command-and-control or utility-like regulation.[161] William Rogerson and Howard Shelanski further recognize that the digital platform context requires a hybrid that they call "light-handed pro-competitive" regulation.[162] They distinguish light-handed regulation from what they instead label "traditional cost-based regulation of public utilities,"[163] arguing that the latter reduces firms' incentive to lower costs and innovate whereas the former "aims to govern firms' behavior and market power by protecting and promoting competition."[164]

3. "Light-Handed Pro-Competitive Regulation"

A number of procompetitive bills have been proposed in the United States. A few have generated momentum, such as the American Innovation and Choice Online Act proposed by Senators Amy Klobuchar (D-MN) and Chuck Grassley (R-IA);[165] the Open App Markets Act proposed by Senators Richard Blumenthal (D-CT) and Marsha Blackburn (R-TN);[166] and the AMERICA Act very recently proposed by Senator Mike Lee (R-UT), Amy Klobuchar (D-MN), Ted Cruz (R-TX), and others.[167] These bills are motivated by a recognition that antitrust lawsuits might not succeed or might not alone suffice to tackle the entrenched market dominance and abusive behavior of technology gatekeepers such as Google. These laws' aim is to open technology platform markets to greater contestability; facilitating intra-platform and inter-platform competition through transparency, interoperability, and access remedies.

AICOA, which was introduced in the 117th Congressional Session but failed to pass and was reintroduced in the 118th Session, gave powers to the FTC to investigate the conduct of "covered platform operators" (which include Google) that engage in statutorily prohibited conduct, such as self-preferencing; discrimination against customers on their platform; refusals to deal, to access or to interoperate; tying and bundling abuses; and self-dealing made possible by privileged access to information about customers. [168] The Bill is technically not an antitrust law and should be understood as a statute that regulates companies like Google.[169] The AMERICA Act seeks to regulate anticompetitive and self-preferencing behavior in advertising markets, including by imposing

161. Pierre Larouche, *Foreword: Legislation on Digital Platform Giants: The Future of Competition Law?*, 1 CONCURRENCES 2 (2022) (arguing that the DMA is a competition law framework). *See also* Heike Schweitzer, *The Art to Make Gatekeeper Positions Contestable and the Challenge to Know What Is Fair: A Discussion of the Digital Markets Act Proposal*, 3 ZEUP 1, 4–5 (2021) (arguing also that the DMA is a procompetitive regulatory framework).

162. *See* Rogerson & Shelanski, *supra* note 5, at Part II.

163. *See id.* at 1924–25.

164. *Id.*

165. American Innovation and Choice Online Act, S. 2992, 117th Cong. (reintroduced in 2023); *DuckDuckGo, Mozilla, and Others Support Klobuchar Bill in Rein in Big Tech*, REUTERS (Sept. 13, 2022, 4:41 PM), https://www.reuters.com/business/duckduckgo-mozilla-others-support-klobuchar-bill-rein-big-tech-2022-09-13/ [https://perma.cc/P2VK-TJ4M].

166. Open App Markets Act, S. 2710, 117th Cong. (2022).

167. AMERICA Act, S. 1073, 118th Cong. (2023).

168. *See AICOA's Failure*, *supra* note 138; S. 2992.

169. *AICOA's Failure*, *supra* note 138.

transparency and disclosure obligations on gatekeepers as well as structural separation remedies.[170]

In Europe, the Digital Markets Act ("DMA") is similarly and even more explicitly aimed at introducing "contestability" and "fairness" in digital platform markets.[171] Together with the Digital Services Act, the DMA conceives of Big Tech platforms like Google as bottlenecks and empowers smaller businesses to enter digital market segments and compete with them.[172] The DMA, introduced in mid-December 2020 and enforced since 2023,[173] is addressed to "gatekeepers," defined as providers of core platform services,[174] and lays down rules ensuring that digital markets are "contestable and fair."[175] Beyond imposing high penalties for violators,[176] the DMA prohibits Big Tech practices that "limit contestability" or "are unfair," such as the combination of a gatekeeper's data with third party data, bundling, and discriminating between customers. It also obliges gatekeepers to provide transparency, and gives users and customers powers to uninstall preinstalled products, switch away from defaults like Google search, or request access to search data or app store functionality.[177] Although the European Commission is given powers to impose fines and behavioral or structural remedies on digital platforms under the DMA, in theory these remedies will be imposed separately from the EU Commission's ordinary competition law powers.[178]

These and similar procompetitive legal regimes are being introduced or envisaged in many parts of the world in the hope of complementing and substituting antitrust interventions with stronger, structural obligations that can preempt power concentration and excessive leverage at an industry level in a more timely and effective manner.[179]

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170. S. 1073.

171. Council Regulation 2022/1925, 2022 O.J. (L 265) 2. For commentary, see, e.g., Schweitzer, *supra* note 161, at 4 (arguing that the DMA should be interpreted as a competition policy measure).

172. *See* 2022 O.J. (L 265); *The Digital Services Act Package*, EUR. COMM'N (Jan. 17, 2024), https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package [https://perma.cc/W63L-GN5Z].

173. European Commission Press Release, DMA: Rules for Digital Gatekeepers to Ensure Open Markets Start to Apply (May 2, 2023). Natasha Lomas, *EU's New Rules for Big Tech Will Come into Force in Spring 2023, Says Vestager*, TECHCRUNCH (May 5, 2022, 6:26 AM), https://techcrunch.com/2022/05/05/digital-markets-act-enforcement-margrethe-vestager/ [https://perma.cc/6VML-4WQV].

174. *See* 2022 O.J. (L 265) 30.

175. *Id.* at 27.

176. *Id.* at 51–3.

177. *Id.* at 35–6.

178. *Id.* at 3 ("[S]ince this Regulation aims to complement the enforcement of competition law, it should apply without prejudice to Articles 101 and 102 TFEU, to the corresponding national competition rules and to other national competition rules regarding unilateral conduct . . . .").

179. *See, e.g.*, Vikas Kathuria, *Assessing India's Ex-Ante Framework for Competition in Digital Markets*, PROMARKET (May 29, 2024), https://www.promarket.org/2024/05/29/assessing-indias-ex-ante-framework-for-competition-in-digital-markets/ [https://perma.cc/5M63-3FAZ]; Vellah Kedogo Kigwiru, *Supranational or Cooperative? Rethinking the African Continental Free Trade Area Agreement Competition Protocol Institutional Design*, 12 J. OF ANTITRUST ENFORCEMENT 98 (2024).

The last twenty years have seen a shift from a deregulatory conception of digital markets as naturally competitive and innovative to an institutional conception of digital markets as spaces constituted and structured through legal and regulatory choices. As efforts to rein in Google's power show, both antitrust enforcement and digital market regulation have changed over the last 20 years. Antitrust's increasingly structural and infrastructural turn and digital regulation's increasing pro-competitive direction seem to be converging toward a neoliberal consensus that aims at competition, consumer choice and switching. Unpacking the stakes of this consensus requires a closer dive into the relation between antitrust, economic regulation and the public utility idea.

IV. THE RELATION BETWEEN ANTITRUST, SECTORAL REGULATION AND UTILITIES

As bodies of laws and normative concepts, antitrust and regulation are in friendly tension. They are functionally extremely close, yet histories of regulatory experimentation and market deregulation have often portrayed them as opposites. Experts like to debate whether entire tech companies such as Google/Alphabet or discrete functions like Search should be regulated as a utility or instead left to operate without restraint on legally frictionless digital markets.[180] These debates forget that answers are hardly found in binaries and either/or choices. Instead, hybridity and experimentation with many regulatory approaches is increasingly key in digital markets.

In what follows, I first describe the relation between perfect competition and natural monopoly in economics. I then move to a discussion of public utilities, antitrust, and regulation as a matter of positive law. I conclude with a critique of commonly held legal views on the relation between these concepts.

A. Competition, Monopoly, and Consumer Choice

Microeconomic theory describes competition and monopoly as theoretical opposites. Under conditions tending toward *perfect competition*, barriers to entry for supplying a good (*e.g.*, pens) are low or inexistent. Many suppliers can produce pens and compete on selling them. As more pens get sold, the market reaches a point where supply meets demand for pens. At that point the market has reached its allocative potential, meaning that all pens have been optimally distributed to match sellers and buyers' preferences (or choices) in the economy. At the opposite end, under *natural monopoly*, barriers to entry are very high.

180. Examples of contributions that weighed on this debate include Peter Swire, *Should the Leading Online Tech Companies Be Regulated as Public Utilities?* LAWFARE (Aug. 2, 2017, 9:00 AM), https://web.archive.org/web/20221004030826/https://www.lawfareblog.com/should-leading-online-tech-companies-be-regulated-public-utilities [https://perma.cc/ZHN3-RQN4] (arguing for treating Big Tech as public utilities); K. Sabeel Rahman, *Infrastructural Regulation and the New Utilities*, *supra* note 147, at 915 (arguing for a new approach to infrastructural regulation in tech markets); Bracha & Pasquale, *supra* note 142 at 1202 (suggesting an agency for regulating search engines); Thierer, *supra* note 140, at 274–86 (arguing the case against treating Big Tech as utilities).

Producing the good (*e.g.*, electricity) entails very high fixed costs that can only be recovered over time, by managing the supply of a large quantity of electricity. Once a producer has incurred the high fixed costs of producing electricity, it becomes inefficient for other producers to enter the electricity market and incur the same costs, driving most or all producers off the market. The good should instead be regulated as a monopoly: a regulator centrally ensures that there is one supplier of electricity and that the supplier is able to recover its costs while imposing fair and non-discriminatory prices and conditions on electric supply.[181]

Economists approach competitive markets as markets that naturally tend toward allocative efficiency, a situation where each consumer can make their preferred purchasing choice(s). The idea is that, when allowed to operate competitively and in a decentralized way, markets produce opportunities for optimal ex post allocation. The informal allocation of preferences through bottom-up individual action is famously synthesized by Adam Smith. When a man acts selfishly intending "only his own gain" he in fact acts as if "led by an invisible hand to promote an end which was no part of his intention," which in turn benefits society.[182] On the other hand, natural monopolies are not conducive to significant consumer choice. In monopolistic industries the government or regulator must determine which goods or services will be produced (and by whom) for the collective good, and can mandate or constrain their production. Choice is limited in an ex ante way by what the regulator has determined to be good for society.

Taking these two ideals seriously has led many in the technology policy space to ask themselves whether digital services are more "pen-like" or more "electricity-like," *i.e.*, whether digital products and platform services are best governed through market forces or through ex ante regulatory constraints. Yet trying to make digital goods and services fit the pen or the electricity paradigm hinders proper inquiry into the specificity of digital productive settings.

It must be noted that the concepts of perfect competition and natural monopoly are ideal simplified models and are contested among economists.[183] Modern economic theory recognizes a multiplicity of nuanced hybrids that sit in between perfectly competitive and naturally monopolistic industry structures.[184] What matters for our purposes is that antitrust, regulation, and utility regulation are legal categories that have evolved to reflect and embed ideal theories of

181. William J. Baumol, *On the Proper Cost Tests for Natural Monopoly in a Multiproduct Industry*, 67 AM. ECON. REV. 809, 810 (1977) (defining natural monopoly).

182. ADAM SMITH, THE WEALTH OF NATIONS (1776), bk. IV, ch. II (Amazon ed. 2023) (describing the "invisible hand" mechanism); *see also* ADAM SMITH, THE THEORY OF MORAL SENTIMENTS (6th ed. 1790) (1759), pt. IV, ch. I.

183. HAL R. VARIAN, INTERMEDIATE MICROECONOMICS: A MODERN APPROACH 1–2 (Jack Repcheck ed., 8th ed. 2010) (1987); *see* DANIEL A. CRANE & HERBERT HOVENKAMP, THE MAKING OF COMPETITION POLICY: LEGAL AND ECONOMIC SOURCES 1–2 (2013) (illustrating contestations on the relationship between state and market as regards competition over the last century).

