

Towards a More Vigorous Antitrust Policy?

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Abstract

The growth of the large, "dominant" digital platforms - as well as increases in national concentration of U.S. industries and average profit margins, and a decline in labor's share of national income – have prompted calls for a stronger antitrust policy. The Federal Trade Commission (FTC) and the U.S. Department of Justice (DOJ) have recently responded with a more vigorous attack on mergers and have launched monopolization cases against Amazon, Apple, Facebook, and Google; two of these suits specifically seek divestitures as remedies. The early results of the more aggressive merger policy are not favorable, and the likelihood that courtordered divestitures would be effective in increasing competition is low if the results of previous monopolization cases are a relevant guide. In addition, two pieces of legislation have been proposed in the U.S. Congress to curb the power of the large, dominant digital platforms. Neither of these proposals addresses the source of the platforms' dominant positions; they would merely constrain the ability of these platforms to exploit their market positions. One of these bills, however, would require the largest platforms to interconnect with other businesses and, potentially, their rivals. This is a proposal that could result in all of the problems that a similar policy in telecommunications created two decades ago.

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1 Introduction

It has been more than a half century since the reform of antitrust policy has been as prominent a political issue as in the last few years. This prominence derives in part from several recent economic studies that suggest a decline in the intensity of competition throughout the U.S. economy. More important, however, has been the emergence of "dominant" digital platforms -- such as Google, Amazon, Facebook, and Apple -- that occupy a large, and increasingly controversial position in the lives of most Americans and Europeans. The latter development has received substantial attention in the U.S. Congress and the European Commission and has prompted U.S. and European competition authorities to file legal actions against these large digital platforms under existing antitrust statutes.

This paper provides a brief review and analysis of the prospects for a new direction in U.S. antitrust policy -- whether by more aggressive actions under current law or through the passage of new legislation. It begins with a brief review of the recent general economic trends that have led some economists to express concern that antitrust policy – particularly with regard to mergers -- has been insufficiently aggressive to prevent a decline in market competition in the U.S. economy. It then turns to a discussion of the more aggressive merger policy that has emerged as a result of this criticism.

Next, the paper turns to the growth of the large digital platforms that has led the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) to file major monopolization suits against Apple, Amazon, Google, and Facebook and a critical analysis of the market results of earlier attempts by antitrust authorities to rein in monopoly power through similar monopolization suits. Finally, the paper provides a brief description of draft legislation that was filed during the 117th Congress (2021–2022) that would attempt to rein in these large digital platforms and applies the lessons learned from one of the earlier major antitrust suits -- U.S. v AT&T -- to one of the major provisions of the proposed legislation.

2 Recent Economic Trends that Motivate the Demand for More Aggressive Antitrust Policy

Over the past decade or so, economists have identified some troubling trends that suggest a more aggressive U.S. antitrust policy is needed. Among these are: (1) evidence of rising concentration in the U.S. economy; (2) increasing profit margins in many U.S. industries; (3) labor's declining share of national income; and (4) the failure of antitrust authorities to challenge allegedly anti-competitive mergers and practices.

No consensus has been reached on the first three of these trends.² Many manifestations reflect the effects of the technological change -- particularly the digital

² For a detailed review of the literature that addresses these trends, see Crandall and Hazlett (2023).



¹ See Report of the White House Task Force on Antitrust Policy (1969). The "Neal Report" advocated breaking up concentrated industries and blocking mergers that involved "large" firms and "leading" firms in concentrated industries.

revolution -- that has transformed major swaths of the global economy. For example, online platforms have increasingly substituted for thousands of local retail establishments in consumer purchases of a wide variety of products, thereby increasing measures of national industry concentration in the retail sector. But this trend may have increased competition by providing the consumer with more options from which to buy everything from the smallest hardware item to very expensive durables, such as automobiles.

In addition, the markets for many products have become more global over time. The *relevant markets* for many of these consumer products are thus changing from a set of local markets to national markets, or even to global markets, with likely beneficial effects on the choices for consumers. (Shapiro, 2018; Werden & Froeb, 2018) Thus, though census data may show a gradual trend of increasing industry concentration measured on a national basis, the trend of average concentration of the markets in which buyers participate may be flat or even declining.

Profit margins may have increased over time, but these increases may simply reflect the ability of some firms to adapt to rapidly changing technologies that reduce their costs while other firms in their industries are less successful in utilizing these technologies (Demsetz, 1973; Carlton & Heyer, 2020). The rise in profit margins and the decline in labor's share of national income may also be attributed to large investments in new technologies, thereby substituting capital for labor. (Ganapati, 2021) On the other hand, some economic studies have detected an increase in monopsony power in labor markets that could be contributing to the reduction in labor's share of income (Azar et al., 2022).

