id.*

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> particular business practice should be whether it is a means by which a rational profit maximizer can increase its profits at the expense of efficiency; and that the design of antitrust rules should take into account the costs and benefits of individualized assessment of challenged practices relative to the costs and benefits rule-of-thumb prohibitions, notably the per se rules of antitrust legality.[180]

This is indeed a proposition that most antitrust practitioners can agree with: that market efficiency and economic rationality should influence calculations needed to prove monopolization or anticompetitive conduct. However, this Comment argues that the law and economics perspective takes this proposition too far. Posner goes so far as to say there is no "justification for using the antitrust laws to attain goals unrelated to efficiency."[181] As seen in the differing outcomes in the Apple antitrust litigation, there is room in antitrust law to acknowledge market dominance more broadly. Courts are willing to assess market dominance through measuring the overall effect a practice has on consumers and engage in a more fact-specific inquiry that accounts for the quotidian realities of consumers' dependence on a product, like those in digital markets. Indeed, UK antitrust law adheres to price theory in market share and market definition analyses, but, when applying economic analysis to the larger issue of dominance, UK antitrust law leaves room for defining multiple markets for a product over time and incorporating particularities of the market such as increasing barriers to entry and inelastic demand for services.

III. THE UNIQUE ANTITRUST CHALLENGES OF DIGITAL MARKETS REQUIRES SPECIFIC REGULATORY AND LEGAL RESPONSES

In light of the questions raised through *Epic Games v. Apple* and similar antitrust litigation involving digital platforms, competition regulators around the world were forced to evaluate whether existing structures for antitrust regulation were adequate to address competition issues in digital markets. As of May 15, 2019, over forty-nine government agencies and research organizations have published reports on digital markets specifically.[182] These reports identified a spectrum of possible opinions regarding digital markets, ranging from digital platforms acting

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[180] POSNER, *supra* note 128, at ix.

[181] POSNER, *supra* note 128.

[182] *World Report on Digital Markets*, *supra* note 1.

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as natural monopolies where only a small number of firms can succeed (as in utilities), to conclusions that there is adequate competition in these markets already.[183] Many reports, including those conducted by the Chicago Booth Stigler Center in the United States (Stigler Report) and the CMA from the UK (Furman Report), identified digital platforms as operating in unique markets that necessitate some sort of change to their countries' current antitrust practices in the interest of consumer welfare.[184] Other reports, such as the one conducted by competition authorities in Canada, instead concluded that digital markets were not unique and did not require any changes to existing antitrust laws.[185] This Comment argues that digital markets are indeed unique from other antitrust inquiries and require specific regulatory agencies and economic tests in antitrust enforcement. In particular, they require the consideration of anticompetitive harm outside of price effects.

A. DIGITAL MARKETS ARE UNIQUE AND PRESENT SIGNIFICANT PUBLIC POLICY CONCERNS THAT EXISTING ANTITRUST LAW AND ENFORCEMENT STRATEGY IS ILL-EQUIPPED TO ADDRESS

The technology that gave rise to digital markets presents unique challenges to existing antitrust law and enforcement strategy. Both the Stigler Report and Furman Report identified significant ways that digital markets differ from markets more frequently analyzed by antitrust enforcement agencies. The reports concluded that the differences presented by digital markets are not sufficiently addressed by the current economic tools used to evaluate antitrust violation, such as the hypothetical monopolist test.[186] Namely, the reports identified that platforms in digital markets often operate a zero-price market that requires consumers to forfeit other aspects of consumer welfare, that the unique aspects of digital markets make them prone toward a single dominant player (also known as tipping), and that platforms in digital markets promote addictive behavior that renders consumer behavior ineffective

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[183] Furman, *supra* note 1, at 2.

[184] *See, e.g.,* Filippo Lancieri & Patricia Morita Sakowski, *Competition in Digital Markets: A Review of Expert Reports*, 26 STAN. J.L. BUS. & FIN. 65, 79–80 (2021) (analysis of the similarities and differences of the digital markets reports).

[185] *Id.*

[186] *World Report on Digital Markets*, *supra* note 1, at 34–43, 87; Furman, *supra* note 1, at 1–7.

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evidence in relevant economic tests.[187] These factors combined require governments to specifically address the market power of players in digital markets.