184. *See, e.g.*, MOTTA, *supra* note 12, at 75–89 (discussing network effects, nonphysical barriers to entry and other characteristics that sit in between competitive markets and natural monopolies). *See generally* WILLIAM J. BAUMOL, JOHN C. PANZAR & ROBERT D. WILLIG, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRIAL STRUCTURE (1982) (discussing the contestation of monopolies over time).

competition and monopoly into real-world productive settings.[185] Today, these categories often reflect economic ideals more dogmatically than many economists would advise. In the last fifty years, antitrust and utility regulation have been claimed by a tradition of classical and neoclassical policy praxis that treats competition as the default mode of production and monopoly as an exception to be tolerated only where uniquely efficient.[186]

B. Descriptive Accounts: Positive Law and Convention

Influenced by neoclassical theories of competition and monopoly, scholars overwhelmingly interpret antitrust law and economic regulation, including public utility regulation, as frenemies.[187]

As a matter of positive law, antitrust law is the universe of U.S. antitrust laws that includes the Sherman Act,[188] the Clayton Act,[189] the Federal Trade Commission Act,[190] the Hart-Scott-Rodino Act,[191] and the Robinson-Patman Act.[192] The existing body of antitrust laws, passed by Congress to protect competition and prevent monopolization,[193] encompasses laws and policies whose overlapping goal is "to perfect the operation of competitive markets"[194] and "ensure that competition in the marketplace is not restricted in a way that is detrimental to society."[195]

"Regulation" is a more pluralistic concept with less precise positive legal boundaries. At its simplest, the notion of "public utility" regulation has been confined to naturally monopolistic settings where competitive dynamics do not apply.[196] Beyond the core case of utilities, regulation is the loose body of rules and norms entrenched in the sectoral regulatory instruments that govern industries

185. CRANE & HOVENKAMP, *supra* note 183, at 1 (describing the influence of neoclassical and other economic theories on competition policy over time).

186. *Id.*; *see also* Sanjukta Paul, *Beyond Neoclassical Antitrust*, BOS. REV. (June 23, 2022), https://bostonreview.net/forum_response/beyond-neoliberal-antitrust/ [https://perma.cc/T5QU-RWZT] (denouncing the over-emphasis on perfect competition economic law and policy).

187. For a different use of the word "frenemies," see ARIEL EZRACHI & MAURICE E. STUCKE, VIRTUAL COMPETITION: THE PROMISE AND PERILS OF THE ALGORITHM-DRIVEN ECONOMY 145–46 (2016).

188. 15 U.S.C. §§ 1–2.

189. 15 U.S.C. §§ 12–27.

190. 15 U.S.C. §§ 41–58.

191. 15 U.S.C. § 18(a).

192. Robinson-Patman Act, 15 U.S.C. §§ 13a–13b, 21a (amending Section 2 of the Clayton Act).

193. Standard Oil Co. v. FTC, 340 U.S. 231, 249 (1951) (quoting Staley Mfg. Co. v. FTC, 135 F.2d 453, 455 (7th Cir. 1943)) ("Congress was dealing with competition, which it sought to protect, and monopoly, which it sought to prevent.").

194. Easterbrook, *supra* note 11, at 1 (delineating antitrust law's underenforcement virtues and limits).

195. MOTTA, *supra* note 12, at 30.

196. *See* ALFRED KHAN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 2 (1970). *But see* WILLIAM J. NOVAK, NEW DEMOCRACY: THE CREATION OF THE MODERN AMERICAN STATE 123 (2022) [hereinafter NEW DEMOCRACY] (citing Bruce Wyman, *The Law of Public Callings as a Solution to the Trust Problem*, 17 HARV. L. REV. 156, 157–73 (1904)) ("[M]onopoly was just one of many important factors that could justify a public utility.").

including transportation, communications, electricity, and many more.[197] Regulation includes public utility regimes and other sectoral statutes such as the Post Office Acts,[198] the Pacific Railroad Act of 1862,[199] the Telegraph Act of 1866,[200] the Federal Reserve Act of 1913,[201] the Federal Water Power Act,[202] the Radio Act of 1927,[203] the Communications Act of 1934,[204] the Public Utility Holding Company and the Federal Power Acts of 1935,[205] the Federal Aviation Act of 1958,[206] as well as the Telecommunications Act of 1996.[207] The boundary between utilities and other forms of sectoral regulation is blurry. The distinction is the product of historical convention; not ontological separateness.

1. The Public Utility

The utility was a nineteenth-century bureaucratic experiment in democratizing control over industrial processes.[208] The intent was to govern certain key industry segments, functions, and private infrastructures in collectively accountable ways. In the case of *Munn v. Illinois*,[209] decided in 1876, the Supreme Court established a "constitutional foundation for the . . . law of public utilities."[210] It upheld a fine against the owners and operators of a grain warehouse who had violated the licensing and rate-setting requirements imposed by an Illinois regulation.[211] Speaking for the majority, Justice Waite stated that:

> Property does become clothed with a public interest when used in a manner to make it of public consequence and affect the community at large. When,

197. "Regulation" can also be construed more expansively. *See, e.g.*, Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661, 662 n.1 (1998) (explaining that by regulation "I mean the constraining effect of some action, or policy, whether intended by anyone or not. In this sense, the sun regulates the day, or a market has a regulating effect on the supply of oranges").

198. Post Office Act of 1792, ch. 7, 1 Stat. 232; *see* 39 U.S.C. § 201.

199. Pacific Railroad Act of 1862, ch. 120, 12 Stat. 489.

200. Telegraph Act of 1866, ch. 230, 14 Stat. 221 (repealed 1947).

201. Federal Reserve Act of 1913, ch. 6, 38 Stat. 251 (codified as amended in scattered sections of 12 U.S.C.).

202. Federal Water Power Act of 1920, ch. 285, 41 Stat. 1063 (codified as amended at 16 U.S.C. §§ 791a–825r).

203. Radio Act of 1927, ch. 169, 44 Stat. 1162 (repealed 1934).

204. Communications Act of 1934, ch. 652, 48 Stat. 1064 (codified as amended at 47 U.S.C. § 151).

205. Public Utility Holding Company Act of 1935; Federal Power Act of 1935 (codified as amended under 15 U.S.C. § 79 but repealed).

206. Federal Aviation Act of 1958, 72 Stat. 737 (codified as amended at 49 U.S.C. § 1).

207. Telecommunications Act of 1996, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.).

208. NOVAK, *supra* note 196, at 121. *See also* JOHN DEWEY, THE PUBLIC AND ITS PROBLEMS 109 (1927) (arguing the democratic state is dedicated to "the utilization of government as the genuine instrumentality of an inclusive and fraternally associated public"); FELIX FRANKFURTER, PUBLIC AND ITS GOVERNMENT 81 (1930) (emphasizing the importance of government's role "in securing for society those essential services which are furnished by public utilities").

209. *See generally* 94 U.S. 113 (1876).

210. NOVAK, *supra* note 196, at 139. William J. Novak, *The Public Utility Idea and the Origins of Modern Business Regulation*, *in* CORPORATIONS AND AMERICAN DEMOCRACY 170, 170 (N. R. Lamoreaux & W. J. Novak eds.) (presenting a history of utilities as paradigms of regulatory experimentation).

211. *Munn*, 94 U.S. at 135–36.

> therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created.[212]

Thomas Hardman posits three primary characteristics of the utility.[213] First, there must be a naturally monopolistic business "in the sense that competition cannot be relied upon to secure the public or social interest in having reasonable rates and adequate service, service without discrimination . . . ."[214] It must be more efficient or socially beneficial to have one regulated provider rather than many competitors.[215] Second, there must be a holding out to serve the public at large which is different from a promise under a private contractual agreement to serve a class of people.[216] Third, the business must be "essential" to the general welfare, that is, "not merely useful or advantageous . . . but . . . reasonably 'necessary'" to the public.[217]

These features are neither necessary nor sufficient to identify a utility. From a legal perspective it seems that neither natural monopoly nor public purpose nor essentiality mandate public utility regulation.[218] Instead, a utility is a business that has de facto been subjected to certain formalities such as administrative rulemaking and adjudication on price or standards,[219] permission or licensing to enter/exit an industry,[220] mandates to provide service on a fair and non-discriminatory basis,[221] and the presence of a supervisory utility commission or agency.

Beyond utilities in the strictest sense, Morgan Ricks, Ganesh Sitaram and co-authors identify a list of features that characterize what they more broadly call "Networks, Platforms and Utilities" law: non-discrimination rules, rate setting, profit sharing, equal access rules, universal service requirements, exit restrictions, entry restrictions, interconnection mandates, structural separations, and ownership and control restrictions.[222] A functional view on these features

212. *Id.* at 126.

213. Thomas P. Hardman, *Public Utilities: I. The Quest for a Concept*, 37 W. VA. L. REV. 250, 250 (1931) (defining public utilities).

214. *Id.* at 251.

215. *Id.*

216. *Id.*

217. *Id.*

218. *See, e.g.*, Pub. Util. Comm'n v. Tex. Tel. Ass'n, 163 S.W.3d 204, 209 (Tex. App. 2005) (noting that a "public interest" determination was held to be necessary to receive public funding but not to compete in an industry). There are many non-naturally monopolistic industries that are nonetheless the subject of heavy government regulation that serves public purposes. Similarly, there are limits to what "public interest" regulation entails in a naturally monopolistic industry. *See, e.g.*, NAACP v. Fed. Power Comm'n, 425 U.S. 662, 671 (1976); N.Y. Cent. Sec. Corp. v. United States, 287 U.S. 12, 21 (1932).

219. Fed. Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 606 (1944); William Boyd, *Just Price, Public Utility, and the Long History of Economic Regulation in America*, 35 YALE J. ON REG. 721, 725 (2018) (setting forth a genealogy of price-setting and utilities law).

220. New State Ice v. Liebmann, 282 U.S. 262, 285–86 (1932).

221. *See, e.g.*, Am. Hoechest Corp. v. Dep't of Pub. Utils., 379 Mass. 408, 411 (1980); Mountain States Legal Found. v. Utah Pub. Serv. Comm'n, 636 P.2d 1047, 1050 (1981).

222. MORGAN RICKS, GANESH SITARAMAN, SHELLEY WELTON & LEV MENAND, NETWORKS, PLATFORMS, AND UTILITIES LAW AND POLICY (2022), ch. 1 (textbook on regulation). Some of these remedies are discussed in greater detail below.

opens the door to a broader concept of "regulation" that operates as a continuum and covers both utilities law and other regulated sectors.

2. Antitrust and Regulation

Utilities and other regulated industries are on a continuum and deeply intermeshed with deregulatory impulses and competition law implications, yet legal authorities suggest an ontological separateness between antitrust and regulatory law, including utility regulation. The history of telecommunications in the United States is full of overlaps between sectoral regulation and competition law. The famous AT&T saga serves as a case study on the interplay of sectoral regulation and antitrust. AT&T was investigated by the Justice Department in 1912, which led to the company's divestment of its Western Union holdings, a commitment not to purchase independent telecommunications exchanges that competed with the Bell System, and an obligation to offer interconnection to competitors on non-discriminatory terms.[223] For more than half a century AT&T was treated as a regulated monopoly, until, in 1974, the Justice Department filed another antitrust suit against the company, accusing AT&T of monopolizing the telecommunications service and equipment markets.[224] Judge Harold Greene in the U.S. District Court for the District of Columbia pushed the case forward in 1978, leading to a historical break up settlement whereby AT&T agreed to divest its Bell Operating Companies.[225] Similar overlaps among regulation and competition can be noticed in the banking sector as well as other sectors.[226]

A number of legal doctrines at the federal and state level govern the relationship between antitrust and regulation.[227] Herbert Hovenkamp describes these doctrines in the negative, as doctrines that expressly remove or immunize certain markets or forms of regulatory action from the application of antitrust rules.[228] Yet these doctrines also positively shape how antitrust and other regulatory regimes interact. An example from digital markets can clarify the positive/negative distinction. Existing legal regimes including consumer privacy law and the FTC's jurisdiction over its shape constrain antitrust's role in digital markets. They constrain antitrust not only in the negative sense that they sometimes preclude antitrust law's application, but also in the positive sense that they shape the

223. Letter from Nathan C. Kingsbury, Vice President, AT&T, to James Clark McReynolds, Attorney General (Kingsbury Commitment) (1913).

