THE RISE OF THE DATA-OPOLY:  
CONSUMER HARM IN THE DIGITAL ECONOMY

INTRODUCTION

Our antitrust laws are a product of their time. Beginning in the 1870s, fundamental changes in transportation, communications, population growth, production technology, business organization, and finance culminated in rapid economic growth. As the United States industrialized, it entered the “Gilded Age,” characterized by rapid social upheaval and technological advancement. Between 1870 and 1890, the population of the United States nearly doubled from 38.6 million to 63 million people, while 7.1 million new Americans immigrated into the country. America’s industrial sector grew tremendously; real GDP increased twofold, the energy consumption of the United States more than quadrupled, and manufacturing production grew by over 50 percent. New industries emerged. Railroads drastically lowered freight rates and enabled rapid, cross-country movement of goods and people. New technological advancements, such as the Bessemer process of steelmaking and new methods of distillation in petroleum refining, led to the emergence of large, capital-intensive firms that were able to take advantage of economies of scale.

However, the economic gains from this period were not evenly distributed; rather, corporate power became concentrated in the hands of the few. During the 1870s, John D. Rockefeller’s Standard Oil grew from comprising about 4 percent of the US petroleum industry to 90 percent. Standard Oil was able to use its dominant market position to extract rebates.

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2. “The term ‘Gilded Age’ was at first a pejorative term that emerged from the preoccupations of 1920s Young Intellectuals, particularly Van Wyck Brooks and Lewis Mumford.” Richard Schneirov, Thoughts on Periodizing the Gilded Age: Capital Accumulation, Society, and Politics, 1873–1898, 5 J. GILDED AGE & PROGRESSIVE ERA 189, 193–94 (2006).
4. Id. at ser. Ad22, 1-547.
5. Id. at ser. Ca9, 3-24 to -25.
6. Id. at ser. Db164, 4-338, ser. Db164.
7. Id. at ser. Dd497, 4-652.
9. Id.
from railroads, spend vast sums to defeat political rivals, and exclude competitors from entering the market.

Andrew Carnegie’s Steel Company, which was later sold for an enormous sum to J.P. Morgan to create U.S. Steel, bought out its rivals and crushed labor unions. Cornelius Vanderbilt formed his monopoly, New York Central Railroad, by refusing to accept the passengers or freight of his rivals until they agreed to sell their companies to him. Criticizing the excesses of the Gilded Age, Walt Whitman wrote:

In fashionable life, flippancy, tepid amours, weak infidelity, small aims, or no aims at all, only to kill time. In business, (this all-devouring modern word, business,) the one sole object is, by any means, pecuniary gain. The magician’s serpent in the fable ate up all the other serpents; and money-making is our magician’s serpent, remaining to-day sole master of the field.

In 1890, in response to an alarming concentration of corporate wealth and power, Congress passed the Sherman Antitrust Act, which, generally speaking, targeted attempts at monopolization and other anticompetitive behaviors. Nearly two decades later, in 1914, Congress passed the Clayton

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11. *Id.* at 97.
15. *Id.* at 560–80.
20. The Sherman Act prohibits illegal restraints of trade, monopolization, attempts at monopolization, and conspiracy to monopolize. §§ 1–2.
Antitrust Act to further prohibit anticompetitive practices, as well as the Federal Trade Commission Act, which established the titular agency to enforce violations of antitrust laws. In the decades that followed, the federal docket saw numerous lawsuits challenging the monopolies of the Gilded Age, many of which resulted in the dissolution of trusts or otherwise diminished unlawfully amalgamated corporate power. Congress later amended these acts by passing the Robinson-Patman Act, the Miller-Tydings Act, the Celler-Kefauver Act, and the Hart-Scott-Rodino Antitrust Improvements Act. However, no significant antitrust legislation has been enacted since 1964.

While the times have changed, antitrust law has not. The monopolies of the twenty-first century are not railroads, oil producers, or steel manufacturers, but multinational technology companies: Amazon, Apple, Facebook and Google, often collectively referred to as “Big Tech.” However, while the technology monopolies of the twenty-first century look very different from the monopolies of the Gilded Age, America’s antitrust


22. Federal Trade Commission Act, 15 U.S.C. §§ 41–58. Under this Act, as amended, the Commission is empowered, among other things, to (a) prevent unfair methods of competition and unfair or deceptive acts or practices in or affecting commerce; (b) seek monetary redress and other relief for conduct injurious to consumers; (c) prescribe rules defining with specificity acts or practices that are unfair or deceptive, and establishing requirements designed to prevent such acts or practices; (d) gather and compile information and conduct investigations relating to the organization, business, practices, and management of entities engaged in commerce; and (e) make reports and legislative recommendations to Congress and the public.


23. See, e.g., Standard Oil Co. of N.J. v. United States, 221 U.S. 1 (1911) (holding that Standard Oil was guilty of monopolization in violation of the Sherman Antitrust Act, and ordering that Standard Oil be divided into several distinct firms); United States v. Am. Tobacco Co., 221 U.S. 106 (1911) (holding that the American Tobacco Company violated the Sherman Antitrust Act, and ordering the breakup of the American Tobacco Company); N. Sec. Co. v. United States, 193 U.S. 197 (1904) (overturning the merger of the Great Northern and Northern Pacific railroad companies); United States v. Joint Traffic Ass’n, 171 U.S. 505 (1898) (finding a violation of the Sherman Antitrust Act); United States v. Trans-Mo. Freight Ass’n, 166 U.S. 290 (1897) (holding that the Sherman Antitrust Act applied to railroads, and that the Trans-Missouri Freight Association violated the Sherman Antitrust Act).


