

Free the Market
How We Can Save Capitalism from the Capitalists

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How We Can Save Capitalism from the Capitalists¹

Mark A. Lemley²

The twentieth century saw the triumph of capitalism. By the end of the 1990s, the verdict of history seemed clear: the free market worked.³ Competition brought new innovations, lower prices, freedom, and a shared prosperity in which a rising tide lifted all boats.⁴ Countries that embraced capitalism prospered, while those that chose communism or authoritarian control over the private sphere languished. With the fall of the Soviet Union, Francis Fukuyama could declare “the end of history.”⁵ We’d figured out how to make the world better. Not perfect, surely, but better. The course of history was one in which the lives of people were destined to improve over time.

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² William H. Neukom Professor, Stanford Law School; of counsel, Lex Lumina PLLC. Thanks to Susan Athey, Barton Beebe, Jamie Boyle, Darren Bush, Mike Carrier, Deven Desai, Cory Doctorow, Robin Feldman, Hank Greely, Rose Hagan, Christopher Leslie, Steve Salop, Jason Schultz, Fiona Scott Morton, Chris Sprigman, Rory Van Loo, and participants at the Concurrences tech antitrust conference and a program at Google for comments on an earlier draft and Aidan Faustina for research assistance.

³ See Guy de Jonquières, *The world turned upside down: the decline of the rules-based international system and the rise of authoritarian nationalism*, 54 INT’L POL. 552, 553 (2017) (discussing how the spread of free market democracies across the globe contributed to increases in economic prosperity).

⁴ See *id.* (“Hundreds of millions of people have been lifted out of poverty . . . while once impoverished or backward economies, such as China, Japan, South Korea, Singapore and Taiwan, have industrialised and risen up the development ladder. Meanwhile, many countries have been transformed from dictatorships into democracies, albeit often imperfect ones.”).

⁵ FRANCIS FUKUYAMA, *THE END OF HISTORY AND THE LAST MAN* (1992).

A quarter century later, political and economic freedom is in retreat around the world. Country after country has turned away from the promise of a global free market and towards authoritarian nationalism.⁶ Countries like the United States that seem to have most clearly embraced capitalism are in decline, their influence in the world waning.⁷ The engine of progress seems to have stalled; economists puzzle over a long-term decline in productivity⁸ while markups – the amount price exceeds cost – are growing.⁹ The U.S. spends almost twice as much money on healthcare than as other country in the world – and gets less for it, with health outcomes below any other country in the developed world and even some in the developing world.¹⁰ Wealth inequality has surged in the US in the last forty years.¹¹ And while it used to be said that a rising tide lifts all boats, people (except at the very top) are no better off than they were forty years

⁶ See Michael A. Peters, *The end of neoliberal globalisation and the rise of authoritarian populism*, 50 EDUC. PHIL. AND THEORY 323 (2018).

⁷ See de Jonquières, *supra* note 3, at 553-54 (discussing reasons why the influence of the United States as a world leader has decreased in recent years); Anu Bradford, *THE BRUSSELS EFFECT: HOW THE EUROPEAN UNION RULES THE WORLD* (2020).

⁸ JAMES BESSEN, *THE NEW GOLIATHS: HOW CORPORATIONS USE SOFTWARE TO DOMINATE INDUSTRIES, KILL INNOVATION, AND UNDERMINE REGULATION* (2022); ROBERT J. GORDON, *THE RISE AND FALL OF AMERICAN GROWTH* 16 (2016) (showing the drop in productivity growth); Fiona Scott Morton, Kartikeya Kandula & Karissa Kang, *Do We Need a New Sherman Act?*, 2022 COLUM. BUS. L. REV. 42, 42 (2022) (“Since 1980, evidence has accumulated that the United States economy is becoming less dynamic and less competitive.”).

⁹ Robert E. Hall, *New Evidence on the Markup of Prices Over Marginal Costs and the Role of Mega-Firms in the U.S. Economy*, <https://web.stanford.edu/~rehall/Evidence%20on%20markup%202018>.

¹⁰ See <https://www.commonwealthfund.org/publications/issue-briefs/2023/jan/us-health-care-global-perspective-2022>.

¹¹ CHAD STONE ET AL., CENTER ON BUDGET AND POLICY PRIORITIES, *A GUIDE TO STATISTICS ON HISTORICAL TRENDS IN INCOME INEQUALITY* (2020), <https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality>.