224. Press Release, Dep't of Just., Regarding Filing of Antitrust Charges Against AT&T (Nov. 20, 1974).

225. United States v. AT&T, 552 F. Supp. 131, 227 (1982).

226. *See, e.g.*, Saule Omarova & Graham Steele, *Banking and Antitrust*, 1, 4–5 (Cornell L. Sch., Rsch. Paper No. 20-03) (forthcoming 133 YALE L.J. (2024)); Dan Awrey & Joshua Macey, *Open Access, Interoperability, and the DTCC's Unexpected Path to Monopoly*, 132 YALE L.J. 96, 113 (2022); Joshua C. Macey, *Utility Mergers and the Modern (and Future) Power Grid*, 42 ENERGY L.J. 237, 244 (2021) (reviewing SCOTT HEMPLING, REGULATING MERGERS AND ACQUISITIONS OF U.S. ELECTRIC UTILITIES: INDUSTRY CONCENTRATION AND CORPORATE COMPLICATION (2020)); Jacob Mays et al., *Private Risk and Social Resilience in Liberalized Electricity Markets*, 6 JOULE 369, 369 (2021).

227. *See, e.g.*, Howard A. Shelanski, *The Case for Rebalancing Antitrust and Regulation*, 109 MICH. L. REV. 683, 685 (2011); Hovenkamp, *supra* note 8, at 342 (arguing that antitrust's role is "residual" and that regulatory regimes generally preempt it).

228. Hovenkamp, *supra* note 8, at 344.

markets that antitrust authorities and courts take as their baseline for assessing anticompetitive behavior. Three regimes illustrate the relationship between antitrust and regulatory regimes under U.S. law: the *Noerr-Pennington* petitioning immunity doctrine,[229] the state action doctrine in antitrust,[230] and the question of federal statutory law's immunity from, or express saving of, antitrust.[231]

The *Noerr-Pennington* doctrine is best understood as the First Amendment principle that citizens have a right to petition the government for regulation even when such petitioning could trigger liability under antitrust as a form of monopolization, coordination, or attempt thereof. The doctrine was established by the Supreme Court in two cases: *Noerr* and *Pennington*.[232] In *Noerr*, the railroad industry was held to have a right to petition the government for regulation even when the regulation was allegedly likely to impose anticompetitive costs on truckers.[233] In *Pennington*, it was held that a labor union's right to petition the government for higher wages legislation could not be denied on antitrust grounds.[234]

The "state action" immunity in antitrust, or Parker immunity after *Parker v. Brown*,[235] is a federal doctrine that immunizes conduct governed by state and local regulation from federal antitrust law.[236] This is different from the Fourteenth Amendment's state action doctrine, *i.e.*, the principle that constitutional protections only apply as against state actors.[237] The doctrine imposes two requirements for exempting state regulatory action from antitrust law.[238] First, the state must have "clearly articulated" and "affirmatively expressed" its wish to displace competition with regulation.[239] Second, the state must have actively supervised the conduct in question.[240] In other words, "[i]f the state passes a statute that unambiguously calls for potato price regulation, and a potato agency created for this purpose actively administers the rate-making process, then the antitrust court has no choice but to find the regulation immune from the antitrust laws."[241]

229. *See infra* notes 232–34 and accompanying text.

230. *See infra* notes 235–42 and accompanying text.

231. *See infra* notes 243–68 and accompanying text.

232. *See generally* E. R.R. Presidents Conf. v. Noerr Motor Freight, Inc., 365 U.S. 127 (1961); United Mine Workers of Am. v. Pennington, 381 U.S. 657 (1965).

233. *Noerr*, 365 U.S. at 139.

234. *Pennington*, 381 U.S. at 665.

235. *See generally* Parker v. Brown, 317 U.S. 341 (1943).

236. *See, e.g.*, City of Columbia v. Omni Outdoor Advert., Inc., 499 U.S. 365, 384 (1991) (holding that a city council's regulation favoring one business owner's billboards and excluding a competitor's billboard was immune from antitrust liability).

237. *See* Edmonson v. Leesville Concrete Co., 500 U.S. 614, 620 (1991) ("Although the conduct of private parties lies beyond the Constitution's scope in most instances, governmental authority may dominate an activity to such an extent that its participants must be deemed to act with the authority of the government and, as a result, be subject to constitutional constraints."). But, in the context of debates on platforms and speech regulation, see Marsh v. Alabama, 326 U.S. 501, 508–09 (1946) (holding that a company town is subject to the First Amendment).

238. *See* Cal. Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc., 445 U.S. 97, 97 (1980); Hovenkamp, *supra* note 8, at 347.

239. S. Motor Carriers Rate Conf., Inc. v. United States, 471 U.S. 48, 48 (1985).

240. Patrick v. Burget, 486 U.S. 94, 98 (1988).

241. Hovenkamp, *supra* note 8, at 347.

The doctrine is meant to preserve state sovereignty over the administration of local productive activities, though it has been criticized for allegedly leading to racially unjust outcomes in certain states.[242]

Finally, federal law can expressly exempt conduct in a given industry from antitrust scrutiny through a preemption or immunity clause,[243] it can expressly preserve antitrust scrutiny through a savings clause,[244] or it can impliedly exempt antitrust. At least until 2004, courts interpreted antitrust and regulation as compatible and as operating compatibly to the extent possible.[245] This reflects the idea that regulatory regimes and antitrust enforcement mostly co-exist without any express or implied intent to preempt each other. The general rule was that regulated conduct would not be immune from parallel antitrust scrutiny: for implied immunity to be inferred by courts there had to be "plain repugnancy" between the given regulatory statute and antitrust law.[246] In *Silver v. New York Stock Exchange*,[247] the Supreme Court established a stringent test for implied immunity from antitrust law, allowing a claim that a group boycott was unlawful under antitrust law to proceed because the Securities Act could not be read as authorizing such conduct.[248] The Court stated that courts should try, to the extent possible, to "reconcil[e] the operation" of antitrust with that of the relevant statutory scheme "rather than holding one completely ousted"[249] and that "[r]epeal of the antitrust laws [was] to be regarded as implied only if necessary to make the [regulatory statute] work, and even then only to the minimum extent necessary."[250]

In *United States v. Philadelphia National Bank* and *Gordon v. New York Stock Exchange*,[251] the court further confirmed the "plain repugnancy" test: "repeals of the antitrust laws by implication from a regulatory statute are strongly disfavored, and have only been found in cases of plain repugnancy between the antitrust and regulatory provisions."[252] In *Philadelphia National Bank*, the Supreme Court held that a merger between the second and third largest banks in Philadelphia should be enjoined on grounds it violated the Clayton Act[253] and that the Bank Merger Act of 1960, which governed mergers in the banking sector, and should not be interpreted to immunize mergers from the operation of

242. Bennett I. Capers & Gregory Day, *Race-Ing Antitrust*, 121 MICH. L. REV. 523, 530 (2023) (arguing that antitrust law can have a significant impact on racial minorities).

243. *See, e.g.*, 15 U.S.C. § 62 (exempting collective export associations from antitrust liability).

244. 47 U.S.C. § 152 (preserving the applicability of antitrust law in the Telecommunications Act of 1996).

245. Hovenkamp, *supra* note 8, at 375.

246. Credit Suisse Sec. (USA) LLC v. Billing, 551 U.S. 264, 267 (2007) (discussing the repugnancy standard as precedent); Gordon v. N.Y. Stock Exch., Inc., 422 U.S. 659, 682 (1975); United States v. Phila. Nat'l Bank, 374 U.S. 321, 350–51 (1963).

247. 373 U.S. 341 (1963).

248. *Id.* at 357.

249. *Id.*

250. *Id.*

251. 374 U.S. 321 (1963); 422 U.S. 659 (1975).

252. *Phila. Nat'l Bank*, 374 U.S. at 350–51 (citing Pan Am. World Airways, Inc. v. United States, 371 U.S. 296 (1963) and California v. Fed. Power Comm'n, 369 U.S. 482 (1962)); *see also Gordon*, 422 U.S. at 682.

253. *Phila. Nat'l Bank*, 374 U.S. at 371.

federal antitrust law.[254] Arguments that commercial banking should be subject to a higher degree of governmental regulation and that concentration would be beneficial to consumers in the banking industry were considered insufficient to immunize the banks from antitrust.[255] In *Otter Tail Power Co. v United States*, the Supreme Court found that a defendant's refusal to supply interconnection to distribution facilities or power to competing utilities, which arguably violated antitrust, also contradicted the objectives of the Federal Power Act.[256] The court held there is no implied immunity on the basis of an antitrust and regulation overlap alone.[257]

The case of *Trinko*, and subsequently that of *Credit Suisse*, overruled *Otter Tail* and loosened the standard for implied immunity.[258] At stake in *Trinko* was the Telecommunications Act of 1996 which expressly encouraged competition between telecommunications providers through an antitrust savings clause.[259] The plaintiff was a law office and retail customer of AT&T that had faced delays because Verizon did not promptly provide AT&T, their supplier, with access to its network facilities.[260] The plaintiff did not have standing to enforce the 1996 Act and therefore chose to plead under antitrust law.[261] It should be noted that the 1996 Act contained a "savings clause" which expressly preserved the applicability of antitrust law to the telecommunications industry.[262] Nonetheless, at first instance, the district court found that each of the illegal actions Trinko alleged involved breaches of regulatory duties under the 1996 Act and therefore dismissed Trinko's suit for failing to state an antitrust claim distinct from violations of the 1996 Act.[263]

On appeal, the Second Circuit reversed, inter alia finding that "[t]he savings clause unambiguously establishes that there is no 'plain repugnancy' between the Telecommunications Act and the antitrust statutes."[264] The case then went up to the Supreme Court. The Court found that the standard for monopolization under the Sherman Act was different from under the statute and therefore one could be held to violate the statute without violating antitrust law.[265] As a result, the Court held that the plaintiff had failed to state an antitrust law claim and overruled the court of appeals.[266] The decision practically reverses previous law on the "plain repugnancy" test and suggests that antitrust has a residual role and applies only where regulation retreats. As argued by Howard Shelanski, *Trinko*

254. *Id.* at 332.
255. *Id.* at 368–72.
256. 410 U.S. 366, 374–75 (1973).
257. Shelanski, *supra* note 227, at 689.
258. Verizon Commc'ns Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 409–10 (2004); Credit Suisse Sec. (USA) LLC v. Billing, 551 U.S. 264, 271 (2007).
259. 47 U.S.C. §§ 152, 332.
260. *Trinko*, 540 U.S. at 404–05.
261. *Id.* at 407.
262. *See id.* at 406.
263. Law Offs. of Curtis V. Trinko, LLP v. Bell Atl. Corp., 123 F. Supp. 2d 738, 742 (S.D.N.Y. 2000).
264. Law Offs. of Curtis V. Trinko, LLP v. Bell Atl. Corp., 305 F.3d 89, 109 (2d Cir. 2002).
265. *Trinko*, 540 U.S. at 415–16.
266. *Id.*

was wrongly decided, and together with *Credit Suisse*,[267] the case narrowed the scope of application of antitrust in regulated industries, negating its essential complementary role.[268] The case essentially makes it more difficult for plaintiffs to plead antitrust violations in regulated industries, reinforcing a purported ontological separateness between antitrust and regulation.