Regardless of their validity, attributing any of these allegedly adverse economic trends to a lax antitrust policy is difficult -- particularly since similar trends are observed in other advanced economies, some with more aggressive "competition" policies than has been observed in the U.S.³ Moreover, it is far from clear how a more aggressive U.S. antitrust policy under current law or even new legislation could slow or reverse these trends. It is perhaps for this reason that there has been little movement towards any general revisions in U.S. antitrust statutes.

The fourth issue -- the alleged laxity in U.S. merger policy -- has received substantial attention in both the economics literature and in recent public policy debates. Retrospective analyses of past mergers have led some to conclude that antitrust authorities have been too lax in challenging mergers. Kwoka (2015) uses a sample of 49 horizontal transactions (mergers and joint ventures) that occurred between 1976 and 2006 and for which there are retrospective studies of their price effects. He concludes that 62% of the transactions that were not challenged by the authorities resulted in price increases. Ashenfelter et al. (2014) provide a similar review of 49 retrospective studies of the effects of mergers on prices in 21 industries and conclude that these studies find a positive price effect for horizontal mergers in concentrated oligopolistic industries. See also Ashenfelter & Hosken (2010).

While these analyses do not provide conclusive evidence of prospective consumer benefits of more strict anti-merger policies, they have stimulated policy discussion

⁴ Kwoka's results were challenged by two FTC economists; see Vita and Osinski (2018).



 $^{^{3}}$ Id.

in Congress and the enforcement agencies. In 2022, Senator Warren (D-Mass.) and Representative Jones (D-N.Y.) introduced legislation -- the Prohibiting Anticompetitive Mergers Act -- that would allow the DOJ and the FTC to block mergers that are valued at \$5 billion or more and would severely limit the ability of these actions to be challenged in court.⁵ This proposed legislation, which has not advanced in the Congress, reflects an abandonment of the consumer-welfare standard of U.S. antitrust policy in favor of a "neo-Brandeisian" approach that targets bigness *per se*. In addition, the FTC and DOJ have become much more aggressive in challenging mergers since the 2020 election.

3 Academic Critiques of U.S. Antitrust Policy

Among the first of recent advocates for a radical change in antitrust policy was Khan (2017), who argued that the growth of large digital platforms – in particular, Amazon – requires a dramatic change in U.S. antitrust policy:

This Note argues that the current framework in antitrust—specifically its pegging competition to "consumer welfare," defined as short-term price effects— is unequipped to capture the architecture of market power in the modern economy. We cannot cognize the potential harms to competition posed by Amazon's dominance if we measure competition primarily through price and output.

In March 2021, the Biden Administration nominated Khan to be Chair of the FTC; her nomination was confirmed by the Senate in June 2021.

One year after Khan's (2017) law review article, Wu (2018) authored an attack on "bigness" that advocated a similar abandonment of the consumer-welfare standard in U.S. antitrust policy. Wu suggested a ban on mergers that would reduce the number of competitors in an industry to fewer than four and the breakup of companies through monopolization cases.

More recently, Shapiro (2019) and Baker (2019) have offered less drastic proposals for antitrust reform. Both would retain the consumer-welfare standard, but they advocate a more aggressive enforcement strategy. Shapiro laments the failure of the enforcement agencies to challenge horizontal mergers between direct competitors and acquisitions of potential challengers of a firm's market position. He also suggests that U.S. antitrust policy has been too lenient in dealing with exclusionary behavior by dominant firms under the Sherman Act. Finally, he suggests that antitrust policy should focus more intently on allegations of monopsony power in labor markets.

Baker's (2019) criticisms are more wide ranging: He focuses intently on what he considers to be the excess reliance of antitrust on the "Chicago school" of economics. Moreover, he believes that political forces have resulted in a weakening of antitrust through judicial appointments. He recommends abandoning the Chicago school's alleged reliance on market forces to correct exercises of market power in

⁵ S.3847 - Prohibiting Anticompetitive Mergers Act of 2022, https://www.congress.gov/bill/117th-congress/senate-bill/3847.



the economy and strongly increasing enforcement of the antitrust laws -- particularly against the threats that are posed by the large digital platforms.

Winston's (2021) review of Baker's book rejects Baker's overly sweeping critique of the Chicago school and provides examples of how markets respond positively to correct the market distortions that are created by monopoly power. Moreover, he points out that Baker provides no evidence that a more aggressive antitrust policy would improve consumer welfare.