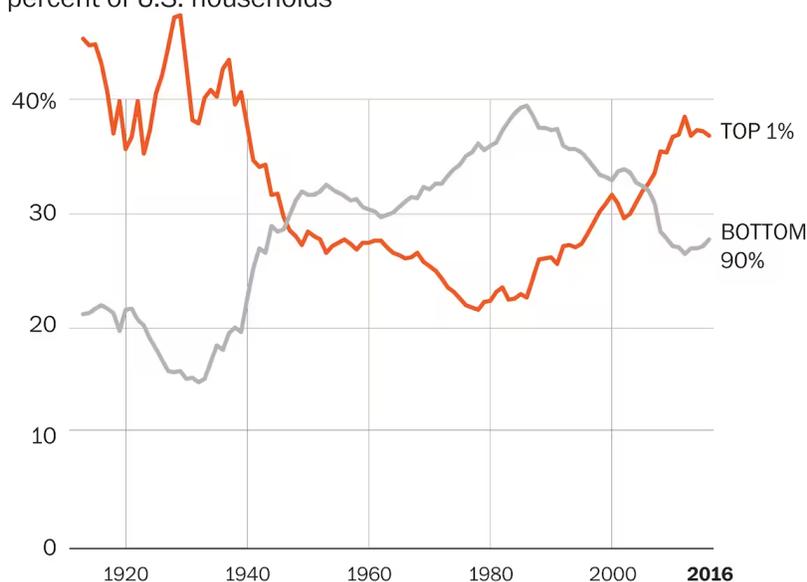
ago.¹² People today speak not of globalism and the end of history, but of “late-stage capitalism.”¹³ The (usually unspoken) assumption is that capitalism is dying, and that the future belongs to an unspecified something else.

What happened? In this Essay, I argue that capitalism didn’t fail us; capitalists did. I continue to believe that a robust free market, appropriately regulated, is the best

¹² *Id.*; Christopher Ingram, *For the first time, workers are paying a higher tax rate than investors and owners*, THE WASHINGTON POST (Oct. 16, 2019), <https://www.washingtonpost.com/business/2019/10/16/us-now-taxes-wages-higher-rate-than-capital-fueling-income-inequality-study-finds/>.

Wealth inequality surges since 1980

Share of national wealth owned by the top 1 percent and bottom 90 percent of U.S. households



Source: Emmanuel Saez and Gabriel Zucman

THE WASHINGTON POST

The same is true of income inequality, though the numbers are not quite as stark. The top 1% of earners grew from 10% of all income in the United States to 19% from 1980-2020; the number is only 13% in the U.K. and 10% in France. Lancieri et al., *supra* note __, at 501.

¹³ Annie Lowrey, *Why the Phrase 'Late Capitalism' Is Suddenly Everywhere: An investigation into a term that seems to perfectly capture the indignities and absurdities of the modern economy*, THE ATLANTIC (May 1, 2017), <https://www.theatlantic.com/business/archive/2017/05/late-capitalism/524943/>.

economic system ever devised for increasing wealth and human happiness. Not a perfect one; far from it. The market needs to be tempered with regulation aimed at its imperfections. Still, like democracy,¹⁴ the market is the worst form of economic distribution . . . except for everything else.

But it turns out that the very last thing capitalists want is a free market. *Capitalism* may thrive under conditions of robust market competition, but most *capitalists* don't. They would much rather operate in an environment free from government restraint but also free from the discipline of a truly competitive market.

Unfortunately, we have obliged them. At every turn, we have allowed the dominant forces in a market to erect barriers to protect themselves from being dislodged and to maximize their own profits at the expense of everyone around them – not just competitors but suppliers, workers, and consumers.¹⁵ The result has been that while we have a capitalist economy, we no longer have a free market. Nearly every market sector is less competitive today than it was fifty years ago.¹⁶ We have centralized control over

¹⁴ *The Worst Form of Government*, INTERNATIONAL CHURCHILL SOCIETY, <https://winstonchurchill.org/resources/quotes/the-worst-form-of-government/> (last visited Sept. 16, 2023) (“democracy is the worst form of Government except for all those other forms that have been tried from time to time . . .”).