First, the zero monetary price charged to consumers for many services in digital markets creates issues in antitrust enforcement and may actually short-change consumers of a fair price. For example, social media platforms charge a zero monetary price for their services, but "charge" the consumer the value of their data in exchange, which is then used for advertising and other profitable endeavors for the company.[188] This data is valuable, and, in a hypothetical market, consumers could even be paid for the use of their data, effectively setting a negative price for certain digital markets.[189] Indeed, negative prices can be found in many markets. Microsoft already employs a negative price in the search engine market through Microsoft Rewards by paying customers for searching through Bing.[190] Another example of negative pricing is the flight miles awarded to customers for credit card usage.[191] While the barter transaction of consumer data for the use of digital services is, in principle, subject to antitrust scrutiny, most antitrust enforcement arose through transactions based on monetary price.[192] This resulted in the US courts and UK enforcement agencies relying greatly on economic tools based on changes in price, such as the hypothetical monopolist test discussed above. These tests have thus nearly become required elements of legal tests, leaving antitrust enforcement of zero-price digital markets with no way to prove antitrust violations when consumers face non-price harm.

Second, both the Stigler Report and the Furman Report agreed that digital markets are prone to tipping. This is because platforms operating in digital markets contain a confluence of factors that, in isolation, may not immediately warrant antitrust investigation, but, working together, greatly influence markets toward a single market winner. These features include: (1) strong network effects (the more people use a product, the more appealing this product becomes for other users); (2) strong

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[187] *World Report on Digital Markets*, *supra* note 1, at 34–43, 87; Furman, *supra* note 1, at 1–7, 42–43.

[188] *World Report on Digital Markets*, *supra* note 1, at 87; Furman, *supra* note 1, at 42–43.

[189] *World Report on Digital Markets*, *supra* note 1, at 87; Furman, *supra* note 1, at 42–43.

[190] *World Report on Digital Markets*, *supra* note 1, at 8. The fact that Microsoft already employs negative pricing but still cannot obtain market share from Google further proves that market concentration is a problem in digital markets.

[191] *Id.*

[192] *Id.* at 87.

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economies of scale and scope (the cost of producing more or of expanding in other sectors decreases with company's size); (3) marginal costs close to zero (the cost of servicing another consumer is close to zero); (4) high and increasing returns to the use of data (the more data you control, the better your product); and (5) low distribution costs that allow for a global reach.[193] These features create high barriers of entry to new incumbents and a fast-moving growth that requires quick antitrust enforcement in order for competition to increase.[194]

Digital markets are also uniquely designed to keep consumers using a specific product in ways contrary to the consumers' own interests by nudging consumers toward certain choices, promoting single-homing, and designing addictive products.[195] Recent economic research has shown that people exhibit "bounded rationality," meaning that people use consistent rules of thumb to make predictions and decisions.[196] This means that in complex worlds, such as digital platforms where users are directed to click through multiple screens of vast text to perform certain functions, people may not behave rationally in the way the economic tests currently used by courts assume. The Stigler Report summarized this best with the following examples:

> A nudge to use a particular browser as a default, for example, can entrench a platform's browser. Another lesson is that consumers overweigh their immediate benefit relative to their welfare in the future. A consumer searching for a solution to a particular problem will be inclined to click or use the first result or recommendation, rather than searching on another page or scrolling down to examine many listings. . .Similarly, consumers' preference for instant gratification may lead them to sign away privacy rights they otherwise say they value.

Another way digital markets are uniquely designed to influence consumers is through single-homing.[197] Some platforms introduce semi-technical barriers to multi-homing that prevent interoperability with competitors.[198] One example of this is Apple tying Apple hardware and devices to the Apple operating system, iOS. This is why Apple AirPods cannot connect to a Samsung Galaxy phone that uses the Android

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[193] Stigler, *supra* note 1, at 7–8; Furman, *supra* note 1, at 56.
[194] Stigler, *supra* note 1, at 7–8; Furman, *supra* note 1, at 103.
[195] Stigler, *supra* note 1, at 8–9.
[196] *Id.* at 42.
[197] Stigler, *supra* note 1, at 42–43; Furman, *supra* note 1, at 36.
[198] Stigler, *supra* note 1, at 42–43; Furman, *supra* note 1, at 36.

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operating system. A user that single-homes bestows market power exclusively on the platform she uses because advertisers and other content providers can only get that user's attention by going through that platform, or because, by selecting a platform or company, the user is now effectively prevented from switching services. Although the woman in the example above who owns Apple AirPods, and perhaps Apple speakers and an Apple TV as well, could, hypothetically, buy an Android phone**,** she would have to replace many more products and, due to bounded rationality, will stick with the company she has used and known if for nothing else other than ease and simplicity.