4 A More Aggressive Merger Policy

Since 2020, the FTC and the DOJ have responded to the concerns that past merger-enforcement policies have been too lax by becoming much more aggressive in challenging mergers. These challenges have been brought under Sect. 7 of the Clayton Act: a statute that requires the agencies to demonstrate that the effect of a merger or acquisition "may be substantially to lessen competition, or to tend to create a monopoly" and presumably thus have a negative effect on consumer welfare. The early results of this more aggressive approach are not promising as lower courts have ruled against the FTC and DOJ in five cases.

In addition, U.S. antitrust authorities have recently finalized a revision of the Merger Guidelines that the agencies use in deciding whether to challenge mergers. These guidelines provide far more specificity about interfirm competition and emphasize a stronger enforcement policy in mergers involving the large digital platforms. They also suggest at least a partial restoration of a pre-1970 approach to challenging vertical mergers despite the substantial jurisprudence that has developed since then that questions this approach.

It is important to note that much of the neo-Brandeisian concern that a lax merger enforcement policy has abetted the growth of the dominant digital platforms is not supported by the evidence. Crandall and Hazlett (2022) found that the major platforms have not been as acquisitive as have other large technology firms and that most of the mergers that involved the large digital platforms appear to have had either benign or pro-competitive effects in their respective markets. Critics (and antitrust authorities) often cite Facebook's acquisitions of WhatsApp and Instagram as evi-

⁹ The Guidelines cite the *Brown Shoe* (1962) and *du Pont* (1957) cases but fail to mention the *GTE Sylva*nia (1977) case that has guided antitrust policy with regard to vertical practices and vertical integration in the last four decades. The last case essentially reversed a previous policy of per se illegality for certain vertical practices: The decision recognized that vertical integration often results in substantial efficiencies that enhance economic welfare.



⁶ White & Case (2023).

⁷ The FTC's attempt to block Illumina's acquisition of Grail was dismissed by an FTC administrative law judge (ALJ), and its attempt to block Microsoft's acquisition of Activision Blizzard was rejected by a federal district court. Three DOJ merger complaints have been dismissed in federal courts: United Health's proposed acquisition of Change Healthcare; U.S. Sugar's acquisition of Imperial Sugar; and Booz Allen Hamilton's acquisition of EverWatch. In the Illumina/Grail case, the Commission voted to over-rule the ALJ and was largely upheld by the Fifth Circuit Court of Appeals in December 2023; Illumina subsequently spun-off Grail as a stand-alone company in 2024.

⁸ U.S. Department of Justice and Federal Trade Commission, Merger Guidelines (2023).

dence to the contrary; but these two acquisitions – even if eventually shown to be anti-competitive – are exceptions, not the general rule in the growth of major digital platforms. ¹⁰

Under current law, a more aggressive anti-merger policy would require the anti-trust authorities not only to be more willing to challenge mergers, but to be more persuasive in federal court. Shapiro (2019) notes that:

[A]s a practical matter, the case law relating to mergers evolves very slowly, with substantial lags following advances in economic learning and then changes in Department of Justice and Federal Trade Commission merger enforcement policies. Whether the current judiciary has the appetite to support stronger merger enforcement remains to be seen.

Unless courts are "persuaded" in this manner, a stricter anti-merger policy would require new legislation; but such legislation does not appear to be on the horizon.¹¹

It is possible that an antitrust policy that risks a greater probability of making Type 2 errors by challenging mergers that are pro-competitive in return for reducing Type 1 errors—failing to challenge anti-competitive mergers—could be welfare enhancing. However, 40 years ago, Easterbrook (1984) argued that the adverse effects of such Type I errors are likely to be overcome through subsequent market entry, but that the welfare loss from the blocking of potentially pro-competitive mergers (or other market practices) and the continuing legal precedents that are created by these decisions are more difficult to reverse.

An illustrative example of these trade-offs can be found by comparing Google's acquisition of Android with Microsoft's acquisition of Nokia's mobile wireless equipment and services business: Google acquired Android's software and its small staff in 2005 – Android had no marketable service at the time – for \$50 million. Google subsequently invested heavily in this start-up's technology, and eventually developed it into the leading mobile platform in the world (Crandall & Hazlett, 2022).

Microsoft tried to catch up with Google and Apple in the mobile wireless marketplace by buying Nokia's mobile wireless assets for \$7.2 billion in 2014. A little over a year later, it wrote off the entire value of this purchase and laid off more than 7,000 employees. In 2016, it sold the Nokia phone assets to Foxconn for \$350 million.¹²

Without Google's major investment and technological skill, Android may not have developed into the valuable operating system that is on the market today. By contrast, Microsoft might have used its technical prowess to combine its existing market presence in related digital services to obtain a prominent position in wireless operating systems and equipment, but it failed miserably.