These three doctrines—*Noerr-Pennington*, state action, and implied immunity—reveal that in practice, courts have distinguished antitrust from sectoral regulation and have interpreted their relationship as more than simply one of binary complementarity or substitutability. Doctrines of state action immunity and of federal immunity conceive of antitrust and regulation as potentially complementary: courts must interpret the two bodies of law as compatible to the extent possible and unless law clearly indicates repugnancy between them. Yet recent cases such as *Trinko* suggest that antitrust and regulation are increasingly viewed as alternatives: the existence of regulatory constraints strongly *suggests* that antitrust enforcement is less welcome.[269]

C. Normative Accounts

The scholarly literature on antitrust and economic law maps onto this legal landscape dominated by neoclassical understandings of the market. For over forty years, economists and economic law scholars have been motivated by efficiency considerations and underenforcement imperatives.[270] The result has been declining faith in utility and sectoral regulation, and massive waves of privatization, *e.g.*, in the airlines industry.[271]

Scholars have interpreted antitrust as a preferred default, and regulation as an exception to be justified only in rare circumstances if at all.[272] According to these views, the imperative is for law to retreat as much as possible and let market processes play out autonomously. Antitrust, construed as part of the background of invisible rules and norms aimed at safeguarding competition, has a residual

267. Shelanski, *supra* note 227, at 685.

268. *Id.* at 706.

269. *Id.* at 719.

270. *See, e.g.*, Jedediah Britton-Purdy, David Singh Grewal, Amy Kapczynski & K. Sabeel Rahman, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 YALE L.J. 1784, 1794 (2020); David Singh Grewal & Jedediah Purdy, *Introduction: Law and Neoliberalism*, 77 LAW & CONTEMP. PROBS. 1, 4 (2014) (arguing that neoliberal hegemony has hampered recognition by legal scholars of power differentials and injustice in the economic sphere).

271. PAUL SABIN, PUBLIC CITIZENS: THE ATTACK ON BIG GOVERNMENT AND THE REMAKING OF AMERICAN LIBERALISM 166 (2021) (tracing the roots of 1980s Reaganism in earlier liberal attitudes to institutions); PAUL STEPHEN DEMPSEY & ANDREW R. GOETZ, AIRLINE DEREGULATION AND LAISSEZ-FAIRE MYTHOLOGY 179–87 (1992) (criticizing Alfred Khan's approach to airline deregulation). *See also* Paul Stephen Dempsey, *The Rise and Fall of the Civil Aeronautics Board—Opening Wide the Floodgates of Entry*, 11 TRANSP. L.J. 91, 93–94 (1979) (discussing the Civil Aeronautics Board's role in the history of airline deregulation).

272. NOVAK, *supra* note 196, at 112:

> [T]he last half century or so has witnessed a sustained effort . . . to undermine and undo the public utility idea. Perhaps aware of the intimate connection between public utilities and the rise of the regulatory state, two generations of critics of regulation have taken direct aim at almost every aspect of the progressive public utility paradigm.

role. Regulation, on the other hand, is an exception that replaces market competition defaults in limited circumstances.[273] This view has dominated the tech policy landscape for years.

1. Antitrust, Regulation and Utilities in the Neoclassical Imaginary

Former Supreme Court Justice Stephen Breyer mentions possible market "defects" that justify regulatory intervention as a last resort while emphasizing competition and antitrust as the default:

> [T]he classicist embraces regulation *faute de mieux*. Competition is more desirable, and antitrust may help maintain competition. Yet for one reason or another, in these special markets, competition cannot work or by itself is inadequate. Thus, one must turn to regulation as a supplement or substitute.[274]

The difference between the emphasis on substitutability and complementarity is more a matter of degree than of substance. One focus views antitrust and regulation as alternatives or substitutes that aim at the same goals, with antitrust generally taking priority in the absence of overriding regulation. Stephen Breyer describes classical theories of antitrust and economic regulation as having similar procompetitive goals including prices close to incremental costs, efficient production, and innovation.[275] Regulation aims at these goals *directly*, "bypass[ing] the competitive process" and typically entails an administrative agency and "network[s] of rules that determine the regulated firms' prices while, in principle, spurring those firms toward innovation and production efficiency."[276] Antitrust instead operates *indirectly*. "The antitrust laws set forth a few negatively phrased directives, which are enforced by the courts or the Federal Trade Commission . . . . [T]hey promote competition so that competition itself can bring us its economic benefits."[277] The picture that emerges is a classicist one where antitrust and regulation have overlapping functions and antitrust is generally preferred in the absence of regulation that takes priority:

> [A]ntitrust is not another form of regulation. Antitrust is an *alternative* to regulation and, where feasible, a better alternative . . . . [T]he classicist first looks to the marketplace to protect the consumer; he relies upon the antitrust laws to sustain market competition. He turns to regulation only where free markets policed by antitrust laws will not work—where he finds significant market 'defects' that antitrust laws cannot cure.[278]

273. Lev-Aretz & Strandburg, *supra* note 74, at 2 (describing a view of regulation based on demand-side externalities as the standard view, and as mistaken).

274. Breyer, *supra* note 8, at 1007. *See also* Hovenkamp, *supra* note 8, at 339 (noting information asymmetries as a key case of externality justifying regulatory intervention). The case of digital markets seems a case in point. *See* Rogerson & Shelanski, *supra* note 5, at 1914 (arguing for supplementing general purpose digital antitrust actions with sectoral regulation).

275. Breyer, *supra* note 8, at 1006.

276. *Id.*

277. *Id.*

278. *Id.* at 1007.

A second focus interprets antitrust and regulation as complements, that is as two separate bodies of doctrine that can operate side-by-side, upon the same actors in the same industry, while potentially tackling distinct harms or objects of regulation. Herbert Hovenkamp, for example, makes the case for antitrust and regulation as "complementary products."[279] He too argues that most markets are efficient and tend toward competition, but some exceptional markets "fail to clear at efficient levels" and require some regulatory intervention.[280] Hovenkamp too, recognizes that the law now treats antitrust as a "residual regulator" that operates only in the zone of free, unregulated markets, in the space where regulation is nonexistent or is in retreat:

> When the government makes rules about price or output, market forces no longer govern. To that extent antitrust is shoved aside. A corollary is that as an industry undergoes deregulation, or removal from the regulatory process, antitrust re-enters as the residual regulator . . . .[281]
>
> *Antitrust law takes a market's regulatory structure as given, warts and all, and tries to prevent injuries to competition that the regulatory process leaves untended . . . . [A]ntitrust's role is 'residual.' It picks up only where regulation leaves off.*[282]

What emerges from Breyer and Hovenkamp's slightly different analyses is the overarching idea that antitrust operates as the law of the free market and operates in a marketplace mostly devoid of regulatory constraint. Antitrust intervenes to correct the operation of the "free market," an imagined structure that is whole and separable from other "regulated" aspects of the economy. Harm to competition is not like any other market failure, it is a specific kind of harm that requires a specific form of after-the-fact judicial intervention. No matter whether they consider antitrust and sectoral economic regulation as substitutes or as complements, these approaches emphasize the separability of antitrust law from other regulatory endeavors and a vague preference for antitrust. These thinkers thus unconsciously appeal to the idea that marketplaces autonomously afford choices to consumers and that legal constraint must remain minimal, nimble, and invisible in the absence of a strong justification for the contrary.

The same classicist and neoclassicist influences that generated dominant views on the relation between antitrust and regulation have produced fifty years of critiques of utility regulation.[283] For example, Richard Posner argued that

279. Hovenkamp, *supra* note 8, at 336; Herbert Hovenkamp, *Antitrust and Regulation Over Time*, REGUL. REV. (Oct. 1, 2020), https://www.theregreview.org/2020/10/01/hovenkamp-antitrust-regulation-over-time/ [https://perma.cc/RZN5-QBAR]. *See also* Shelanski, *supra* note 227, at 684–85 (arguing against exemptions of antitrust in regulated sectors); Rogerson & Shelanski, *supra* note 5, at 1914 (arguing for supplementing general purpose antitrust with sectoral regulation in technology markets).

280. Hovenkamp, *supra* note 8, at 336.

281. *Id.* at 341.

282. *Id.* at 342 (emphasis added).

283. NOVAK, *supra* note 196, at 112:

> [T]he last half century or so has witnessed a sustained effort . . . to undermine and undo the public utility idea. Perhaps aware of the intimate connection between public utilities and the rise of the regulatory state, two generations of critics of regulation have taken direct aim at almost every aspect of the progressive public utility paradigm.

regulating the natural monopolies of today "is to gamble dangerously with the future."[284] Since the benefits of regulation were overall "dubious," Posner advocated for repealing most if not all public utility regulation and common carrier legislation.[285] Harold Demsetz similarly questioned natural monopoly justifications for public utility regulation suggesting that concentration could be efficient.[286] Subsuming many of these views, Rick Geddes noted in 2000 that "[w]here once regulated or government-owned monopolies dominated because of the belief that most utilities were 'natural monopolies,' there is now a growing consensus that competition can perform a broader and more effective role."[287]

If anything, the effect of neoclassical critiques of regulation and of the utility has been to limit appetite for regulatory experimentation and to atrophy intellectual debates on how law and other regulatory modalities such as technical and social constraints can structure the digital economy. As such, it is imperative to restore credibility around the idea of the public utility as a capacious repository of experimental strategies, remedies, and ideas which can help us creatively design future digital platform regulation efforts.

D. To Break Up, to Regulate, or to Experiment

The legal division of functions between utilities, sectoral regulation, and antitrust is far less clear cut than is often imagined. Breaking up as opposed to "regulating" Google is not a real tradeoff. In practice, a variety of procompetitive reform Bills similar to the European Digital Markets Act might one day supplement antitrust and other sectoral laws, even if none succeeded so far.

In the absence of a regulatory regime, the standard view formulated by Herbert Hovenkamp and others is that antitrust must act as the "residual regulator."[288] Views that favor antitrust's residual role in tech platform markets, though plausible, have two limitations. First, antitrust frequently fails to adequately address digital market power.[289] If anything, antitrust has so far contributed to reinforcing the gatekeeping power of tech giants like Google.[290] This means that antitrust and regulation's respective roles need revisiting. Second, "regulation," construed as sector-specific, is far from absent in digital markets. Cybersecurity, data privacy laws, intellectual property regimes, and tax and labor laws are already in place. In the presence of many legal regimes, antitrust's "residual" role,

284. Posner, *supra* note 124, at 636.

285. *Id.* at 638.

286. Harold Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55, 61 (1968) (the case against utility regulation).

287. Rick Geddes, *Public Utilities*, *in* ENCYCLOPEDIA OF LAW AND ECONOMICS: THE HISTORY AND METHODOLOGY OF LAW AND ECONOMICS, VOLUME III, THE REGULATION OF CONTRACTS 1162, 1163 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000).

288. Hovenkamp, *supra* note 8, at 343 (arguing that antitrust's role is "residual" and that regulatory regimes generally preempt it).

289. Khan, *supra* note 66; Newman, *supra* note 66; Steinbaum, *supra* note 66.

290. *See, e.g.*, Nico Grant, *Google's Antitrust Loss to Epic Could Preview Its Legal Fate in 2024*, N.Y. TIMES (Dec. 12, 2023), https://www.nytimes.com/2023/12/12/technology/google-antitrust-cases.html [https://perma.cc/5B6N-5A4W] (discussing the various antitrust lawsuits Google faces).

the argument that it must apply only when overlapping or overriding sectoral regulatory regimes are absent, is implausible.[291]

Emphasis on "residuality" and on separating the law of antitrust from other regulatory approaches is unhelpful. Markets are real processes of value creation and exchange constituted by legal, technical, and social choices. They have social consequences.[292] Binaries on the relation between antitrust, economic regulation and utilities law have made regulators' jobs in digital platform markets more limited and ineffective than they could have been had policymakers embraced a continuum of regulatory methods and their social implications. Things are changing, however. As illustrated in Part III, antitrust enforcement and sectoral regulation are "converging," revealing that they jointly shape what digital markets are for, their social mission and implications. Together, these domains contribute to structuring digital markets in a durable way.