28. “As of September 2020, the combined valuation of these platforms is more than $5 trillion—more than a third of the value of the S&P 100.” Maj. Staff Subcomm. on Antitrust, Com. and Admin. L., 116th Cong., Investigation of Competition in Digit. Mkts. 10 (Comm. Print 2020) [hereinafter Investigation of Competition].
framework remains mired in the past. Unsurprisingly, the Sherman Antitrust Act and the Clayton Antitrust Act, which continue to form the backbone of American antitrust regulation, have proven inadequate for preventing the emergence of, or otherwise regulating, today’s monopolies; these technology companies, sometimes dubbed “data-opolies” on account of the massive amounts of data they are able to collect, are able to engage in anticompetitive conduct, including leveraging their monopoly power to exclude competitors from market entry and acquiring would-be market entrants. The rise of the data-opoly has also harmed consumers by reducing consumer choice, diminishing product innovation, and eroding user privacy.\(^{29}\) However, the traditional antitrust framework, and its focus on price-related consumer harm, has failed to account for the economics of the data economy where users pay not with dollars, but with data.

In Part I, this Note will consider the history of antitrust regulation in this country, from the Gilded Age to the twenty-first century. Part II will provide a brief overview of the classical antitrust framework. In Part III, this Note will illustrate how the conceptual shortcomings of the classical antitrust framework have facilitated the emergence of data-opolies. Part IV will analyze proposals and potential solutions to the data-opoly problem, and propose a focus on data, the underlying commodity which has enabled the rise of the data-opoly. Part V of this Note will consider other similar measures, including state laws, the current European privacy framework, and several pieces of legislation pending in various state legislatures. Finally, in Part VI, this Note will suggest implementing a privacy regime focused on the rights of individuals in their data, which would have the effect of providing an effective remedy to the data-opoly problem from outside the antitrust regulatory framework.

I. ANTITRUST REGULATION

The regulatory framework for antitrust law comes from a variety of statutes passed between 1890 and 1964. In 1890, Congress passed the Sherman Antitrust Act,\(^{30}\) which prohibited contracts, combinations, or conspiracy in restraint of interstate or international trade,\(^{31}\) outlawed monopolizing, attempting to monopolize, or conspiring to monopolize,\(^{32}\) and tasked the Department of Justice with the duty to institute proceedings in equity to prevent and restrain such violations, including by injunctive

\(^{29}\) Id. at 12.


\(^{31}\) § 1.

\(^{32}\) § 2.
Within the meaning the Sherman Act, unlawful restraints of trade can include horizontal restraints such as price fixing, market allocation, and concerted refusals to deal, as well as vertical restraints such as tying. Monopolization and attempted monopolization offenses require anticompetitive behavior. In order to demonstrate anticompetitive behavior under the Sherman Act, a plaintiff must show “that (1) defendant has, and exercises, such overwhelming strength in the [relevant] market that it controls that market, (2) this strength excludes some potential, and limits some actual, competition, and (3) this strength is not attributable solely to defendant’s ability, economies of scale, research, natural advantages, and adaptation to inevitable economic laws.”

In 1914, the Clayton Antitrust Act expanded antitrust regulation to prohibit predatory pricing, to prohibit sales and leases contingent on the purchaser or lessee refusing to deal with competitors of the seller or lessor, and to prohibit anticompetitive mergers and acquisitions, as well as to provide for a right of action for damages by individuals, and for injunctive relief by individuals and the federal government. The 1914 Federal Trade Commission Act established the Federal Trade Commission (FTC), an administrative body tasked with enforcing antitrust laws. The act also substantively...

33. § 4.
34. See, e.g., United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 223–24 (1940) (“Under the Sherman Act a combination formed for the purpose and with the effect of raising, depressing, fixing, pegging, or stabilizing the price of a commodity in interstate or foreign commerce is illegal per se... Proof that a combination was formed for the purpose of fixing prices and that it caused them to be fixed or contributed to that result is proof of the completion of a price-fixing conspiracy under § 1 of the Act.”).
35. See, e.g., United States v. Addyston Pipe & Steel Co., 85 F. 271, 277 (6th Cir. 1898), aff'd as modified, 175 U.S. 211 (1899).
36. Nw. Wholesale Stationers, Inc. v. Pac. Stationery & Co., 472 U.S. 284, 294 (1985) (recognizing that “joint efforts by a firm or firms to disadvantage competitors by ‘either directly denying or persuading or coercing suppliers or customers to deny relationships the competitors need in the competitive struggle’” is per se illegal); Klor’s, Inc. v. Broadway-Hale Stores, Inc., 359 U.S. 207, 212 (1959) (“Group boycotts, or concerted refusals by traders to deal with other traders, have long been held to be in the forbidden category.”).
40. § 14.
41. § 18.
42. § 15.
45. § 45.
expanded antitrust laws by prohibiting unfair methods of competition and unfair or deceptive acts or practices.\textsuperscript{46}

The Robinson-Patman Act of 1936\textsuperscript{47} amended the Clayton Antitrust Act to redefine price discrimination and address other discriminatory practices,\textsuperscript{48} to criminalize certain offenses in the Clayton Antitrust Act,\textsuperscript{49} and to prohibit sales at unreasonably low prices.\textsuperscript{50} The Miller-Tydings Act of 1937 amended Section 1 of the Sherman Act to provide an exception for fair trade agreements,\textsuperscript{51} and although this provision limited the efficacy of the Sherman Act,\textsuperscript{52} this provision was narrowly construed by the Supreme Court,\textsuperscript{53} and later repealed.\textsuperscript{54} The Celler-Kefauver Act, passed by Congress in 1950, amended the Clayton Antitrust Act to expand its prohibitions against mergers and acquisitions so as to include in its scope both vertical and horizontal mergers and acquisitions which could limit competition.\textsuperscript{55} The Hart-Scott-Rodino Antitrust Improvements Act of 1976 strengthened antitrust law by requiring parties undergoing mergers to file with the Federal Trade Commission and Department of Justice to determine whether those mergers would violate antitrust laws.\textsuperscript{56}