¹² Karpal (2016).



¹⁰ As of this writing the Facebook antitrust case that has been brought by the FTC is still in litigation. If this case goes to trial, it may provide evidence of the effect of these acquisitions on the growth of Facebook (now Meta).

¹¹ See the discussion in Section II, above, of S 3847, introduced by Senator Warren (MA) and Representative Jones (NY) in 2022.

Neither merger was challenged by U.S. antitrust authorities, but if the new Merger Guidelines had been in force then, both could have been challenged. The result might have been the growth of Nokia's or Microsoft's wireless operating systems in place of Android – which would have been a suboptimal result that the market has clearly rejected.

The Warren-Jones bill has not advanced in Congress, and it is still too early to determine if the more aggressive anti-merger stance of the FTC and DOJ will have any effect on merger activity, although there are early indications of a decline in such activity – which may or may not be welfare-enhancing. Regardless of its success (or futility), this aggressive approach to merger enforcement could discourage firms from pursuing mergers because of the cost and time that are required to deal with the antitrust authorities. The reduction in the appetite for mergers could, in turn, reduce investment in new technologies or innovative new services because start-ups would have less access to the off-ramp of being acquired by established firms. Even if this more aggressive approach to merger policy begins to succeed in court, it will be years before retrospective studies of its effects on prices, output, and investment in new start-ups become available.

5 Antitrust and the Large Digital Platforms

Arguably, the most important current focus of antitrust reform is on the growth of the "dominant" digital platforms. There has been a major effort to rein in these platforms through antitrust enforcement and even a modest attempt to pass new antitrust/regulatory legislation for this sector. The following sections address both developments, drawing upon lessons that can be learned from earlier antitrust cases.

The digital revolution that was spawned by universal access to the Internet has generated some remarkable new services that have quickly developed widespread appeal. The companies that offer these services – Google, Amazon, Facebook, and Apple are prominent examples – have assumed dominant positions in shopping, search, social media, video entertainment, and digital advertising services. As these companies continue to grow and consolidate their positions, public support for constraining them through some form of regulation is growing (Khan, 2017; Wu, 2018; U.S. House of Representatives, 2020).

Each of these large digital platforms has achieved its position in large part because it is able to offer an attractive service (or services) to millions if not billions of subscribers throughout the world. Using the modern Internet to distribute their services and collect data that are useful for developing new services and advertising protocols, these companies can exploit the economies of scale and scope that are described as "platform economies." Google, Facebook, Apple, and Amazon can reach millions of subscribers around the world through the Internet and continue to add subscribers and develop new services at very low incremental costs. This provides them with an advantage over smaller rivals, who must grow to a comparable size to compete meaningfully.



¹³ PWC (2023); Boston Consulting Group (2023).

5.1 Major New Monopolization Cases

In the last three years, five federal monopolization suits have been filed against Amazon, Facebook, Google, and Apple. In October 2020, the Justice Department and 11 states charged Google with violating Sect. 2 of the Sherman Act by "unlawfully maintaining monopolies in the markets for general search services, search advertising, and general search text advertising in the United States through anticompetitive and exclusionary practices." Two months later, the FTC filed a suit against Facebook: The complaint alleges that Facebook had violated Sect. 5 of the Federal Trade Commission Act by "buying up companies that present competitive threats and by imposing restrictive policies that unjustifiably hinder actual or potential rivals" in the market for "personal social networking services." 15

In early 2023, the Justice Department filed another Sherman Act case against Google: The suit alleges that Google has unlawfully monopolized various aspects of digital advertising. ¹⁶ In late 2023, the FTC and 17 states filed a monopolization suit, under Sect. 5 of the Clayton Act and Sect. 2 of the Sherman Act, against Amazon. That suit alleges that Amazon is engaging in "exclusionary" conduct to maintain its monopoly in online retailing. ¹⁷ Finally, in March 2024 the DOJ and 15 states sued Apple. The complaint alleges that Apple has monopolized the smartphone market and taken actions that have made it more difficult for rivals to compete. ¹⁸

The 2020 antitrust DOJ complaint against Google -- which focuses on Google's position in Internet search and advertising -- does not explicitly ask for structural relief, perhaps because Google's success in search cannot be attributed to acquisitions. However, the Department's second case against Google includes a plan to ask for divestitures. If it succeeds in proving its monopolization charges, the Department plans to ask the court to:

"Order the divestiture of, at minimum, the Google Ad Manager suite, including both Google's publisher ad server, DFP, and Google's ad. exchange, AdX, along with any additional structural relief as needed to cure any anticompetitive harm" 19

The FTC's (revised) complaint against Facebook focuses heavily on its acquisitions of WhatsApp and Instagram. As a result, it quite naturally asks for structural relief that would include the divestiture of the assets that have evolved from these two acquisitions.²⁰ The FTC's complaint against Amazon asks for "any preliminary

²⁰ FTC Facebook Complaint, Section XI.