Last, many products offered in digital platforms are designed to be as addictive as possible.[199] These products, such as social media platforms, are designed to keep consumers "hooked" on the platform to better profits without consideration for consumer well-being.[200] As one report put it: "Strategies such as offering addictive content at moments when consumers lack self-control increase time spent on the platform and profitable ad sales even as the platform lowers the quality of content. These tactics increase the welfare costs of market power."[201] This behavior further entrenches consumers in a single product by a single company and hinders consumer choice, ultimately eliminating competition of products that could increase consumer welfare instead. The Stigler Report concluded that competition by itself cannot resolve the issue raised by the exploitation of behavioral biases.[202] This is because staying profitable in a competitive environment may force firms to exploit behavioral bias to achieve maximal profitability, driving firms that abstain from doing so out of the market.[203]

B. SOLUTIONS NEED TO HAVE IMMEDIACY AND BE SPECIFIC TO DIGITAL MARKETS

The unique aspects of digital markets mentioned above make market growth fast-moving and market concentration hard to undo. The Stigler and Furman Reports suggested that both the US and UK need to implement ex-ante antitrust remedies that can prevent consumer harm

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[199] Stigler, *supra* note 1, at 8–9.
[200] *Id.* at 13.
[201] *Id.*
[202] *Id.* at 60.
[203] *Id.*

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throughout investigations, create regulatory agencies geared toward this unique market, and update antitrust law and antitrust enforcement.

1. Preemptive Antitrust Remedies

Two ways to create preemptive antitrust remedies are allowing interim injunctive relief and changing merger enforcement thresholds. Allowing courts to quickly issue injunctive relief at the request of regulators would prevent damage to competition while a case is ongoing.[204] The Furman Report suggested that antitrust regulators should rely less on large fines and drawn-out procedures, since this market tipping can be hard to undo.[205]

In addition, regulators should change the threshold for merger reviews in digital markets. In markets with strong tendencies toward monopolization, a mistake in a merger approval could condemn a market to monopoly.[206] Furthermore, monetary thresholds for which acquisitions trigger enforcement review are not as useful for digital markets specifically. Large platforms in digital markets often attempt to acquire startups that could potentially cause competition in the future, but, at the time of the acquisition, the startup is often valued too little to trigger antitrust scrutiny.[207]

Regulators could remedy this in three different ways: (1) creating lower monetary thresholds for mergers or acquisitions in digital markets, (2) basing antitrust scrutiny off some other sort of valuation, as venture capitalists do, or (3) in acquisitions involving large platforms, shifting the burden of proof to the existing platform such that they must prove the acquisition will not harm competition or harm consumers in ways other than price.[208]

2. Specialized Regulatory Agencies and Laws Geared Toward Digital Markets

In order to accomplish these goals, both the Stigler Report and Furman Report suggested that governments must create specialized

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[204] Furman, *supra* note 1, at 6.
[205] *Id.*
[206] Stigler, *supra* note 1, at 16.
[207] Furman, *supra* note 1, at 13; Stigler, *supra* note 1, at 16–17.
[208] Furman, *supra* note 1, at 13; Stigler, *supra* note 1, at 16–17.

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regulatory agencies for digital markets and create legislation establishing norms for digital markets.[209] Four jurisdictions—the European Union, Germany, Japan, and the UK—have already introduced specific regulatory regimes for digital platforms, and it appears Australia, Brazil, India, and Turkey will soon follow.[210] The UK in particular has taken a strong pre-emptive approach to protect consumers from Big Tech by creating a new regulatory authority for digital markets called the Digital Markets Unit[211] and passing an antitrust law regulating digital markets specifically called the Digital Markets, Competition, and Consumers Act. In the US, the federal government took small steps toward increased regulation throughout President Biden's administration: President Biden created a department of AI security through executive order,[212] the House of Representatives considered and discussed amending the Sherman Act,[213] and the FTC under Biden's administration took a stronger regulatory approach towards tech giants.[214] It appears the Trump administration intends to undo some of this progress in an attempt to de-regulate, but will still pursue antitrust enforcement actions against Big Tech. President Trump signed an executive order to review "all policies, directives, regulations, orders, and other actions taken" during the Biden administration and revoke any that "act as barriers to American AI

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[209] Stigler, *supra* note 1, at 34–43, 87; Furman, *supra* note 1, at 1–7, 42–43.