II. CLASSICAL ANTI-TRUST THEORY

While the American economy has changed dramatically since these laws were originally enacted, the core statutory framework has remained substantially the same. Furthermore, while the antitrust laws were originally interpreted broadly,\textsuperscript{57} subsequent trends and developments in the

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\item \textsuperscript{46} § 45(a).
\item \textsuperscript{48} § 13.
\item \textsuperscript{49} § 13a.
\item \textsuperscript{50} Id.
\item \textsuperscript{51} Miller-Tydings Act, ch. 690, tit. VIII, 50 Stat. 693 (1937) (repealed 1975).
\item \textsuperscript{52} McDermott, supra note 19, at 277.
\item \textsuperscript{53} Schwengmann Bros. v. Calvert Distillers Corp, 341 U.S. 384 (1951) (holding that the Miller-Tydings exemption only applied to the contracting parties of a fair-trade agreement).
\item \textsuperscript{57} See, e.g., United States v. Trans-Mo. Freight Ass’n, 166 U.S. 290 (1897) (interpreting the Sherman Act to reach all restraints of trade, not just unreasonable ones). Compare Brown Shoe Co. v. United States, 370 U.S. 294 (1912) (finding that a proposed merger might substantially lessen competition, despite the post-merger market share being less than 10 percent) with United States v. Phila. Nat’l Bank, 374 U.S. 321 (1963) (establishing a post-merger market share as 30 percent as a rough
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enforcement of antitrust laws have significantly diminished their reach. First, the Courts have narrowly interpreted the goals of antitrust laws by applying a “consumer welfare” focus, which emphasizes not the effect on the market as a whole but rather the prices ultimately paid by consumers. Second, courts have taken the view that underenforcement is preferable to overenforcement, 58 a position at odds with the legislative intent of the antitrust laws. 59 Third, enforcement of the antitrust laws has been split between the Federal Trade Commission and the Department of Justice, who have contributed to the underenforcement problem by interpreting their legal authorities narrowly and by being overly permissive towards market power. 60

A. The Chicago School

The narrow consumer welfare standard, as well as the intellectual roots of much of modern antitrust jurisprudence, can be traced back to the Chicago School, specifically to the scholarship of Robert Bork. 61 In his foundational The Antitrust Paradox, 62 Bork identified three principal critiques of the U.S. antitrust regime. 63 First, he argued that it was incorrect for courts to try to foster an egalitarian business environment, and that instead courts should only intervene when challenged conduct decreased economic efficiency. 64 Second, Bork argued that antitrust enforcement should focus on consumer welfare, and only intervene to ban collusive


58. See Verizn Commc’n, Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 414 (2004) (“Mistaken inferences and the resulting false condemnations ‘are especially costly, because they chill the very conduct the antitrust laws are designed to protect.’”) (citation omitted).


60. Id. For example, in the recent T-Mobile–Sprint merger, Makan Delrahim, the Assistant Attorney General for the Antitrust Division of the Department of Justice, worked behind the scenes to facilitate the merger by connecting executives and providing instructions for lobbying legislators. Katie Benner & Cecilia Kang, How a Top Antitrust Official Helped T-Mobile and Sprint Merge, N.Y. TIMES (Feb. 11, 2020), https://www.nytimes.com/2019/12/19/technology/sprint-t-mobile-merger-antitrust-official.html [https://perma.cc/SPBM-NL85].

61. Many contemporary antitrust scholars are highly critical of Bork’s scholarship (and influence in the judiciary). See, e.g., Christopher R. Leslie, Antitrust Made (Too) Simple, 79 ANTITRUST L.J. 917 (2014). However, I discuss Bork not to assess his arguments on the merits but to illustrate his influence in antitrust jurisprudence. As such, a thorough analysis of Bork’s work is beyond the scope of this Note.


64. BORK, supra note 62, at 55–66.
arrangements among direct rivals, horizontal mergers which would leave three or fewer firms in a relevant market, and business efforts to misuse government regulatory processes to forestall competitors. Third, Bork criticized the antitrust establishment, including Congress, the Federal Trade Commission, the Department of Justice, and the federal judiciary, and argued that judges incorrectly considered externalities while overlooking economic justifications. Bork even went so far as to encourage judges to ignore antitrust legislation that conflicted with his economic efficiency centered framework.

The influence of the Chicago School was not confined to the ivory tower of academia; it significantly shaped the federal courts’ antitrust jurisprudence. In the 1986 decision Matsushita Electric Industrial Co. v. Zenith Radio Corp., for instance, the Supreme Court directly cited Bork’s Antitrust Paradox. He has been directly quoted by regulatory agencies, such as the FTC, which in 1982 endorsed an analytical framework similar to Bork’s. Federal judges often cite Bork, and his influence has had the

65. Id. at 405–07 (“The only goal that should guide interpretation of the antitrust laws is the welfare of consumers . . . In judging consumer welfare, productive efficiency, the single most important factor contributing to that welfare, must be given due weight along with allocative efficiency.”).


67. Id. at 409–10; Leonard Orland, The Paradox in Bork’s Antitrust Paradox, 9 CARDozo L. REV. 115, 121–22 (1987) (“With a bold assertion of judicial intervention, Professor Bork urges that if Congress passes antitrust legislation which does not pass the ‘efficiency’ litmus test, the Supreme Court should refuse to enforce the legislation.”).