¹⁴ U.S., et al., v. Google LLC, U.S. District Court for the District of Columbia (DDC), October 20, 2020. Subsequently, the State of Texas and the State of Colorado (joined by a number of other states) filed similar suits (*The State of Texas*, et al. v. Google, LLC, U.S. District Court the State of Texas, December 16, 2020; Colorado, et al., v. Google, LLC, U.S. District Court for the District of Columbia, December 17, 2020.

¹⁵ Federal Trade Commission v. Facebook, Inc., U.S. District Court for the District of Columbia, December 9, 2020.

¹⁶ U.S., et al. v. Google, LLC, U.S. District Court for The Eastern District of Virginia, January 24, 2023, (hereafter, "DOJ Google Complaint II).

¹⁷ FTC, et al., v. Amazon.com, Inc., U.S. District Court for the Western District of Washington, November 2, 2023.

¹⁸ U.S., et al. v. Apple Inc., U.S. District Court for New Jersey, March 21, 2024.

¹⁹ DOJ Google Complaint II, "Request for Relief."

or permanent equitable relief, including but not limited to structural relief...," but it does not describe the structural relief that it may seek if it is successful. ²¹ Given the specific allegations in the complaint, it is exceedingly unlikely that the FTC and the states would be able to obtain any divestitures.

It is far from clear that the DOJ and the FTC can prevail in these five major undertakings. There are many issues to be settled in what could be protracted litigation. The established case law of Sect. 2 requires the plaintiffs to identify relevant markets; show that the defendants have dominant (if not quite monopoly) positions in these markets; and prove that they have engaged in unlawful practices ("restraints of trade") to attain or maintain such positions.

Equally important, if they succeed in court in proving their case, the plaintiffs may obtain relief only with respect to the court's (or jury's) findings of how the alleged monopoly was obtained. If, for example, Google's control over search or the mechanisms of digital advertising cannot be attributed, in whole or in part, to acquisitions, the court would likely not approve divestiture as an appropriate remedy. Surprisingly, as was noted above, the large digital platforms have not generally relied heavily on acquisitions to achieve their current positions (Crandall & Hazlett, 2022).

It should also be noted that a divestiture may not be a remedy at all if it simply establishes a new entity that struggles to become viable because of the platform economies involved. For example, it is difficult to conceive of a structural remedy that would reduce Google's position in Internet search. Attempts to reduce its domination in this activity have eluded other aspirants, including Microsoft, which was (as of late 2023) the second-largest U.S. company by market capitalization.

5.2 Lessons from Earlier Monopolization Cases

Much of the current advocacy for a reinvigoration of antitrust – particularly to address monopolization – invokes the "successes" of the 20th century use of Sect. 2 of the Sherman Act to address monopolization: particularly those cases that resulted in major divestitures. ²² In fact, most of these cases were not generally successful in curbing monopoly power. Rather, market developments largely unrelated to the antitrust decrees that resulted from these cases were generally responsible for invigorating or re-invigorating competition.

Posner (2001, Ch.4) devotes an entire chapter of his seminal study of antitrust law to "Breaking up Large Firms." He is skeptical of attempts to use antitrust to promote competition in concentrated industries through divestitures. He reviews studies of the results of 13 of the single-firm national-market monopolization cases that resulted in divestitures and finds that "The picture that emerges of what antitrust divestiture in monopolization cases has meant in practice is not an edifying one" (Posner, 2001, p. 107). Crandall (2001 and, 2019) reaches similar conclusions in an analysis of



²¹ It should be noted that the FTC's *Amazon* complaint argues that Amazon's conditions for admitting third-party sellers to its platform unfairly suppresses competition and *increases* consumer prices. This complaint is very different from FTC Chair Khan's, 2017 allegation that Amazon engages in predation, keeping prices below competitive levels. The difference lies in the FTC complaint's focus on the alleged unfair practices to *maintain* a monopoly -- not its route to *achieving* this alleged monopoly.

²² See, for example, Feldman (2017); Ip (2018); and Wu (2018).

the major landmark cases. Both find that the most important reason for the failure of divestiture as a remedy for monopolization is that by the time the divestitures occurred market conditions had changed so much that the divestitures had little effect or were largely irrelevant.