[210] Alexiadis, *supra* note 6.

[211] *Digital Markets Unit*, UK.GOV, https://www.gov.uk/government/collections/digital-markets-unit [https://perma.cc/NCU7-NT58] (last visited Feb. 3, 2025).

[212] Statement Release, The White House, FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence (Oct. 30, 2023), https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/30/fact-sheet-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/ [https://perma.cc/9X6Z-7PGF]. The US created the Artificial Intelligence Safety Institute managed by the Department of Commerce's National Institute of Standards and Technology. In November of 2024, this organization created a taskforce to test risk of AI for national security in collaboration with experts from the Department of Commerce, the Department of Defense, the Department of Energy, the Department of Homeland Security, the National Security Agency, and the National Institute of Health. *See U.S. AI Safety Institute Establishes New U.S. Government Taskforce to Collaborate on Research and Testing of AI Models to Manage National Security Capabilities & Risks*, US DEP'T OF COM. (Nov. 20, 2024), https://www.commerce.gov/news/press-releases/2024/11/us-ai-safety-institute-establishes-new-us-government-taskforce [https://perma.cc/HLU5-SU76].

[213] *See* U.S. HOUSE OF REPRESENTATIVES, 116TH CONG., REPORT ON INVESTIGATION OF COMPETITION IN DIGITAL MARKETS: MAJORITY STAFF REPORT AND RECOMMENDATIONS at 394 (2020).

[214] Jody Godoy, *The long road to replacing Lina Khan at the FTC*, REUTERS (Nov. 13, 2024), https://www.reuters.com/world/us/long-road-replacing-lina-khan-ftc-2024-11-13/ [https://perma.cc/3BAP-G8RT].

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innovation."[215] This action may affirm fears that President Trump has "cozied up" to Big Tech by accepting millions of dollars in donations to his inaugural fund and brokering a $500 billion joint-venture among the largest tech companies to build AI infrastructure.[216] However, others have noted that President Trump's pick to run the Antitrust Division, Gail Slater, signals the administration's intention to pursue the same aggressive antitrust enforcement as the Biden administration.[217] The DOJ's decision to block a $14 billion acquisition by technology company Hewlett Packard just days into the Trump Administration further signals continued antitrust enforcement against tech titans.[218]

For regulation, the US should create a regulatory agency that specifically addresses norms for digital markets, much like the UK recently has.[219] In complex industries, the Stigler Report found that sector-specific regulators can have a wider remit than a broad antitrust authority since the agency can devote resources and time to studying that particular market.[220] For example, it notes that the telecommunications industry faced similar market shocks with the advent of cellular telephones in the 1990s. The passing of the Telecommunications Act of 1996 expanded and clarified the Federal Communication Commission's authority with respect to phone services as a result of the DOJ breaking up AT&T, which resulted in substantial benefits to consumers.[221] Prior to the Act, telephone companies made their devices unportable by requiring phone numbers be tied to specific carriers in a similar way to how digital platforms are

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[215] Matt O'Brien and Sarah Parvini, *Trump signs executive order on developing artificial intelligence 'free from ideological bias'*, ASSOCIATED PRESS (Jan. 23, 2025), https://apnews.com/article/trump-ai-artificial-intelligence-executive-order-eef1e5b9bec861eaf9b36217d547929c [https://perma.cc/ZU7B-Z485].

[216] *Big Tech is Cozying Up to President Trump. Here's Why Their Lawyers Are Cautiously Optimistic*, THE AM. LAW. (January 27, 2025); Steve Holland, *Trump announces private-sector $500 billion investment in AI infrastructure*, REUTERS (January 21, 2025), https://www.reuters.com/technology/artificial-intelligence/trump-announce-private-sector-ai-infrastructure-investment-cbs-reports-2025-01-21/ [https://perma.cc/P4CA-NN6E].

[217] David B. Schwartz, Rebecca Nelson, Emilee L. Hargis & Darren Ray, *United States: President-elect Trump's Pick to Lead DOJ's Antitrust Division Signals Continued Aggressive Big Tech and Agriculture Enforcement*, MONDAQ BUSINESS BRIEFING (Dec. 11, 2024).

[218] *Justice Department Sues to Block Hewlett Packard Enterprise's Proposed $14 Billion Acquisition of Rival Wireless Networking Technology Provider Juniper Networks*, DOJ ANTITRUST DIV. (Jan. 30, 2025), https://www.justice.gov/opa/pr/justice-department-sues-block-hewlett-packard-enterprises-proposed-14-billion-acquisition [https://perma.cc/R385-KWN4].