70. Id. at 589. See also Waste Mgmt., Inc., 743 F.2d at 983 (citing Bork, supra note 62, at 222).

71. See e.g., Detroit Auto Dealers Ass’n, Inc. v. FTC, 955 F.2d 457, 470 (6th Cir. 1992).


73. Professor Christopher R. Leslie argues that the enduring appeal of Bork’s argument is that it “present[s] a judge-friendly theory of economics that allowed judges to dismiss antitrust cases quickly,” which assumes that barriers to entry do not exist, “mak[ing] federal judges’ lives a lot easier because they do not have to worry about efficient rivals being illegally excluded from the market because if the rival were efficient, by definition, according to Bork, it would be able to compete.” Leslie, supra note 61, at 934.
effect of creating a presumption among federal judges that concerns other than economic efficiency should be ignored by the courts.\textsuperscript{74}

\textbf{B. The Harvard School}

Although the influence of the Chicago School is notable, an analysis of the intellectual underpinnings of modern antitrust jurisprudence would be incomplete without analyzing the influence of the significant contributions made by the Harvard School.\textsuperscript{75} Under the stewardship of Professors Phillip Areeda and Donald Turner, who authored the seminal treatise \textit{Antitrust Law},\textsuperscript{76} the Harvard School, like Bork, thought that courts and government agencies should eschew social and political externalities and focus solely on how challenged actions would affect economic performance.\textsuperscript{77} Areeda and Turner were greatly concerned with the institutional capacity of the antitrust system,\textsuperscript{78} and thought that the private rights of action associated with antitrust enforcement (as well as the accompanying treble damages, jury trials, joint and several liability, plaintiff friendly rules on fee shifting, availability of extensive discovery, and class actions) posed a serious threat of overdeterrence.\textsuperscript{79} However, unlike Bork, Areeda and Turner argued that courts should defer to the legislature and adhere to established precedent when possible.\textsuperscript{80} Areeda and Turner advocated a contextualist approach which would, while still applying efficiency-based legal standards, pay greater attention to the unique facts of the case.\textsuperscript{81}

Perhaps Areeda’s most notable contribution to antitrust scholarship was his narrow conceptualization of antitrust injury,\textsuperscript{82} which further narrowed the reach of the antitrust laws by making it more difficult for private plaintiffs to bring antitrust claims. Areeda argued that the treble damages provision of the Clayton Act\textsuperscript{83} should be construed narrowly and require a

\textsuperscript{74} Kovacic, Revisited, supra note 72, at 1450.
\textsuperscript{75} See, e.g., Kovacic, \textit{The Chicago Obsession, supra} note 63 (arguing that the robustness of contemporary discourse surrounding American antitrust history suffers because it significantly overstates the dominance of the Chicago School); see generally William H. Page, Areeda, Chicago, and Antitrust Injury: Economic Efficiency and Legal Process, 41 \textit{Antitrust Bull.} 909 (1996).
\textsuperscript{76} PHILLIP AREEDA & DONALD F. TURNER, \textit{ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION} (1978). Although the phrase “Harvard School” can refer to two distinct periods of thought, Kovacic, \textit{The Chicago Obsession, supra} note 63, at 468, in this Note it will be used exclusively to refer to the latter of the two.
\textsuperscript{77} AREEDA & TURNER, supra note 76.
\textsuperscript{78} Kovacic, \textit{The Chicago Obsession, supra} note 63, at 475.
\textsuperscript{80} Page, \textit{supra} note 75, at 913.
\textsuperscript{81} \textit{Id.} at 912.
\textsuperscript{82} \textit{Id.} at 927.
strong showing of actual injury. While Areeda acknowledged that it was possible that an antitrust violation might not cause an injury, he dismissed this possibility as “superficially paradoxical.” Areeda defended this contention by arguing that interpreting Section 7 of the Clayton Act, which prohibits acquisitions that “may lead to circumstances that may cause competitive injury,” to require present harm to recover for damages does not undermine antitrust enforcement because plaintiffs can still seek governmental action or injunctive relief.

Like Bork, Areeda’s influence was not confined to academia. In Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., the Supreme Court, citing Areeda, defined antitrust injury as not “injury causally linked to an illegal presence in the market” but “antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants’ acts unlawful. The injury should reflect the anticompetitive effect either of the violation or of anticompetitive acts made possible by the violation.”

III. THE DATA-OPOLY PROBLEM

The rise of the modern data-opoly has laid bare the deficiencies of the previous antitrust regime. In part, the reemergence of monopoly power can be seen as the natural culmination of decades of underenforcement and