For the purposes of this paper, the monopolization cases in motion pictures (U.S. $v.Paramount^{23}$), telecommunications (U.S. $v.AT&T^{24}$), and computer software (U.S. $v.Microsoft^{25}$) would seem to provide the most useful lessons for antitrust authorities that seek to attack dominant digital platforms today. In each one of these cases, the government prevailed and sought divestiture as at least part of the remedy for the antitrust violations, and it succeeded in obtaining divestitures in the first two.

The AT&T monopolization case was filed in 1974 before cellular telephony, cable telephony, and the Internet were launched, and it was settled in 1982 with AT&T's agreeing to be divested of its local regulated telephone companies. These local companies were to be excluded from offering all but the shortest of long-distance services until competition emerged in their local markets.

The divestiture was completed in 1984, after which contentious proceedings under the decree and then under the 1996 Telecommunications Act — which essentially replaced the 1982 decree — continued for more than two decades.

The Federal Communications Commission (FCC) attempted to encourage entry into local wireline telephony under the 1996 Act by requiring the incumbents to provide entrants with interconnection to their networks at very low cost, thereby attracting an estimated \$35 to \$55 billion in investment from entrants by 2005 (Crandall, 2005). Most of these entrants failed and entered bankruptcy because of the unanticipated competition that was unleashed by (cellular) wireless carriers, cable television companies, and other internet-based services in the ensuing decade.

Given the economies of scale, density, and scope in communications services, it is doubtful that competitive local wireline carriers could have survived anyway; but the technological change that propelled wireless and Internet telephony doomed the entrants despite the FCC's aggressive regulatory policy of supporting them. This prolonged exercise in regulatory futility should serve as a stark warning to those who would attempt to design a similar new policy of mandated access to today's digital platforms. (See the discussion below.)

The ultimate decrees that were negotiated in both *Paramount* and *Microsoft* arguably had little effect on competition; instead, as in telephony, competition emerged from changes in technology and market developments that were unforeseen at the time the decrees were entered.

The *Paramount* case was an extreme example of antitrust futility. The relatively concentrated motion-picture distribution and exhibition (theater) markets in the mid-20th century were a relatively easy target for the DOJ; it ultimately prevailed in 1948 in the Supreme Court and obtained remedies that included the divestiture of the five major distributors' theaters and the banning of the distributors' uniform practices in

²⁵ United States v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001).



²³ United States v. Paramount Pictures, Inc. 334 U.S. 131 (1948).

²⁴ Modification of Final Judgment, United States v. American Telephone and Telegraph Co., 552 F. Supp. 131 (D.D.C. 1982), aff'd. sub. nom., 460 U.S. 1001.

executing exhibition contracts with theaters. As it turned out, the mandated theater divestitures were a blessing in disguise for the distributors; the advent of television reduced theater admissions by more than 50% between 1948 and 1954 and a further 37% between 1954 and 1958 (Crandall, 1975).

Until new film releases began to be shown on network television decades later and then on cable television even later, motion picture production stagnated. There was little entry, and the number of films released by the *Paramount* defendants declined by nearly one-half between 1948 and 1966. By this time, revenues from program series on cable and broadcast television had far surpassed motion-picture theater revenues. The *Paramount* decrees became little more than a nuisance.

Nevertheless, the extensive decrees remained in place for 70 years and constrained the distributor-exhibitor relationship, until the DOJ finally moved to terminate them in 2019 [U.S. Department of Justice (2019)]. The video marketplace is much more dynamic today not because of the *Paramount* antitrust decrees, but rather because the traditional motion picture companies – plus new entrants Netflix, Amazon, and Apple – are competing in a new video marketplace of Internet streaming that is overwhelming the traditional theatrical and cable television video distribution channels.

The more recent history of the *Microsoft* monopolization case, which concluded in 2002, is well known and is analyzed more extensively in Crandall (2019). The DOJ sought, but it did not obtain a break-up of Microsoft into two companies: one that would offer computer operating systems; and one that would provide applications software. The DOJ eventually settled its suit with injunctive relief that appears to have had little effect. Competition emerged not because of the final decree, but from major technological changes in the marketplace for communications and computing.