V. RE-CONSTRUCTING THE CONVERGENCE OF ANTITRUST AND UTILITIES IN DIGITAL PLATFORM MARKETS

As seen through Google's example, antitrust and public utility approaches to technology markets are converging. Antitrust lawsuits are aiming to restructure tech markets, dislocate vertically integrated firms, and place infrastructural power at the center.[293] Regulatory reforms are motivated by a procompetitive vision that emphasizes inter- and intra-platform competition, notably through prohibitions against self-preferencing and transparency and disclosure obligations for Big Tech companies. The goals, purposes and remedies offered by antitrust in tech markets increasingly overlap and coincide with the goals of top-down regulatory regimes: non-discriminatory access to key platform inputs such as advertising exchanges or app stores, firewalls to avoid conflicts of interest and self-preferencing, information sharing around opaque practices such as the price

291. A vast literature shows how various regimes contribute to shaping the structure of digital markets and entrenching the power of tech giants like Google. *See, e.g.*, Thomas E. Kadri, *Platforms as Blackacres*, 68 UCLA L. REV. 1184, 1184 (2022) (arguing that cyber-trespass laws give platform companies free rein over their proprietary infrastructures); Thomas E. Kadri, *Digital Gatekeepers*, 99 TEX. L. REV. 951, 951 (2021) (arguing that cyber-trespass laws give platform companies free rein to act as arbitrary gatekeepers of digital spaces); Peter Lee, *Reconceptualizing the Role of Intellectual Property Rights in Shaping Industry Structure*, 72 VAND. L. REV. 1197, 1197 (2019) (offering empirical evidence on the role of patents and copyrights in shaping digital industries' structure); Michal Gal & Oshrit Aviv, *The Competitive Effects of the GDPR*, J. COMPETITION L. & ECON. 1, 1 (2020) (arguing that European data protection law has effects on the competitiveness of data markets and thus on their structure). *See generally* Garrett A. Johnson, Scott K. Shriver & Samuel G. Goldberg, *Privacy & Market Concentration: Intended & Unintended Consequences of the GDPR*, 69 MGMT. SCI. 5695 (2022) (demonstrating that data protection law has effects on market structure); DAMIEN GERADIN, THEANO KARANIKIOTI & DIMITRIOS KATSIFIS, GDPR MYOPIA: HOW A WELL-INTENDED REGULATION ENDED UP FAVORING GOOGLE IN AD TECH 1 (2020) (arguing that EU data protection law has favored Google's dominance in the EU).

292. *See, e.g.*, Salomé Viljoen, Jake Goldenfein & Lee McGuigan, *Design Choices: Mechanism Design and Platform Capitalism*, 8 BIG DATA & SOC'Y 1, 11 (2021) (discussing mechanism design in the digital context). "Understanding mechanism design in action . . . offers us a new story about . . . how market rationality is a contingent and constructed notion that defines us as economic and social actors for the benefit of the designers of the digital worlds we inhabit." *Id.*

293. Posner, *supra* note 124 and accompanying text.

of advertising, and structural separations. This neoliberal convergence around competition and choice in digital markets suggests both (a) the possibility of an approach to antitrust and economic regulation that views these modes as dynamically co-constitutive of digital ecosystems,[294] and (b) the imperative to envision understandings of choice, competition and of the goals of regulation in digital settings that depart from the neoliberal consensus.

This section proceeds in three steps. The first step is to visualize the relationship between antitrust law and sectoral regulation. This will reveal that, in combination, antitrust and utility strategies jointly structure digital markets while decentralizing power and decision-making. It will also show that legislators and agencies are continuing to selectively prioritize self-correcting market processes and individual preferences over the advancement of deep-seated values such as a healthy digital public sphere, privacy, or equality.

The second step introduces a pragmatic, or experimental, methodology that helps orient efforts toward structuring markets in line with the public interest.[295] This method embeds creative and adaptive combinations of preexisting bodies of doctrine and remedies, such as antitrust and other regulatory frameworks, in a context. The quest to transform a social function like web search now dominated by a company like Google is not about abstract trade-offs between antitrust and command-and-control regulation; it is a contextual, dynamic, and inescapably value-oriented process that requires combining regulatory strategies, supervising some market segments, and opening other segments to unsupervised competition. After articulating this methodology, the third step is its application to concrete reform efforts such as the DMA and AICOA.

A. Visualizing the Convergence of Antitrust and Utilities

Mapping antitrust and utility regulation entails some questionable simplification. The relationship between antitrust and regulation has a long history. In spite of fifty years of neoclassicist antitrust law that readily tolerated "efficient" market concentration, the belief that antitrust decentralizes production remains entrenched.[296] Frank Pasquale describes the crossroads of antitrust and

294. Note that the history of antitrust law is replete with examples of overlaps between sectoral and utility-like legislation and antitrust. *See, e.g.*, United States v. AT&T, 552 F. Supp. 131, 135 (1982); United States v. Microsoft Corp., 97 F. Supp. 2d 59, 64–65 (D.D.C. 2000); Verizon Commc'ns Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 415–16 (2004).

295. The term "experimentalist" refers to John Dewey's work and consists of a contextual approach to the tailoring of problems and solutions. *See generally* DEWEY, *supra* note 208. *See also* Charles F. Sabel, *Dewey, Democracy and Democratic Experimentalism*, 9 CONTEMP. PRAGMATISM 35, 35 (2012); Charles F. Sabel & Jonathan Zeitlin, *Experimentalist Governance*, *in* THE OXFORD HANDBOOK OF GOVERNANCE 170 (David Levi-Faur ed., 2012); Kevin Morgan & Charles F. Sabel, *The Experimentalist Polity*, *in* RADICAL VISIONS OF FUTURE GOVERNMENT 76 (Tom Symons ed., 2019) ("Experimental Governance (EG)—a form of multi-level organization in which framework goals are routinely corrected in light of the ground-level experience of implementing them . . . .").

296. *See also* PHILLIP E. AREEDA & HERBERT HOVENKAMP, AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION (2021), Chapter 1:

> When laypersons, including some lawyers, speak of "competition" they think of a market containing numerous firms . . . . Protecting "competition" may then mean preserving a market structure that permits small

regulatory visions of the internet as a tension between the decentralizing "Jeffersonian" antitrust path and the centralizing "Hamiltonian" regulatory/utilities path:[297]

> Populist localizers want a new era of antitrust enforcement to break up giant firms. These Jeffersonian critics of Big Tech firms, megabanks, and health care behemoths are decentralizers. They believe that power is and ought to be distributed in a just society. They promote strong local authorities to counterbalance the centripetal accumulation of wealth and power in multinational firms.[298]
>
> Others have promoted gigantism as inevitable or desirable, and argue that we simply need better rules to cabin abuses of corporate power. Today's Hamiltonians argue that massive stores of data are critical to the future of artificial intelligence—and thus to the productive dynamism of the economy. They focus on improving the regulation of leading firms rather than on breaking them up.[299]

In the simplified popular imagination, antitrust's ex post, case-by-case nature as a common law or reactive branch of enforcement is often contrasted to utilities and other regulatory interventions' structural ex ante nature.[300] The former corrects reactively while the latter structures before-the-fact. The remedies traditionally associated with antitrust law and public utility regulation can be represented along two axes.

For explanatory purposes, let us represent these polarities—centralizing/decentralizing and ex ante/ex post—visually (see Fig. 1).

firms to enter freely and profit, even if this entails forcing larger firms not to compete too strenuously lest the smaller ones be unable to survive.

297. Pasquale, *supra* note 5, at 6.

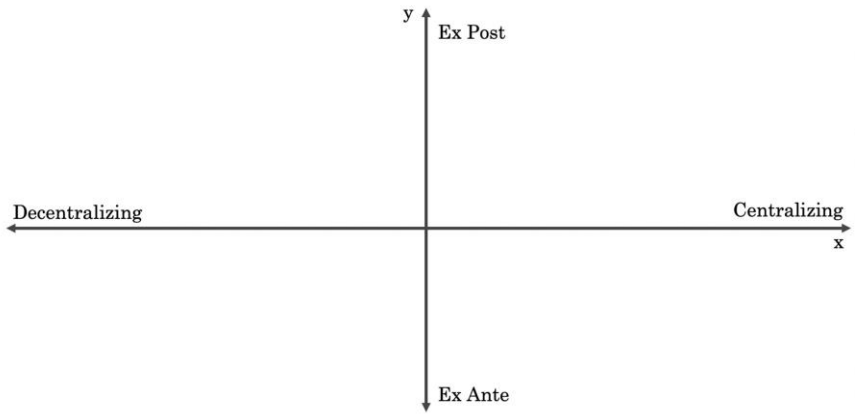
298. *Id.* at 5.

299. *Id.*

300. EUR. CONSUMER ORG., *supra* note 5, at 4 (emphasis added):

Competition law . . . is fundamentally a case-by-case instrument that focuses on one individual situation with a specific set of facts where one specific undertaking—or a few undertakings in the case of an anti-competitive agreement—is found to be in violation of competition rules. . . . Although the adoption of a decision should have a precedent and deterrent effect on other undertakings not involved in the specific case and discipline their future behaviour, this is far from certain and is unlikely to be as effective as ex ante rules that can tackle recurrent and systemic problems affecting a sector.

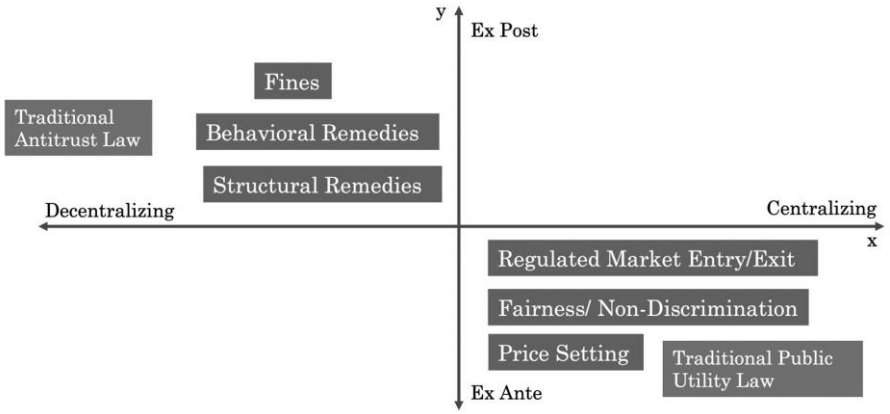
FIGURE 1



The x axis is horizontal and represents a spectrum of approaches to law that go from decentralizing to centralizing: from legal interventions that directly aim to protect and correct decentralized productive processes and individual transactions, or that have this effect, to modes of intervention that intentionally preserve more centralized infrastructures, such as utility regulation, or that have this effect through court enforcement, such as copyright law. The x axis thus goes from policy action that promotes uncoordinated invisible hand transactions and preferences (*e.g.*, some antitrust remedies) to action that preserves more concentrated structures. These can include more structured coordination of productive decisions, infusing predetermined purposes directly into productive structures, consolidating and restructuring firms internally, imposing rules or prescribing conduct. The second axis, the y axis, is vertical: it represents the spectrum from ex ante to ex post forms of regulation, from structural and infrastructural regulation that is durable and applies to entire business segments or industries, to after-the-fact fines and other court-based remedies that are limited in time, reactive, and apply only to a specific defendant on a case-by-case basis.

Figure 2 represents common conceptions of antitrust and utilities as these fields are imagined, reduced, and described in scholarly and popular debates.