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85. Id.
87. Areeda & Turner, supra note 76, at 1129.
88. Id. at 1130. However, the tendency of the government to underregulate antitrust matters casts doubt on the strength of this argument.
90. Although recent developments, such as the suit filed by the Department of Justice against Google, Complaint, United States v. Google, LLC, No. 1:20-cv-03010 (D.D.C. Oct. 20, 2020), the suit filed by the State of New York and joined by forty-seven other states against Facebook, Complaint, New York v. Facebook, Inc., No. 1:20-cv-033589 (D.D.C. Dec. 9, 2020), the suit filed by the State of Colorado and joined by thirty-seven other states against Google, Complaint, Colorado v. Google, LLC, No. 1:20-cv-03715 (D.D.C. Dec. 17, 2020), and the suit filed by the FTC against Facebook, Complaint, In re Facebook, Inc., No. 1:20-cv-03590 (Jan. 1, 2021), suggest that antitrust enforcement is returning to the fold, it does not necessarily follow that the classical antitrust framework is finally catching up to the times. The Department of Justice’s suit, for instance, is extremely limited in scope, narrowly challenging Google’s dominance of the search market by use of a tying arrangement with Apple that makes Google the default search engine of all Apple iPhones. Press Release, U.S. Dep’t of Just., Justice Department Sues Monopolist Google for Violating Antitrust Laws (Oct. 20, 2020), https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws [https://perma.cc/289N-S64E]. It does not, however, address any of the anticompetitive concerns levied at Alphabet Inc., Google’s parent company, nor does it address any of Google’s other anticompetitive behaviors.
deference to corporate power. Regulatory agencies’ tendency to underregulate, as Areeda and Bork have argued is preferable,\(^91\) has enabled technology companies to amass large market shares while evading significant scrutiny.\(^92\) For example, the Federal Trade Commission engaged in an extensive investigation of just one of Facebook’s nearly 100 acquisitions: its purchase of Instagram in 2012.\(^93\) However, underenforcement is only half of the picture. Any analysis of the inability of classical antitrust theory to account for the emergence of “big tech” would be incomplete without considering the specific manner in which classical antitrust theory conceptualizes consumer harm and the ways in which that conceptualization intersects with the business models of data-opolies. Certainly, it is no coincidence that the largest monopolies of today emerged not from railroads, oil companies, and other traditional industries but from business models centered on gathering data. As discussed above, a central tenet of classical antitrust theory is the consumer welfare standard, under which the focus of antitrust enforcement is, normatively, the price paid by consumers.\(^94\) For example, as recently as 2012, Bork argued that Google was not anticompetitive because Google Search does not charge consumers a fee to use their service, and thus causes no consumer harm.\(^95\) While the courts’ narrow formulation of antitrust standing recognizes consumer harm,\(^96\) it has limited private antitrust claims to injuries the “antitrust laws were intended to prevent,”\(^97\) such as artificially high prices paid by consumers. However, this narrow focus on the dollar price paid by consumers for services provided by technology companies ignores a simple reality: although consumers may not pay for such services with their wallets, they do pay with their data.\(^98\)

In exchange for their services, data-opolies are able to extract massive amounts of consumer data. For example, shopping platforms such as Amazon “gather enormous amounts of information, ranging from the amount of time you hover your mouse over a particular button and the number of days an item sits in your shopping basket, to every location

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91. Areeda & Turner, supra note 76; Bork, supra note 62.
92. Investigation of Competition, supra note 28, at 11.
93. Id.
94. See supra Part II. Although applying the consumer welfare standard is not necessarily mutually exclusive with considering non-price related harms, such as product quality, in practice consumer price, as the most readily quantifiable measure of consumer harm, dominates.
96. See supra Section II.B.
you’ve visited with your phone and how you psychologically react to different posts and words. Such platforms can even track user activity on third-party websites and applications. Amazon also collects data from the merchants that rely on its marketplace to do business, analyzing sales data to create products to compete directly with those sold successfully by Amazon merchants, thus harming competitors as well as reducing consumer choice.

Most data-opolies are opaque about the data they collect, and if this information is presented to consumers it is often done so in the form of lengthy and unwieldy disclosures. As a result, consumers are often unaware of what data is being collected, creating an information asymmetry that allows data-opolies to extract data without paying its fair market value. And, because consumers are unaware about what their data is being used for, they tend to undervalue their data. Furthermore, access to the services provided by data-opolies is provided on a take-it-or-leave-it basis; consumers have no ability to opt out of data collection and are offered the choice of surrendering their data or not using the service at all.

The traditional antitrust framework’s focus on price also enables anticompetitive mergers to escape regulatory scrutiny. Upstart competitors are often data-rich but cash poor, so utilizing a price-centric review allows otherwise anticompetitive mergers to avoid detection by the FTC, as evidenced by the fact that acquirers conducting competition-squashing acquisitions are more likely to do so via deals that do not trigger the FTC notification requirements for premerger review. Since the mid-1990s, hundreds of billions of dollars in output have been concentrated via mergers that fall below the threshold for merger review.

100. Id.
102. Cf. INVESTIGATION OF COMPETITION, supra note 28, at 53.
104. Id.
105. INVESTIGATION OF COMPETITION, supra note 28, at 44. The Hart-Scott-Rodino Antitrust Improvements Act, 15 U.S.C. § 18a, established a minimum size of transaction threshold that is adjusted annually in response to changes in gross national product. Mergers that meet or exceed this threshold must file pre-merger notification with the FTC and wait a predetermined period of time before consummating the transaction. Id.
107. Wollmann, supra note 106, at 92.
IV. FIXING THE DATA-OPOLY PROBLEM

There are many tools available to regulators that could help curb the monopolistic tendencies of data-opolies. These options can generally be grouped into two categories: preemptive and reactive. Preemptive reform options include limiting the type of data that can be collected,\(^{108}\) granting users ownership rights over their data, requiring interoperability and data portability,\(^ {109}\) or limiting how collected data can be used.\(^ {110}\) Reactive reform options include undoing mergers and preventing future mergers, requiring data-opolies to spin off parts of their business,\(^ {111}\) or prohibiting data-opolies from entering ancillary lines of business on their platforms. Some options operate both preemptively and reactively, such as prohibiting platforms from discriminating against competitors that rely on their platforms.\(^ {112}\)

This Note advocates for a statutory framework aimed at protecting the rights of the individual in their data, which would have the effect of providing an effective remedy to the data-opoly problem from outside of the antitrust regulatory framework. This approach is viable for several reasons. For one, such a proposal would likely be politically popular, as the vast majority of Americans are concerned with the amount of their data being collected,\(^ {113}\) and believe that big tech unfairly undermines

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108. For example, the European Union’s General Data Protection Regulation (GDPR) implements “purpose limitation,” which requires companies to collect data only for a specific purpose, as well as “data minimization,” which requires companies to collect only data necessary to fulfill that specific purpose. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation), 2016 O.J. (L 119) 45 [hereinafter GDPR].