Wireless services grew dramatically -- particularly after Apple introduced the iPhone in 2007 and the iPad in 2010. Google used its position in Internet search to develop its own Internet browser (Chrome) in 2008 and subsequently introduced a set of applications -- Google Workspace -- that competes with Microsoft's Office suite. In 2008, Google also released its first version of its Android wireless operating system to compete with Apple's iOS system. Despite several attempts, Microsoft has been unable to develop a competitive alternative to these two wireless operating systems. ²⁶

Thus, a dynamic marketplace substituted for antitrust in bringing competition – or at least dynamic rivalry – to the digital world. One cannot know how these markets would have evolved if Microsoft had been split into two companies in 2001-02, but it is clear that the two decades of confused and confusing regulation that followed the AT&T divestiture was avoided.

One could also add another monopolization case to this list that never resulted in a final court decision or remedy: *U.S. v. IBM.*²⁷ The government brought this action in 1969 and pursued it for 13 years before dropping it. After the litigants had spent several hundred million dollars on this litigation, Assistant Attorney General William

²⁷ United States v. IBM Corp., Dkt. No. 69-Civ.-200 (S.D.N.Y. Complaint filed Jan. 17, 1969).



²⁶ According to Statcounter, Microsoft currently has a 0.02% of the wireless operating system market. https://gs.statcounter.com/os-market-share/mobile/worldwide.

Baxter decided to abandon it in 1982 because the market for computers had changed dramatically since the case was filed. (Lopatka, 2000)

Given this history, one must question whether the pending monopolization suits against Amazon, Google, Apple, and Facebook will result in more competitive markets. Would divestitures in the Facebook case and the second Google case create competition in social media or digital advertising? Or would such relief be largely irrelevant by the time these cases come to their conclusion years from now? Even if the plea for a divestiture remedy is successful, it is likely that other (behavioral) injunctive relief would accompany it and be ineffective because of the rapid changes in the relevant markets -- as it was in the *AT&T* and *Microsoft* cases.

6 Proposed Antitrust (Regulatory?) Legislation that Addresses Digital Platforms

Given the considerable public attention that is being given to a variety of issues involving the large digital platforms, it is not surprising that members of Congress have focused upon various approaches to reining in these platforms through new regulatory/antitrust legislation.

The two pieces of legislation in the 117th Congress that had the widest support were The American Innovation and Choice Online Act (S. 2992) and The Open App Markets Act (S. 2710); both bills were directed at the largest digital platforms. The former bill would prohibit large platforms -- those with a market capitalization of more than \$550 billion and 50 million or more active monthly users (at the time, Amazon, Apple, Google, Microsoft, and Facebook) -- from discriminating in favor of their own complementary products or services. The latter bill would ban the large "app" platforms -- currently Apple and Google (Android) -- from requiring app developers to consummate their customer transactions on their platforms and from requiring that these apps not be sold at lower prices on other platforms. Neither bill has advanced to a final vote in either chamber.

The American Innovation and Choice Online Act would also require that the major covered platforms allow other businesses to interconnect with them by using their own software and would prohibit them from uninstalling these competitors' software. The covered platforms would also be banned from using the non-public data of these interconnected users in support of their own products or services.²⁸

The Open App Markets Act is directed principally at Apple and Google, who maintain large app stores for iPhone and Android wireless devices, respectively. These app stores require businesses that use them to conform to a variety of security measures and to consummate all transactions over the app stores' platforms and pay the fees that the platform charges for each transaction. The Open App Markets Act would require the two app stores to allow developers to use an outside payment system and would forbid the imposition of a rule that the app developers not offer their apps on other platforms at a lower price.

²⁸ For a more complete discussion of proposals for antitrust reform and new regulatory authorities for the large digital platforms, see Crandall and Hazlett (2023).



Neither of these bills attempts to deal with the sources of the digital platforms' dominance; each bill simply aims to constrain the platforms' ability to extract value from their operations. This is an approach that is similar to the European Union's prohibition of the "abuse of a dominant position" in antitrust actions against dominant firms. ²⁹ It is also an implicit concession to the fact that it is difficult to use antitrust to combat the network effects that have driven the large digital platforms to occupy their formidable current positions. Any attempt to limit these network effects is likely to be futile or, if successful, to have adverse effects on consumer welfare, thereby denying consumers the benefits of economies of scale and scope.

There has been very little attention devoted to the mandatory interconnection provision in the American Innovation and Choice Act. The history of the AT&T case, discussed above, provides a clear warning to those who would advance such a mandate. The 1996 Telecommunications Act, which replaced the AT&T decree after 12 years of contentious court proceedings, created an even more burdensome administrative regime: The Act required that the incumbent local (landline) telephone companies provide entrants access to "unbundled elements" of their network platforms so that these new companies would not have to replicate the incumbents' entire "last-mile" networks.³⁰

The definition of these elements, the scope of the required unbundling, and the basis for setting the rates for such access occupied the FCC and the U.S. Court of Appeals for the District of Columbia -- which repeatedly struck down the FCC's ambitious unbundling rules -- for more than a decade. Over this period -- 1996–2006 -- U.S. wireless subscriptions rose from 44 million to 233 million; broadband subscribers rose from essentially zero to 65 million; and cable telephone service (offered over the internet) was growing at a rate of about 30% per year. As a result, the new local carriers that were attracted by provisions of the 1996 Telecom Act largely disappeared into bankruptcy despite the FCC's best efforts.