FIGURE 2



On the top left is a simplified understanding of classic ex post antitrust remedies. These include remedies issued by a court in response to a complaint by a private plaintiff, or by a regulator such as the Federal Trade Commission or a State Attorney General, and they also include out of court settlement remedies such as those imposed in the *Microsoft* or the *AT&T* cases.[301] They include break up remedies. An illustrative case is the break up of the AT&T telephone and telephone equipment monopoly into seven telephone operating companies and one long distance carrier.[302] They also include sanctions and fines such as those frequently imposed by antitrust authorities in Europe,[303] and those available to the FTC in exceptional circumstances, for example, when the terms of a Consent Order are violated.[304] Even in their more radical forms, these remedies fit the traditional view of antitrust law as a toolkit that does not disrupt or change the structure of markets but mainly corrects obstructions and inefficiencies after the

301. *See, e.g.*, United States v. AT&T, 552 F. Supp. 131, 131 (1982); United States v. Microsoft Corp., 97 F. Supp. 2d 59, 64–65 (D.D.C. 2000). On settlements more generally, see Douglas H. Ginsburg & Joshua D. Wright, *Antitrust Settlements: The Culture of Consent*, *in* WILLIAM E. KOVACIC: AN ANTITRUST TRIBUTE 177 (2013) (articulating the virtues of antitrust settlements); Joshua D. Wright & Douglas H. Ginsburg, *The Economic Analysis of Antitrust Consents*, EUR. J.L. & ECON. 245, 248 (2018) (arguing against settlements); Jonathan M. Jacobson, *Issues in Antitrust Consent Decrees*, Presentation to the Department of Justice Antitrust Division (April 26, 2018) (regarding practicalities related to antitrust settlements).

302. *See AT&T*, 552 F. Supp. at 200–01, 224.

303. Commission Decision (EU) No. 9/08 of 27 June 2017, art. 30, 2018 O.J. (imposing a fine on Google of EUR 2.42 billion for preferential treatment in comparison shopping). Case T-612/17, Google LLC v. Comm'n, 2021 ECLI:EU:T:2021:763, ¶¶ 699–702 (Nov. 10, 2021) (affirming the Commission's decision).

304. Complaint for Civil Penalties, Injunction, and Other Relief, United States v. Facebook, Inc. 456 F. Supp. 3d 105 (D.D.C. July 24, 2019) (No. 91-cv-2184); Press Release, FTC, FTC Imposes $5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook (July 24, 2019) (imposing a $5 billion fine on Facebook for non-compliance with a 2012 Consent Order and for other FTC Act violations).

fact, reflecting Hovenkamp's views on the proper scope of antitrust law as a tool that does not (pre)structure markets.[305]

On the bottom right is a simplified view of traditional public utility regulation, characterized as structural and ex ante and compatible with large concentrations of power in digital markets. Here the tendency is to view legal and regulatory intervention as something that is centrally planned and coordinated. Remedies on this side of the spectrum include nondiscrimination obligations, which require a platform, bottleneck or incumbent to treat all customers, users and suppliers on equal terms.[306] In certain regulated industries, ex ante measures also include the prospective rate setting aimed at avoiding price increases and lowering outputs by monopolists.[307] Traditional ex ante utility measures also include entry and exit restrictions, which, respectively, limit the number of players on a given industry segment, or limit the ability of companies offering essential services at a loss to reduce or terminate those services.[308] And they include measures aimed at ensuring universal access on fair and nondiscriminatory terms, such as common carriage obligations,[309] net neutrality mandates,[310] and universal service requirements.[311]

1. Convergence

If we take those paradigmatic views seriously, then we see that digital antitrust and regulatory attitudes are converging toward the bottom left of the chart in Fig. 3: decentralizing aims & ex ante regulation. Antitrust enforcers are increasingly sensitive to antitrust remedies' role in pre- and restructuring digital ecosystems, and sectoral regulation is now aimed proactively at decentralizing

305. Hovenkamp, *supra* note 8, at 342.

306. For examples of nondiscrimination obligations, see the telecommunications sector where common carriers' tariffs, including tariffed terms, conditions, and rates, must be "just and reasonable." Communications Act of 1934, Pub. L. No. 73-416, §§ 201(b), 202(a), 48 Stat. 1064, as amended. *See also Tariffs*, FCC, https://www.fcc.gov/general/tariffs-0 (last visited Mar. 27, 2024) [https://perma.cc/8VUE-LWH3].

307. Fed. Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 605 (1944) (establishing that the standard for courts' review of rate setting under the Natural Gas Act was that they must be "just and reasonable"); *see generally* Boyd, *supra* note 219 (tracing a history of public utility rate setting).

308. *See, e.g.*, New State Ice Co. v. Liebmann, 285 U.S. 262, 278–89 (1932) (imposing entry restrictions on businesses manufacturing, selling, and distributing ice held to violate the Fourteenth Amendment's Due Process Clause because the business was private and not affected by a public interest).

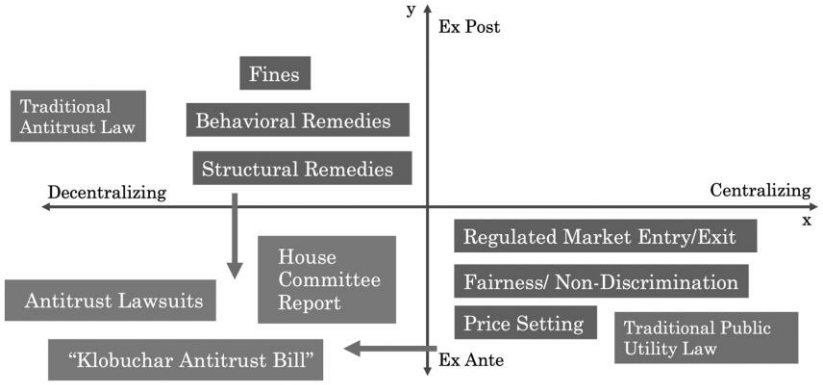
309. *See, e.g.*, Hepburn Rate Act of 1906, ch. 3591, 34 Stat. 584, 584. Section 1(4) imposed a common carrier obligation on pipelines to "provide . . . transportation upon reasonable request therefor" and section 1(5) required common carriers to publish their rates, which must "be just and reasonable; and every unjust and unreasonable charge for such service or any part thereof is prohibited and declared to be unlawful."

310. *See* Act of Feb. 8, 1996, 101 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.) (regulating telcos but not information-service providers as common carriers); *see also* Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 973 (2005).

311. Communications Act of 1934, Pub. L. No. 73-416, § 1, 48 Stat. 1064, 1064 (the industry should be regulated "so as to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges").

digital markets, enabling new entrants to compete against incumbents, promoting consumer choice.[312]

FIGURE 3



Lawsuits against Google and other Big Tech companies challenge power over vertically integrated platform models such as the combination of Android, Chrome, and YouTube, and networks of agreements between providers of upper-layer functionality (*e.g.*, Google Search) and of lower-layer operating systems (*e.g.*, Apple's iOS).[313] These cases seek to impose obligations and structural remedies on companies to enable long-term competition. At the regulatory level, sectoral Bills such as AICOA or the Open App Markets Act have advanced a vision of digital platform markets as more competitive and contestable by default. They envisage statutory obligations and liability on large bottlenecks and incumbents.

In the past, too, antitrust remedies have had long lasting structural effects. The *Microsoft* settlement is one example.[314] The corpus of essential facilities and duty to deal exceptions in antitrust is also forward-looking: it imposes quasi-regulatory duties on certain firms.[315] It has been argued that there are reasons to revive the essential facilities doctrine in technology markets.[316] Duties to license

312. *See* S. 2992, *supra* note 26 and accompanying text.

313. Amended Complaint at 19, United States v. Google LLC, No. 1:20-CV-03010 (D.D.C. Jan. 15, 2021).

314. *See, e.g.*, CNBC Television, *LIVE CNBC Capital Exchange: Big Tech, Big Deals and a New Era of Antitrust*, YOUTUBE, at 20:50 (Jan. 19, 2022), https://www.youtube.com/watch?v=w1iYGE3PVYA (Lina Khan's response to Kara Swisher, discussing Microsoft's acquisition of Blizzard and Chinese competition).

315. A number of cases have led to the demise of the essential facilities doctrine and its construal as a very narrow exception. *See* MCI Commc'ns Corp. v. AT&T, 708 F.2d 1081, 1132–33 (7th Cir. 1983) (establishing the essential facilities test: "(1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility"); *see also* United States v. Terminal R.R. Ass'n of St. Louis, 224 U.S. 383, 394 (1912); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 601–05 (1985); Verizon Commc'ns Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 410–11 (2004).

316. *See generally* Nikolas Guggenberger, *Essential Platforms*, 24 STAN. TECH. L. REV. 237 (2021) (arguing that the essential facilities exception should be applied more expansively in tech markets); Erik Hovenkamp, *The Antitrust Duty to Deal in the Age of Big Tech*, 131 YALE L.J. 1483 (2022) (arguing that two separate lines of cases on duty to deal should be distinguished in light of tech platform challenges).

key telecommunications patents on "Fair Reasonable and Non-Discriminatory" ("FRAND") terms are another example of a preemptive, procompetitive measure.[317] These licensing terms open the market to competitors and promote the development of innovative products based on so-called "standard essential" patents.[318] Overall, visualizing these regulatory attitudes in digital markets highlights that they are far from "laissez-faire." The core contestation is around the form that ex ante procompetitive measures must take. This finding is significant for reasons I now explain.

2. Limits

The visual chart does not purport to explain the role and goals of antitrust, regulation, or competition law in contemporary democratic societies. Although textbook views tend to place antitrust in the top left quadrant and regulation on the bottom right, these bodies of norms and remedies could be mapped differently. Remedies such as interoperability are part of both antitrust and utilities law and can be deployed to serve a range of different functions and ends.[319] Far from obscuring a plurality of functions and rationales, visualizing these modes of regulation elucidates that their province is irreducibly contestable.

There are ways in which antitrust law favors centralized power rather than decentralized competition. As the Supreme Court noted in *Trinko*, the opportunity to charge monopoly prices "is an important element of the free-market system" and "attracts 'business acumen' in the first place; it induces risk taking that produces innovation and economic growth."[320] Chicago School proponents Robert Bork and Richard Posner have emphasized the efficiencies of certain monopolies.[321] Judge Easterbrook's view of markets as inherently self-correcting also justified erring on the side of underenforcement, forgiving many acts of

317. Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 314–16 (3d Cir. 2007).

318. *See, e.g.*, *id.*; Microsoft Corp. v. Motorola, Inc., 696 F.3d 872, 875 (9th Cir. 2012); Apple Inc. v. Samsung Elecs. Co., No. 11-CV-01846, 2012 WL 1672493, at *11 (N.D. Cal. May 14, 2012); FTC v. Qualcomm Inc., 969 F.3d 974, 982–83 (9th Cir. 2020). *See also* Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 CALIF. L. REV. 1889, 1896–98 (2002); Mark A. Lemley & Timothy Simcoe, *How Essential Are Standard-Essential Patents?*, 104 CORNELL L. REV. 607, 609–15 (2019); Carl Shapiro & Mark A. Lemley, *The Role of Antitrust in Preventing Patent Holdup*, 168 U. PA. L. REV. 2019, 2044–48 (2020); Swire, *supra* note 23, at 146–49 (framing data sharing obligations through the lens of FRAND).

319. Note that a similar point is made by Lancieri & Neto, *supra* note 75, at 24 (arguing for synergies between antitrust and regulatory methods).