109. INVESTIGATION OF COMPETITION, supra note 28, at 20. One notable example of a data portability requirement is Article 20 of the EU’s GDPR. Id.

110. The EU’s GDPR, for example, requires that data is processed only for a specific purpose and stored for no longer than necessary to accomplish that purpose. Id. For a longer list of use restrictions in the GDPR, see infra Section V.B.


112. INVESTIGATION OF COMPETITION, supra note 28, at 20.

113. 85% of Americans are concerned about the amount of data online platforms store about them, and 81% are concerned that platforms are collecting and holding this data in order to build out more comprehensive consumer profiles. CONSUMER REPS., PLATFORM PERCEPTIONS: CONSUMER ATTITUDES ON COMPETITION AND FAIRNESS IN ONLINE PLATFORMS (2020), https://advocacy.consumerreports.org/wp-content/uploads/2020/09/FINAL-CR-survey-report-platform-perceptions-consumer-attitudes-september-2020.pdf [https://perma.cc/2F67-WQYA].
competition. While few legislators are clamoring for new antitrust laws, regulating big tech has attracted a fair amount of bipartisan support. Second, a robust data privacy regime would have the ancillary effect of protecting user privacy. Just as monopolistic firms, as price setters, have no incentive to compete on price, modern technology monopolies, as data collectors, have no incentive to provide or compete on privacy protections.

Most importantly, granting individual users rights to their own data will significantly hamper the data-collection efforts of data-opolies. In turn, this will significantly diminish the monopoly power of technology firms, as well as enable new competitors to enter the market, thus boosting competition. This is because data collection forms a core component of data-opolies’ business models and enables many of their monopolistic tendencies. Google tracks what users search for and how they interact with those results, then uses this data to efficiently manage index upkeep, improve its search algorithm, and maximize advertising revenue. Furthermore, because Google’s suite of products is so varied, it can collect and aggregate data from across the Google ecosystem, including Chrome, Android, Maps, and other widely used Google applications. And, as the owner of the Android platform, Google can also track real-time data usage of third-party apps, including those of Google’s competitors. Facebook, on the other hand, utilizes user data to provide individualized user experiences, as well as to maximize advertising revenue by providing users with targeted ads.

114. Id.
117. “The collection and use of personal data by Google and Facebook for personalised advertising, in many cases with no or limited controls available to consumers, is another indication that these platforms do not face a strong enough competitive constraint.” COMPEITION & MKTS. AUTH., ONLINE PLATFORMS AND DIGITAL ADVERTISING: MARKET STUDY FINAL REPORT 318 (2020).
118. INVESTIGATION OF COMPEITION, supra note 28, at 80–81.
119. Id. at 208. In 2007, after Google acquired DoubleClick, an internet advertising firm, it promised the FTC that it would not combine this data with data gathered via the Google ecosystem. Dina Srinivasan, Why Google Dominates Advertising Markets: Competition Policy Should Lean on the Principles of Financial Market Regulation, 24 STAN. TECH. L. REV. 55, 92 (2020). However, it later reneged on its commitment. Id. at 93.
120. INVESTIGATION OF COMPEITION, supra note 28, at 214.
121. Id. at 148.
122. Id. at 149.
Additionally, data-opolies are able to use data in anticompetitive ways, such as by identifying potential business rivals and acquiring them before they develop into genuine threats.\textsuperscript{123} And, because antitrust enforcers lack access to the data that monopolistic firms use to make these anticompetitive acquisitions, these transactions escape the scrutiny of regulators.\textsuperscript{124} Facebook, for example, uses the data it collects to “identify nascent competitive threats and then acquire, copy, or kill [them].”\textsuperscript{125} Google “exploits information asymmetries and closely tracks real-time data across markets” to set up programs to track actual and potential competitors,\textsuperscript{126} as well as disfavor vertical providers that compete with Google’s own services.\textsuperscript{127} Amazon utilizes the data collected from merchants on Amazon Marketplace to create products that compete directly with those sold successfully by these merchants.\textsuperscript{128}

Not only does collecting data enable pernicious anticompetitive behavior, but the manner in which data-opolies use the data results in a feedback loop that increases barriers to entry. Take the search market for example: Google uses the data it collects to improve its search engine, which in turn draws users to their product. As more users use Google Search, Google gets more data, which it uses to improve its search engine, and so on and so forth. Because alternative search engines do not have access to the same data that Google does, they are unable to compete with Google Search.\textsuperscript{129} Facebook likewise uses data to create ever-mounting barriers to entry. Because it is the largest social media platform,\textsuperscript{130} Facebook has more data than its competitors and is able to use this data to provide tailored, individualized user experiences.\textsuperscript{131} In turn more users join and existing users spend more time on Facebook, making it harder for would-be competitors to enter the market. Although data is theoretically a non-rivalrous good, firms can prevent rivals from using their data through technical restrictions and contracts.\textsuperscript{132}

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\textsuperscript{123} Id. at 44.
\textsuperscript{124} Id. See also Cunningham, Ederer, & Ma, supra note 106; Wollmann, supra note 106.
\textsuperscript{125} INVESTIGATION OF COMPETITION, supra note 28, at 14.
\textsuperscript{126} Id. at 15.
\textsuperscript{127} Id. at 83–84.
\textsuperscript{128} Khan, supra note 99, at 329. This is anticompetitive because it enables Amazon to freeride on the research and development of those merchants that rely on Amazon Marketplace.
\textsuperscript{129} COMPETITION & MKTS. AUTH., supra note 117, at 73 (identifying the most significant barriers to entry in the search market as “economies of scale in developing a web index; access to click-and-query data at scale; and Google’s extensive default positions”).
\textsuperscript{131} COMPETITION & MKTS. AUTH., supra note 117, at 148.
\textsuperscript{132} Id. at 43.
Additionally, this phenomenon leads to indirect network effects as increasing use of platforms incentivizes third parties to “invest in developing compatible technologies, which in turn reinforces the popularity of the original product or service with users.” 133 Consequently, the switching costs for businesses that rely on data-opolies’ platform’s increase, thus further entrenching the market positions of those data-opolies.