Surely, technological change continues just as rapidly in today's digital marketplace. Were the large digital platforms required by statute or regulation to provide interconnection to other businesses, perhaps even to rivals, regulatory disputes would likely arise immediately. How is this access to be provided? Could the incumbent modify its platform in response to marketplace or technological changes if such changes required the interconnecting businesses to invest in new software to continue to use the incumbent's platform? Would the price charged by the incumbent be regulated, and – if so – how would the price be determined?

³² These data are available in various FCC reports over the period: FCC, Trends in Telephone Service; FCC, Mobile Wireless Competition Reports; FCC, Local Competition Reports; FCC, Availability of Advanced Telecommunications Capability in the United States, Annual Reports; FCC, High-Speed Services for Internet Access, Annual Reports.



²⁹ Article 102 of the Treaty on the Functioning of the European Union. https://competition-policy.ec.europa.eu/antitrust/procedures/article-102-investigations en.

^{30 47} U.S. Code § 251.

³¹ Access to the entire history of this complicated episode -- which involved more than 20 different FCC orders, can be found at https://www.fcc.gov/general/triennial-review-remand-resources.

Shapiro (2019, p. 83) is concerned that the large digital platforms might not be vulnerable to antitrust sanctions for refusing to interconnect with actual or potential rivals:

The Microsoft case established antitrust liability for a dominant firm that excludes rivals, even if the threats they pose are "nascent." But the reach of the Microsoft case is unclear, since the Supreme Court subsequently ruled in the Trinko case that a dominant firm normally has no duty to deal with its rivals. If the Supreme Court applies Trinko broadly to the tech titans, then separate regulation might be needed to impose on the tech titans mandated interconnection or data sharing with rivals.

It is likely that such "regulation," whether administered by an independent regulator or by the courts in an antitrust case, would provide results like those that resulted from attempts to mandate interconnection in telecommunications markets two decades ago. As market participants waited for answers to emerge from regulatory or legal proceedings, the riskiness of incumbent platforms' investment would surely increase.

Network spending by U.S. incumbent local telecommunications carriers was stagnant after the 2000-01 dot-com bubble for five years until the regulatory issues that involved competitors' access to their networks were settled – or essentially became moot as new technologies overwhelmed the competitors and drove them into bankruptcy. Thereafter, network investment rose rapidly for three years. Mandating access to today's digital platforms in a similar fashion would likely stimulate a replay of the 1996–2006 regulatory battles in telecommunications with similarly adverse impacts on investment.

7 Concluding Comments

Despite considerable recent economic research that raises important concerns over rising economic concentration and profit margins and a declining labor share in national income, there has been limited support for changes in the basic U.S. antitrust laws. Other retrospective research on the adverse effects of some horizontal mergers has induced U.S. antitrust authorities to become more aggressive in challenging mergers. It is too early to determine if these challenges will succeed and far too early to estimate their effects on consumer welfare if they do.

The concern over the rise of dominant digital platforms -- such as Amazon, Facebook, Google, and Apple -- has generated much more interest in strengthening U.S. antitrust policy. Five major monopolization suits have been filed by U.S. authorities against Amazon, Apple, Facebook and Google -- two of which ask for divestiture of certain operations. Analyses of the effects of earlier similar major monopolization suits, however, suggest that divestiture has not worked to improve competition. Instead, changes in technology and market conditions generally have a much greater effect than the relief that was granted in these monopolization cases.

³³ Annual Reports of the carriers to the Securities and Exchange Commission (Forms 10 K).



Members of Congress have also taken an interest in reining in the dominant digital platforms: Legislators have proposed bills that would limit these platforms' ability to exploit fully their market positions. None of these proposals has reached the floor of either chamber, and none has found a way of overcoming the underlying "platform economies" that drive the digital platforms' current dominant positions. One of the bills would require that the large platforms allow others to interconnect with them. This is potentially a very harmful notion. Such interconnection was mandated in an earlier exercise in promoting competition in telecommunications, which resulted in years of litigation and suppressed capital investment. It would likely have similar results if imposed upon today's large digital platforms.

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