320. Verizon Commc'ns Inc. v. Law Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

321. ROBERT BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978); *see also* Posner, *supra* note 124, at 564 ("[T]he effort of a businessman to monopolize a market by producing at a cost so low as to drive out his competitors and deter new entry or, the monopoly achieved, to improve his return by lowering his costs still further is not at all reprehensible."). For a critical analysis of this view, see Rudolph J. Peritz, *A Counter-History of Antitrust Law*, 1990 DUKE L.J. 263, 300 (1990) (recognizing an alternative to Chicago's history of antitrust); Paul, *supra* note 73, at 425–29 (reinterpreting antitrust law with a neo-Brandeisian inclination). Note that the Harvard School of antitrust also followed a total welfare standard. *See* Alan J. Meese, *Debunking the Purchaser Welfare Account of Section 2 of the Sherman Act: How Harvard Brought Us a Total Welfare Standard and Why We Should Keep It*, 85 N.Y.U. L. REV. 659, 690–98 (2010) (explaining the appeal of the total welfare-productive efficiencies-based account of antitrust that favors firms over a direct consideration of consumers' well being).

monopolization.[322] In the 1930s, Ronald Coase theorized the firm as a space immune from the rules of competition, separate from the competitive order, where concentrated power and hierarchical relations were acceptable and legitimate.[323] Sanjukta Paul diagnoses these trends and explains that "antitrust law tends to allocate coordination rights, across doctrinal areas, according to criteria that systematically prefer concentrated control over dispersed coordination or cooperation."[324] According to her, antitrust law is far from an ex post body of law with decentralizing effects; it in fact operates as an ex ante body of law that centralizes market power.[325]

Traditional ex ante centralizing utility measures are rare, if nonexistent, in technology markets. Processes of regulation do not take digital markets as naturally monopolistic in a static sense. They are instead modular and incremental. Ex ante rate setting is infrequent and any digital quality and technical standards as well as transparency rules are often designed in an ex post dynamic and reactive manner.[326] For example, the modern internet is built on technical standards and protocols managed and updated by the Internet Engineering Task Force, an association of private network designers, operators, vendors, and researchers.[327] Similarly, the World Wide Web Consortium, an association of private companies and other stakeholders, is responsible for developing technical standards for the web.[328] Besides technical standards, privacy and disclosure rules also sit ambiguously across ex ante and ex post paradigms. The California Consumer Privacy Act ("CCPA"), for example, establishes ex ante obligations for businesses to reactively respond to data access and portability requests:

> A business that receives a verifiable consumer request . . . to access personal information shall promptly take steps to disclose and deliver, free of charge . . . the personal information required . . . .[329]

Interoperability and data portability remedies are versatile.[330] This is a family of remedies that sits across antitrust and various regulatory regimes.

322. Easterbrook, *supra* note 11, at 2–3.

323. *See generally* R.H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937) (explaining the nature of the firm in terms of information externalities).

324. Paul, *supra* note 73, at 383.

325. *Id.* at 395–96.

326. Standard setting may be the equivalent of price setting in some digital contexts. *See* Tejas N. Narechania, *Machine Learning as Natural Monopoly*, 107 IOWA L. REV. 1543, 1598 (2022) ("[R]egulators may adapt traditional rate-setting approaches—rate-of-return regulation and price-cap regulation—to the monopolists' information collection practices, setting out rules for data collection and use.").

327. *About Us*, INTERNET ENG'G TASK FORCE, https://www.ietf.org/about/ (last visited Mar. 27, 2024) [https://perma.cc/QK5V-D9VK].

328. *About Us*, WORLD WIDE WEB CONSORTIUM, https://www.w3.org/Consortium/ (last visited Mar. 27, 2024) [https://perma.cc/DG29-4PZY].

329. California Consumer Privacy Act of 2018, § 1(d), CAL. CIV. CODE. § 1798.100(d) (2020) (amended 2023). The California Privacy Rights Act of 2020, coming into force in January 2023, has added protections to the CCPA.

330. Elettra Bietti, *Explainer: Competition, Data and Interoperability in Digital Markets*, PRIV. INT'L (Aug. 20, 2020), https://privacyinternational.org/explainer/4130/explainer-competition-data-and-interoperability-digital-markets [https://perma.cc/H4T9-GM9B] (presenting a taxonomy of interoperability). *See also* JACQUES CRÉMER, EUR. COMM'N, YVES-ALEXANDRE DE MONTJOYE & HEIKE SCHWEITZER, COMPETITION POLICY FOR

Interoperability in particular is a term that exists in both antitrust law and regulatory law and has many applications.[331] The UK Furman Report states that digital marketplaces' tendency to tip could be remedied through measures including what the report calls "data mobility," "portability," and "interoperability," whose overall promise is to create greater choice in digital environments.[332] Interoperability is "the ability to transfer and render useful data and other information across systems, applications, or components"[333] or "a technical mechanism for computing systems to work together—even if they are from competing firms."[334]

These remedies structure and react, centralize and decentralize productive functions. They illustrate that the boundaries between antitrust, regulation, and utilities are fluid, and that each of these categories is capable of remaking the others. Mapping regulatory possibilities in the digital economy, therefore, entails viewing existing remedies as part of contested families of approaches whose precise specification depends on function, purpose, and context.

3. Lessons

In addition to showing us that antitrust and regulation are hybrid and contested families of remedies, this mapping exercise also carries some lessons.

The most obvious one is that antitrust and utility regulation are not the polar opposites they are sometimes claimed to be in popular or policy discourse but are best understood as contested points on a common spectrum or map. They are functionally aligned. They substitute for and complement each other. They can each centralize and decentralize, and manifest in structural or reactive forms.

Another lesson from this mapping exercise is that the convergence toward ex ante decentralization crystallizes an existing normative consensus in policy circles around promoting competition and consumer choice in digital markets. This broad consensus is significant in two ways. On the one hand, it crystallizes a recognition that markets, and in particular competitive markets, are made and not found. Perfect competition lives in textbooks. In real markets, competition requires more than minimal ex post correction; it requires durable preemptive structuring.[335] This seems particularly salient in platform ecosystems: markets formed through conscious infrastructural choices. Without holding those who

THE DIGITAL ERA, PUBL'NS OFF. OF THE EUR. UNION 83–85 (2019) (describing different forms of interoperability); Michael Kades & Fiona Scott Morton, *Interoperability as a Competition Remedy for Digital Network* 2 (Wash. Ctr. for Equitable Growth, Working Paper, 2020) (arguing for interoperability as a remedy in tech platform settings).

331. *See* Swire, *supra* note 23, at 66–67.

332. JASON FURMAN, UNLOCKING DIGITAL COMPETITION, REPORT ON DIGITAL CHALLENGES AND COMPETITION 8–11 (2019) https://assets.publishing.service.gov.uk/media/5c88150ee5274a230219c35f/unlocking_digital_competition_furman_review_web.pdf [https://perma.cc/HU9A-BZWA].

333. Urs Gasser, *Interoperability in the Digital Ecosystem* (Harv. Univ.: Berkman-Klein Ctr. for Internet & Soc'y, Rsch. Publ'n No. 2015-13, July 6, 2015) (defining interoperability).

334. IAN BROWN, INTEROPERABILITY AS A TOOL FOR COMPETITION REGULATION 5 (2020) (providing an overview of interoperability in the digital economy).

335. But *see* Easterbrook, *supra* note 11, at 39 (arguing in favor of underenforcement and the ex post nature of antitrust).

control platform ecosystems in check, and ensuring contestability over digital bottlenecks, these markets will not be "competitive." Competition requires creating options and standards, imposing interoperability and nondiscrimination obligations. It requires enabling new entrants to compete with incumbents, and enabling the exercise of individual choice and switching. In other words, competitive digital markets are constituted through law, and in particular through antitrust and regulatory strategies that aim to create opportunities for distributed participation and choice while holding bottlenecks to account.

At the same time, this same consensus reflects a longstanding Hayekian (or "neoliberal") faith in distributed individual preferences in markets. Indeed, the vision motivating reforms such as the AMERICA Act or AICOA, as well as the vision underlying some antitrust lawsuits, is one of perfect competition and contestability in digital markets: a scenario in which a multiplicity of platform providers can coexist and offer services to users and customers who in turn can switch without friction between platforms. The hope, for many, is that a mix of antitrust lawsuits and regulatory reforms might create a radically more decentralized platform economy governed by individual preferences and entrepreneurial freedoms, instead of the whims of platform giants.

The limits of the consensus around individual preferences in competitive markets is what I turn to now.

B. Pragmatism in the Digital Platform Economy: Integrating Remedies and Values

A joint approach to antitrust and utilities or other economic regulation is not new: it is underway in tech markets and it can help address harms that sit in the forgotten interstices between legal domains. How should regulators think about this joint approach?

What is needed is a method that reconfigures market regulation efforts along functional, instead of doctrinal, axes.[336] This method is pragmatic, or experimental, in that it allows pooling bodies of doctrine and remedies in context-sensitive ways. In the words of Charles Sabel and Jonathan Zeitlin, "experimentalist governance is a recursive process of provisional goal-setting and revision based on learning from the comparison of alternative approaches to advancing [goals] in different contexts."[337]

The experimentalist exercise, which can apply to various policymaking contexts, follows three steps. First, one must define the *ends* of legal intervention, that is the interests, harms, goals or values that justify legal intervention, such as reform, or judicial determination. Most regulatory and judicial efforts are supported by narrow conceptions of efficiency, externality or transaction costs,

336. The term "pragmatic" refers to John Dewey's approach to regulation which consists in a contextual definition and tailoring of means and ends. *See generally* DEWEY, *supra* note 208.

337. Sabel & Zeitlin, *supra* note 295, at 169. *See also* Morgan & Sabel, *supra* note 295, at 76 ("Experimental Governance (EG)—a form of multi-level organization in which framework goals are routinely corrected in light of the ground-level experience of implementing them.").

competition, choice, and consumer welfare that facially generate consensus. As noted, lawyers tend to assume that legal intervention is only justified where markets do not perform their proper function. The aim of this first step is to consider a broader range of ends to support legal intervention. In this sense, ends can include increasing the variety of travel aggregator options available on Google Search, increasing data sharing between social media operators, limiting data collection in online advertising markets, enhancing consumer choice by providing better search engine options, or advancing competition and innovation by funding generative AI startups.

Second, one must define the scope of available *means*, *i.e.* remedies, doctrines and institutions, which could advance the ends described. What is important here is to counteract doctrinal resistance to creative thinking around legal remedies. Investigating means need not be limited to existing remedies and could consist in designing new remedies that better address given ends. Old and new remedies can be imposed in tandem to address new digital problems. Algorithmic disgorgement, for example, is a relatively novel remedy designed to address emerging algorithmic abuses.[338] But more settled and longstanding standard-setting mechanisms or utility-like measures could equally help address some hard issues in emerging AI markets.[339]

Third, experimentalist scholars speak of the importance of reflexive learning, ensuring that the means are responsive and narrowly tailored to the ends. Experimentalism requires institutional mechanisms that facilitate the identification of mistakes and the dynamic adjustment of means and ends. The integration of an antitrust lawsuit with a regulatory framework such as the AMERICA Act or the Digital Markets Act cannot be successful without systematic and institutionalized feedback channels and constant monitoring.[340] The adoption and the effort to implement and clarify the scope of the Digital Markets Act and its relation to antitrust enforcement efforts in Europe is already an important terrain of experimentation and comparison for any future regulatory efforts in the United States.[341]

Seen as a process that integrates *means* and *ends*, digital governance becomes a process of iterative learning and adaptation to new conditions. In this

338. Rohit Chopra, Commissioner, FTC, In the Matter of Everalbum and Paravision Commission File No. 1923172 (Jan. 8, 2021), https://www.ftc.gov/system/files/documents/public_statements/1585858/updated_final_chopra_statement_on_everalbum_for_circulation.pdf [https://perma.cc/XKA2-37T2]:

> First, the FTC's proposed order requires Everalbum to forfeit the fruits of its deception. Specifically, the company must delete the facial recognition technologies enhanced by any improperly obtained photos. Commissioners have previously voted to allow data protection law violators to retain algorithms and technologies that derive much of their value from ill-gotten data. This is an important course correction.

See also Tiffany C. Li, *Algorithmic Destruction*, 75 SMU L. REV. 479, 498–505 (2022) (discussing such remedies).

339. Narechania & Sitaraman, *supra* note 152.

340. *See generally* Van Loo, *The Missing Regulatory State: Monitoring Businesses*, *supra* note 137.

341. Press Release, European Commission, Commission Sends Preliminary Findings to Apple and Opens Additional Non-Compliance Investigation Against Apple Under the Digital Markets Act, (June 24, 2024), https://ec.europa.eu/commission/presscorner/detail/en/IP_24_3433.

way, digital governance can face new and changing digital governance challenges.