However, creating individual rights in data is not without its pitfalls. First, it is both philosophically and practically challenging to conceptualize the value of data, as would be necessary in order to determine whether an individual’s rights in their data are sufficiently strong as to affect the economic business models of data-opolies. Different monopolistic firms utilize data for different purposes, meaning that deriving a value for an individual’s data based on empirical methods is likely unfeasible. Determining the value of individual data by analyzing the value of the data to the consumer is likely to be ineffective as well, since the massive scale of data-opolies allows them to utilize consumer data in a myriad of ways such that the value of consumer data is worth significantly more to the data-opolies than it is to the consumer. 134 Third, looking at the value of data within the antitrust consumer framework does not account for other, noneconomic reasons why individuals might value privacy. Nonetheless, despite these shortcomings, such an approach could be effective at regulating data-opolies.

V. THE SCOPE OF EXISTING DATA PROTECTION

A. Data Protection in the United States

A statutory data privacy regime could take a variety of forms, and a brief overview of existing data privacy regimes will be illustrative. Few states have prophylactic measures to limit the degree to which data can be collected ex ante, although all fifty states, as well as the District of Columbia and the U.S. territories, do have laws which require the notification of individuals when a data breach affects their personally identifiable information. 135 At the federal level, while there is no generally applicable right to data privacy, there are several laws which protect various classes of data, including financial data, health data, educational data, and children’s

133. Id. at 40–41.
134. Id. at 45–46.
In the absence of a robust federal framework, some states have gone a step further and enacted their own data privacy laws. In California, the California Invasion of Privacy Act restricts recording or listening to private electronic communications and creates a private right action, while the California Online Privacy Protection Act requires operators of commercial websites and online services to affirmatively disclose their privacy policies. The California Comprehensive Computer Data Access and Fraud Act imposes criminal and civil liability for knowingly accessing, and without permission, using computer data. The California Privacy Rights Act, which is modeled after the GDPR, grants individuals the right to correct inaccurate information, the right to have personal information collected limited in purpose, the right to receive notice from businesses using sensitive personal information, the right to access data previously collected, the right to opt out of sharing information with third parties, and the right to sue businesses that suffer from data breaches. The California Privacy Rights Act also creates a new agency for enforcing the law. In Illinois, the Biometric Information Privacy Act regulates the collection of an individual’s biometric information and provides for a private right of action. Texas passed a similar law limiting the collection of biometric data, as did Washington, although neither measure includes a private right of action.

Additionally, many state legislatures are considering passing various privacy-related statutes. Both houses of the Virginia legislature have passed the Consumer Data Protection Act, which would “grant consumer rights to access, correct, delete, obtain a copy of personal data, and to opt out of the

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136. U.S. privacy laws only apply to certain classes of information—GLBA addresses financial data, the Health Insurance Portability and Accountability Act (‘HIPAA’) govern health data, the Family Educational Rights and Privacy Act (‘FERPA’) regulates maintenance of educational records, and the Children’s Online Privacy Protection Act (‘COPPA’) applies to children’s data. Alexandria Bradshaw, Emerging Trends in International Data Breach Law, 1 GEO. L. TECH. REV. 143, 144 (2016).

140. See infra notes 152–160.
142. Id.
143. 740 ILL. COMP. STAT. 14/99 (2020).
144. TEX. BUS & COM. CODE ANN. § 503.001 (West 2020).
processing of personal data for the purposes of targeted advertising.”\(^{146}\) The New York State Legislature introduced the New York Privacy Act, which is substantially similar to the California Privacy Right Act but includes a private right of action.\(^{147}\) The State of Washington is considering two separate data privacy laws, one of which would allow individuals to find out how much of their data has been collected,\(^{148}\) and another which would require companies to obtain consent before collecting or processing personal data.\(^{149}\) The Utah State Legislature recently introduced a measure which would give consumers the right to opt out of data collection for certain purposes as well as impose several data handling requirements on data processors, and empower the Office of the Attorney General to enforce the law.\(^{150}\) The Oklahoma State Legislature recently introduced a measure which would require certain companies to inform users what data has been collected.\(^{151}\) However, this is the extent of data privacy protection in the United States, leaving American consumers with few federal protections and a loose patchwork of state laws.