[219] Stigler, *supra* note 1, at 99–100.

[220] *Id.* at 99–101.

[221] *Id.* at 102–104; *Telecommunications Act of 1996*, FCC (updated Jun. 20, 2013), https://www.fcc.gov/general/telecommunications-act-1996 [https://perma.cc/VDE8-ZUC6].

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unportable across devices.[222] The FCC published the Wireless Local Number Portability Rule in 2003, which is the reason consumers can keep the same phone number across telephone providers today.[223] Digital markets could benefit from similar industry-based rules that promote interoperability.

In fact, the US's long regulatory history demonstrates that creating new agencies to regulate emerging markets is the norm when there is a specific, important industry that requires oversight. For example, the Interstate Commerce Commission was established in the 1880s to regulate railroads as a result of public indignation against railroad malpractices and abuses,[224] the Federal Deposit Insurance Corporation was created to examine and supervise financial institutions after the Great Depression,[225] the Securities and Exchange Commission was also created after the Great Depression to protect investors through regulating corporations,[226] and the Commodities Futures Trading Commission was created to regulate the US derivative market after grain and soybean futures prices reached record highs due to excessive speculation.[227] Such agencies generally have the power to review company conduct based on a public interest standard that is more inclusive than that used in antitrust. This solves the unique consumer protection and public policy concerns raised by the harms of emerging industries without disrupting black letter US antitrust law and general merger rules. An agency regulating digital markets, for example, could also be given special merger review authority. This would solve resource constraint issues and allow for the lowering the monetary thresholds set in merger and acquisition review.

Such regulation is possible, as is evidenced by the new legislation and regulatory bodies in the EU and UK. The EU instituted similar regulatory and law-making measures as suggested above through the

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[222] Stigler, *supra* note 1, at 102.

[223] *Id.*

[224] *Interstate Commerce Commission*, NATIONAL ARCHIVES FED. REG., https://www.federalregister.gov/agencies/interstate-commerce-commission [https://perma.cc/YJ2F-YQWB] (last visited Apr. 15, 2024).

[225] *A Brief History of Deposit Insurance*, FDIC (Aug. 9, 2023), https://www.fdic.gov/resources/publications/brief-history-of-deposit-insurance/index.html; *see* FED. DEPOSIT INS, CORP., A BRIEF HISTORY OF DEPOSIT INSURANCE IN THE UNITED STATES at 1 (1998).

[226] *Mission*, U.S. SEC. & EXCH. COMM'N, https://www.sec.gov/about/mission [https://perma.cc/B3L8-SEL6] (last visited Apr. 15, 2024).

[227] *US Futures Trading and Regulation Before the Creation of the CFTC*, COMMODITY FUTURES TRADING COMM'N, https://www.cftc.gov/About/HistoryoftheCFTC/history_precftc.html [https://perma.cc/8B2W-F8NG] (last visited Apr. 15, 2024).

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Digital Markets Act, passed on September 14, 2022, which aims to create fairer competition for digital businesses, generate increased innovation, and provide consumer protection.[228] The Act regulates large digital platforms (designated as gatekeepers) that: (1) run digital services such as online search engines, app stores, and messenger services; (2) have a strong economic position; (3) link a large user base to a large number of businesses; and (4) are entrenched in a durable position in the market.[229] The legislation encourages interoperability and prohibits attempts by gatekeepers to treat their own services and products more favorably, attempts to prevent users from uninstalling pre-installed software, and attempts to track users' actions outside of the platform's services for targeted advertising without consent.[230] The Digital Markets Act is enforced by regular market investigations by the European Commission, where violations incur heavy penalties of up to 10 percent of the company's total worldwide annual turnover, or up to 20 percent in the event of repeated infringements.[231] Since the EU's designated gatekeepers had until March 6, 2024 to make the relevant changes to their platforms, it is unclear what effect the regulation will have on consumer welfare.[232] It is clear, however, that the platforms had to make many changes. For example, Apple will now allow iPhone users in Europe to download apps from transaction platforms other than the Apple App Store and has decreased its 30 percent commission on in-app transactions to 17 percent in Europe only.[233] Similarly, the UK passed the Digital Markets, Competition and Consumers Act in 2024 to better protect consumer harm

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[228] *Digital Markets Act*, COUNCIL OF THE EUROPEAN UNION (Nov. 5, 2024), https://www.consilium.europa.eu/en/infographics/digital-markets-act/ [https://perma.cc/JL23-QN76].