1. Integrating Means: Remedies, Processes, Institutions

Filippo Lancieri and Caio Mario Pereira Neto have provided an error cost framework which guides the adoption of remedies across different areas of economic regulation including antitrust and utility-like regulation.[342] They argue that "[r]emedy design . . . [reflects] a continuum distribution of possibilities that can and should be modulated in intensity: authorities must choose one or a couple of solutions from a range of available interventions."[343] They see regulation as a "learning process that enables the reduction of over- and underenforcement errors in remedy design and implementation over time."[344] They suggest a framework that first identifies the unlawful conduct, then assesses remedies functionally, and finally compares different possible institutions and authorities able to address the conduct or impose the remedy. They also mention a fourth step which includes monitoring any remedies after they are imposed.

William Rogerson and Howard Shelanski also offer a method for combining antitrust and regulatory remedies.[345] They identify some virtues and limits of antitrust enforcement: it affords stability, develops slowly, is case-by-case and ex post.[346] Antitrust, however, leads to underenforcement: it leaves some pressing issues, such as predatory pricing, underexplored because case selection is driven by the market and not by what expert regulators consider urgent to clarify judicially.[347] The digital context begs instead for an informed and coordinated regulator.[348] Yet when is such coordinated regulation justified? Rogerson and Shelanski suggest a test to determine when regulation is needed: (1) does the monopoly conduct meet "criteria of economic harm, durability and remediability" that warrant intervention? and (2) are "available regulatory mechanisms . . . in fact likely to remedy . . . harm . . . without creating equally harmful side-effects for consumers"?[349]

These cost-benefit approaches could guide economic regulation in the platform economy and open the door to synergies between antitrust and other legal strategies. What they miss, however, is that there is no neutral universal framework by reference to which one defines "economic harm" and assesses "side-effects for consumers" so as to determine appropriate remedies in any given context. These authors' views on what constitutes a "harm" or a justified externality in this context might not be the views of a privacy or speech scholar considering the same context. While some harms may be universally recognized as urgent,

342. Lancieri & Neto, *supra* note 75, at 24.
343. *Id.* at 26.
344. *Id.* at 27.
345. *See generally* Rogerson and Shelanski, *supra* note 5.
346. *Id.* at 1917–21.
347. *Id.*
348. *Id.* at 1923–24.
349. *Id.* at 1924.

others are irreducibly contested. A methodological shift that overcomes doctrinal boundaries in enforcement cannot stop at procedural integration. It must also embrace contestation over the goals of regulation, and the extent to which dominant conceptions of the role of individual choice, externalities, and efficiencies should drive and justify regulatory intervention.

2. Contesting Ends: Values and Goals

Revisiting the normative premises of existing and future enforcement approaches is key to ensuring that antitrust and sectoral policymaking adapt to the digital context. Policymaking is not just a procedural endeavor, or a deliberation about *means*. It is also and always a dynamic process of deliberation about values, goals, or *ends*. Regulation is often justified in terms of purified externality or transaction cost arguments, as if these were uncontroversial notions that exclusively justified one or another form of intervention. Lack of contestation about values produces regulatory siloes and blind spots.

There is no need to go very far into the justifications for antitrust and regulatory intervention to see that even the most conventional justifications for underenforcement are highly contestable and implicate different *means* of regulation. There is significant contestation even around widely adopted concepts such as the externality, the social cost imposed on third parties by market transactions.[350] One approach is to argue that the best way to allocate and remedy these costs is to let their allocation be determined through exchange of individual preferences on markets. In his article "The Problem of Social Cost," Coase argued that all social costs can be internalized by the market and addressed through market transactions.[351] For example, pollution can be governed by allowing individuals to elicit their willingness to pay to pollute or to be paid to suffer the harm of pollution by allowing the correct price for these "costs" to be determined on the market.[352] Similarly, surveillance could ideally be governed by allowing individuals to opt in or out of surveillance-based services. Coase's view denotes a deregulatory preference.

Other approaches to externalities and social costs are less deferent to the self-correcting market. Arthur Pigou, on the one hand, argued that pollution required exogenous regulatory intervention such as the imposition of taxes on polluters. Other theorists such as Alyssa Battistoni, on the other hand, focus on the need to reorganize productive relations to minimize asymmetric exposure to pollution and to subject pollution to the democratic will.[353] Surveillance scholars that argue for regulating data flows more directly or in more egalitarian ways follow a similar impetus.

350. Alyssa Battistoni, *Rethinking Domination in the Age of the Externality* 1 (2023) (draft on file with author).

351. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 1–2 (1960).

352. *Id.* at 16.

353. *Id.* at 44.

These examples show us that even the narrowest and most widely accepted economic justifications for legal intervention (externalities), and the solutions to them, are contested and unstable. Markets produce social harms like pollution, surveillance, addictive propensities, and the erosion of trust in institutions, and yet the nature of such harms, how markets propagate them, and how these harms can be addressed through laws such as antitrust and sectoral regulation remain highly contested.

Understanding social harm and the justifications for legal intervention as contested only accentuates the need to overcome doctrinal siloes. Dominant justifications for limiting regulatory intervention in allegedly competitive markets and for preferring antitrust, such as efficiencies or regulatory capture, are contestable normative and ideological choices. On the other hand, the justifications for adopting common carrier obligations, utility-like standard setting, and entry/exit restrictions may have never been as strong in digital markets.[354] One cannot blankly dismiss them by alleging that these *means* of regulation undermine efficiency or competition. Any approach to law in markets must be sensitive to normative contestation around the missions and boundaries of antitrust and other forms of economic regulation.

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Recognizing the antitrust-regulation convergence generates new questions not only on the *means* but also on the *ends* of regulatory intervention in digital platform markets. It prompts a departure from abstract conventional slogans such as "competition," "innovation," "choice" or "externalities" in favor of more concrete engagement with situated harms, weighted value determinations, and proportionate remedies. I have proposed a methodology that embraces contestation over the ends of regulation and the means of pursuing them and that is context-sensitive. The method is an imperfect science. It should serve as inspiration to guide legislators, stakeholders, and experts in determining the interplay of antitrust and regulatory domains of law: how to design, adjudicate, and implement new policies, reform packages, bills, guidelines, or strategies more tailored to the problems and tools at hand.

C. Pragmatism in Practice: Markets and Society's Dynamic Co-Dependence

The method just introduced could have significant implications for policymaking in the short and longer term. A reflective approach to the ends being pursued and the means at hand can redirect digital policy toward more adaptive approaches that identify regulatory blind spots and opportunities for synergies between policy domains.

354. *See, e.g.*, Ganesh Sitaraman & Morgan Ricks, *Tech Platforms and the Common Law of Carriers*, 73 DUKE L.J. 1037 (2024).

1. Beyond Individual Choice in Digital Platform Markets: The Limits of AICOA

As discussed, "light-hand procompetitive regulation" has recently been considered in Congress. Key examples include AICOA as well as the European DMA, which is AICOA's EU counterpart. As noted, these reforms break with digital markets' underenforcement past, and none of them are considered antitrust or competition laws. They are ex ante instruments intended to impose certain statutory obligations on platform gatekeepers like Google so as to enable more competition and consumer choice. Their relation to traditional antitrust law regimes will be determined through a learning process.

The philosophy underlying these proposals is an optimistic vision of competition and consumer choice in platform markets fostered by structural and behavioral sectoral measures such as prohibitions on self-preferencing, discriminatory terms of service, bundling and obligations to respond to interoperability, and data access requests. AICOA is framed as a regulatory instrument to be enforced through litigation initiated by a Federal agency like the FTC or by state attorneys general, not individuals. Enforcement of DMA obligations is primarily up to the European Commission, in cooperation with national authorities and courts.[355] Under the DMA, investigations can be started by a request of three or more Member States.[356] Class actions are also allowed under the DMA.[357] The *ends* or goal of these reforms is competition and increasing entrepreneurs' and consumers' choices in digital markets, the ability of businesses to enter new market segments, and of consumers to *switch* between platform providers. The idea is to favor the emergence of new digital options and to give users the ability to switch between these options.

The DMA and similar reforms, however, have limits. Their *ends* is a relatively narrow neoliberal view of choice in competitive markets. The ultimate power to determine the shape of platform infrastructures and available consumer options is left to private companies. These reforms remain committed to a vision of self-correcting markets as autonomous efficient devices guided by preference signals. Social and structural preoccupations such as how to ensure that nonprofit search models are sustainable or how to fund digital businesses in ways that might avoid surveillance advertising do not feature as part of these reforms. As such the reforms favor some interests and obscure others. DMA continues to assume that there is a realm of "competition" detachable from the ordinary operation of law and politics that can be switched on then left "alone." What is missing is a realistic assessment of the values or *ends* at play in the construction and reconstruction of markets.

What other possible understandings of competition and consumer choice could compete with those embedded in these frameworks? What do consumers and businesses need and want from these markets and infrastructures? Favoring

355. *See supra* Subsection III.D.2.
356. Council Regulation 2022/1925, 2022 O.J. (L 265) 58.
357. *Id.* art. 42.

switching and the ability of individuals to opt in or out of preexisting platform infrastructures is a timid normative choice. Instead, new laws could focus on the possibility of public provision of certain digital services, on the importance of incentivizing nonprofit and decentralized platform infrastructure models such as Wikipedia or Mastodon, on sustaining public repositories of data and content in the face of growing privatization and platformization of the digital public sphere through generative AI.

These existing procompetitive Bills, instead, represent a political compromise. AICOA and the DMA treat competition as a neutral valueless ideal and continue to hide what really is at stake. More competitive digital platform ecosystems will not afford more empowered digital choices. Choice between market provided digital goods will not be enough in the absence of a conscious market-structuring exercise. They choices are likely to keep people locked into opaque ecosystems prone to surveillance and other extractive logics. DMA-like reforms may bring about more options, but these options are likely to remain qualitatively limited—they will continue to be driven by profit rationales and riddled with their harmful side-effects (surveillance, addiction, mistrust, social fragmentation, inequality).

An antidote to these threats is the experimentalist approach I introduced. We need to think about the *ends* of regulatory instruments such as DMA or AICOA, and how these reforms might interact with antitrust law and other existing frameworks. Instead of relying on the abstract terminology of individual choice and competition, we might ask what values should be embedded or dynamically infused in search or advertising ecosystems. What productive structures would best advance a diverse, inclusive, open, informative, non-addictive, and possibly egalitarian search or platform ecosystem? The antidote, in other words, is to think beyond externalities, efficiencies, and narrow understandings of choice that guide the doctrinally siloed domains of antitrust law, and utilities, and instead to open up those ends to contestation, asking what competition or choice could look like in the economies of the future, and how different regulatory frameworks and legal domains might help us build markets that enable the production of the social and economic goods people want and need. A more diverse and competitive search landscape or publicly provided search engines are two possibilities for the future: both more attractive than the status quo; both subject to democratic and political contingency, both achievable through law; and neither contradicts the other.

VI. CONCLUSION

The ideal of self-correcting competitive markets as an economic and policy default has hindered and delayed proper acknowledgement of new manifestations of harm, control, and knowledge asymmetries in technology platform markets. Against the grain of many conventional accounts, antitrust and economic regulation coexist by transforming each other dynamically. They should be considered part of a joint coextensive toolbox that encompasses ex ante and ex post, as well as centralizing and decentralizing regulatory strategies. Antitrust,

regulation and utility regulation mutually constitute each other and are part of a joint umbrella of approaches to law and institutions whose boundaries are irremediably fluid. In digital platform contexts in particular, how we interpret their relationship depends on our normative priors, and whether we are open to viewing markets and society as codependent. Any discussion of disciplinary boundaries and remedies cannot be divorced from a normative contestation of the values that the regulation of different markets or productive functions can and ought to advance as markets and technological artifacts change. Focusing legal efforts on the constitutive question of what markets or productive processes are for, instead of whether they are efficient or what volume of transactions they afford in the abstract, means re-aligning markets' functions to society's more pressing needs.