B. Data Protection in the European Union

The most prominent non-American data collection regime is the European Union’s General Data Protection Regulation (GDPR),\(^{152}\) which was enacted in 2018 to protect individual rights to protection of data and ensure “[t]he free movement of personal data within the [EU].”\(^{153}\) Under the GDPR, there are strict limits upon the types of data that can be collected, as well as limits on the manner in which that data can be collected. Significantly, the GDPR requires, in many circumstances, that data subjects consent to have their data processed.\(^{154}\)

The GDPR requires data to be processed lawfully, to be collected and processed in a manner not inconsistent with specific allowed purposes, and to be limited to the extent necessary for the purpose for which the data is processed.\(^{155}\) The GDPR also protects individual confidentiality by placing limits on how collected data may be maintained and processed.\(^{156}\)

\(^{152}\) GDPR, supra note 108.
\(^{153}\) Id., art. 1.
\(^{154}\) Id., art. 5. See also Id. art. 6 (establishing conditions for consent).
\(^{155}\) Id., art. 5.
\(^{156}\) Id.
GDPR further protects the data rights of individuals by establish certain individual rights. Article 15 allows individual data subjects to obtain confirmation as to whether or not their personal data is being processed as well as information pertaining to that processing. Article 16 allows data subjects to have inaccurate personal data rectified. Article 17 allows data subjects, in certain situations, have their personal data erased. Article 18 allows data subjects to obtain restrictions on processing in certain circumstances. Article 20 provides data subjects with the right to receive copies of their personal data in a readable format. Article 21 allows data subjects to object to the processing of personal data when that data is used improperly. By regulating data processing, the GDPR thus limits what can be done with data once it is collected.

Thus, by limiting the conditions under which data can be collected and restricting what can be done with data after it is collected, the GDPR directly regulates a core component of data-opolies’ business models, and in turn indirectly regulates the manner in which they can compete in the digital economy. For instance, in 2017, Germany’s national competition regulator notably found that “Facebook is abusing [its] dominant position by making the use of its social network conditional on its being allowed to limitless amass every kind of data generated by using third-party websites and merge it with the user’s Facebook account.”

VI. CREATING A NEW REGIME

The data privacy provisions contained by the aforementioned state laws and the GDPR should be instructive in identifying potential provisions of a data-protection framework aimed at combatting data-opolies. First, an effective data privacy regime tailored towards promoting competition in digital markets should prohibit data-opolies from preventing their competitors from using the data. This could be done directly with a blanket ban on such conduct, or by an affirmative obligation of data sharing and

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157. GDPR, supra note 108, art. 15.
158. Id., art. 16.
159. Id., art. 17. Article 17 allows data subjects to have their data erased when the data is no longer necessary in relation to the purpose for which it was collected; for certain situations in which data subjects withdraw consent; when the data is unlawfully processed; when necessary to comply with a member nation’s law; and when necessary to comply with regulations governing child’s consent in relation to information society services. Id.
160. Id., art. 18.
161. Id., art. 20.
162. Id., art. 21.
interoperability. Additionally, a regulatory framework could prohibit the cross-referencing of data across applications or platforms, which would limit the ability of data-opolies to take advantage of economies of scale. Data-opolies could be forced to pay users for their data, either directly or through a data licensing organization, thus allowing consumers to leverage their power as data sellers.

Alternatively, this could be accomplished indirectly by vesting users with the right to make the decision of how their data is used. Vesting users with an individual, property-like right in their data is likely to be effective for several reasons. With respect to protecting the rights of individuals, user consent is likely to be ineffective, as user consent is unlikely to be freely given since access to the services provided by data-opolies is provided on a take-it-or-leave-it basis.164 Allowing consumers to learn what data has been collected is a notable commonality of many of the recently enacted or pending privacy laws discussed in Part V, but is unlikely to pose a serious deterrent to the data-opoly. Indeed, Washington’s Privacy Act,165 which provides for as much, has in fact been endorsed by Amazon.166 However, giving users a property right in their data, and creating a private right of action for violations of this right, avoids this pitfall. Furthermore, because property rights are enforceable in rem, individuals who have had their data rights violated could potentially hold future users of that data liable, increasing the risk for data-opolies of data misappropriation.167 Allowing individual consumers to bring lawsuits under a private right of action would also circumvent two shortcomings of the existing antitrust framework: the current tendency of regulatory agencies to underenforce antitrust laws,168

164. See Stucke, supra note 103.
and the strict injury requirements that the courts have imposed on private plaintiffs bringing antitrust actions.169

While a private right of action would likely help to deter anticompetitive data collection, an effective data protection regime, especially one created with the goal of protecting consumers from the exploitative practices of the data-opolies, would be greatly strengthened by an effective enforcement mechanism. The GDPR, for instance, created the European Data Protection Board to oversee enforcement of the GDPR among EU member states.170

The United States could just as easily establish a federal agency tasked with protecting individual data rights. Alternatively, in the United States the chief enforcer of most federal privacy statutes is the Federal Trade Commission;171 expanding the jurisdiction of the FTC to handle more robust data privacy regulations would be fairly in line with the agency’s mandate.172

CONCLUSION

Competition in the digital economy is in a precarious position. Data-opolies have come to dominate the country’s search engines, e-commerce websites, and social media platforms, and in doing so have seized control over some of the basic mechanisms through which American consumers use to interact with the digital world. The data-opoly problem is not just an economic problem, it’s a societal one.

Fortunately, regulators have a wide variety of tools available to them. At the federal level, regulators should be able to draw upon the examples from

170. Michael L. Rustad & Thomas H. Koenig, Towards a Global Data Privacy Standard, 71 FLA. L. REV. 365, 379 (2019). The European Commission, however, has found that the impact of the GDPR has been diminished by the dispersal of enforcement power across EU member states. Data Protection as a Pillar of Citizens’ Empowerment and the EU’s Approach to the Digital Transition – Two Years of Application of the General Data Protection Regulation, COM (2020) 264 final (June 24, 2020).
the European Union and from the various US states that have enacted or will enact data privacy schemes. Imposing restrictions similar to those proposed in Part VI of this Note will go a long way towards protecting competition from the anticompetitive behavior of data-opolies. In the past, it has been said that price is the “central nervous system of the economy.”¹⁷³ However, for the modern internet economy, at least for the data-opolies that operate in digital markets, the central nervous system may in fact be data. It is only logical that America’s regulatory framework adapt to the times by adopting a framework focused on data.

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