[229] *The Digital Markets Act: ensuring fair and open digital markets*, EUR. COMM'N, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en [https://perma.cc/YLA8-4BZX] (last visited Apr. 15, 2024). The European Commission designated six gatekeepers that provide 22 core platform services: Alphabet, Amazon, Apple, ByteDance, Meta, and Microsoft. *Id.*

[230] *Id.*

[231] *Id*.

[232] Jess Weatherbed, *Experts fear the DMA won't change the status quo*, THE VERGE (Mar. 6, 2024), https://www.theverge.com/2024/3/6/24091695/digital-markets-act-eu-compliance-experts [https://perma.cc/QFT4-K9LD].

[233] Michael Liedtke, *Apple will open iPhone to alternative app stores, lower fees in Europe to comply with regulations*, AP NEWS (Jan. 25, 2024), https://apnews.com/article/apple-app-store-changes-european-regulation-039a86d1193cb2aa6515d9ae0464cf0a [https://perma.cc/7ZE2-NHWC]. Note, however, that Apple also instated new fees, such as a $0.50 download fee for any app downloaded from transaction platforms other than the Apple App Store.

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arising from tech giants.[234] The new authority given the CMA is designed for speed and consistency: an investigation is estimated to only take nine months, and conduct by large tech firms is reviewed every five years.[235] The EU regulatory regime has already resulted in enhanced consumer protection and the UK regulatory regime better recognizes non-price harm and promises quick action.

Last, the US needs to specifically amend current tests in antitrust litigation either by creating rebuttable presumptions specific to digital markets, changing the presumption shifting standards, or by incorporating non-price related consumer harm into its analysis of anticompetitive harm. Rebuttable presumptions would ease the high proof requirements currently imposed on antitrust plaintiffs and place the burden of proving efficiencies more on defendants.[236] For example, both the Stigler Report and Furman Report recommended a presumption that mergers between dominant firms and substantial competitors, or uniquely likely future competitors, are unlawful, subject to rebuttal by the defendant.[237] Reform would be helpful in US courtrooms as well. Some examples of helpful antitrust courtroom reform are: (1) allowing circumstantial evidence, as opposed to strict adherence to price-based tests, where the propositions in question are not observable, (2) allowing and entertaining evidence of non-price related consumer harm, and (3) switching the Sherman Act burden shifting requirement to presume anticompetitive harm on preliminary showings by antitrust plaintiffs.[238]

IV. CONCLUSION

Current antitrust law in the United States is ill-equipped to justly regulate the consolidation of large technology companies in digital markets. Decades of antitrust case law entrenched specific economic tools into the legal tests used to determine monopolization claims and agreements to restrain trade. These economic tools are ineffective in properly representing consumer harm in digital markets specifically and are overly focused on price effects. Additionally, these tests greatly

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[234] *How the UK's digital markets competition regime works*, COMPETITION & MKTS. AUTH. (Jan. 23, 2025), https://www.gov.uk/guidance/how-the-uks-digital-markets-competition-regime-works [https://perma.cc/5BBE-ZCWW].

[235] *Id*.

[236] Stigler, *supra* note 1, at 93.

[237] Stigler, *supra* note 1, at 98; Furman, *supra* note 1, at 101.

[238] Stigler, *supra* note 1, at 98–99, 216.

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undervalue non-price harm. Countries all around the world are grappling with similar problems as they handle international lawsuits such as Apple's alleged monopolization of the transaction platform market. It is clear from this series of cases, as well as the resulting forty-nine reports on the structure of digital markets, that digital markets are unique. Namely, digital markets often operate a zero-price market that requires consumers forfeit other aspects of consumer welfare, such as privacy; are prone toward a single dominant player; and have products that promote addictive behavior that renders consumer behavior ineffective evidence in relevant economic tests. These attributes make growth fast-moving and market concentration hard to undo, necessitating a specialized legal response. The US should create specialized regulatory agencies that promote ex-ante antitrust remedies, and pass laws that establish norms for digital markets and expand the type of economic evidence allowed when proving consumer harm in antitrust claims, especially with harm outside of price. Posner may claim that there is no goal for antitrust law outside of market efficiency, but the true goal of antitrust law should be consumer protection, of which market efficiency is only one means to that end.

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