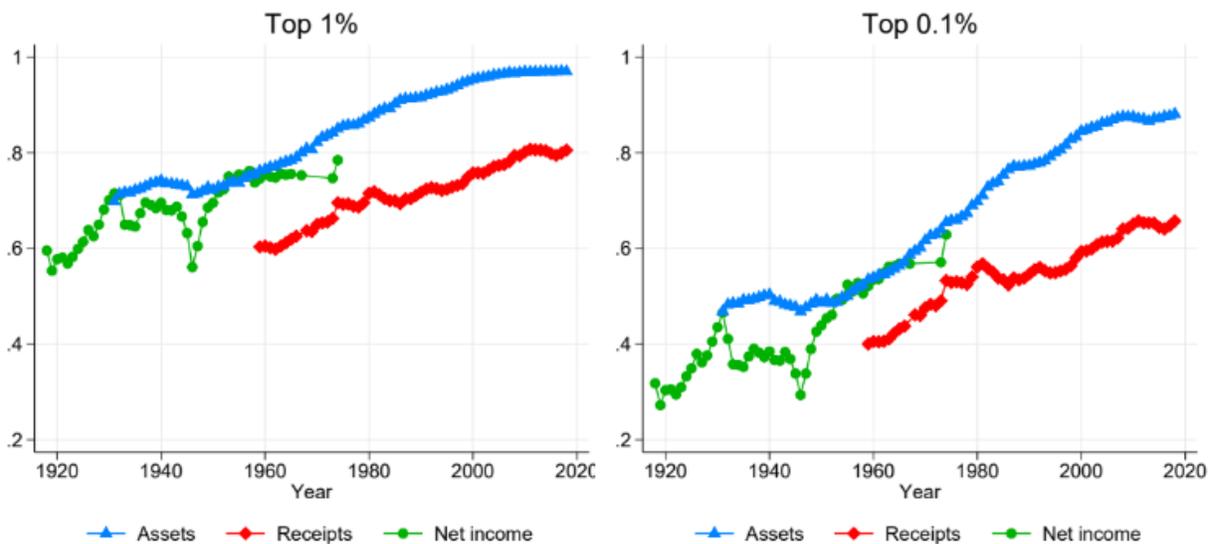
¹⁵ See *infra* __; Yanis Varoufakis, TECHNOFEUDALISM: WHAT KILLED CAPITALISM.

¹⁶ Yueran Ma, *New Data Shows the Rise of Corporate Concentration in the US in the Past 100 Years*, PROMARKET (Apr. 21, 2022), <https://www.promarket.org/2022/04/21/new-data-shows-the->

important sectors of the economy in a handful of companies.¹⁷ And we have given them the tools to use that control to prevent new competition, to make it hard for consumers to take advantage of what competition there is, to drive down wages, and to extract as much short-term profit as possible rather than invest in long-term productivity.¹⁸ And indeed they have done so, raising markups and profitability at the expense of consumers and workers.¹⁹ Late-stage capitalism isn't the free market run amok. It is the capture of markets by actors who have a vested interest in making sure there *is* no free market. And the consequences have been dire, not only for consumers, but for inequality and political stability in the U.S. and throughout the world.

The good news is that we have the tools to reverse that process and to free the market – and many of them are legal tools. These are big problems; much bigger than the

rise-of-corporate-concentration-in-the-us-in-the-past-100-years/.



¹⁷ See *id.*

¹⁸ See *infra* ____.

¹⁹ See Jan de Loecker et al., *The Rise of Market Power and the Macroeconomic Implications*, 135 Q.J. Econ. 561 (2020) (finding a rise in aggregate firm markups (the extent to which price exceeds cost) from 21% in 1980 to 61% forty years later).

law. But many of these problems are traceable to our failure over the past forty years to enforce legal rules that regulate markets. Enforcing the laws we have will make a good start at undoing this harm. There are also a number of other laws we can pass that can help free the market. And one agency – the Federal Trade Commission – has both the authority and the motivation to open markets to competition. In the sections that follow, I discuss the ways in which capitalists have prevented market competition and how we can reverse those changes.

I. Blocking Competition

The reason capitalism works better than government control of markets isn't that individual businesspeople are better planners than government officials. There is no reason to think that's true.²⁰ No one has a monopoly on knowledge of the future. Any individual company owner may be stupid, short-sighted, lazy, or all three, just as central planners might. And some famous billionaires have recently driven home the point that you can be rich, successful, and still be a petulant man-child who runs his company into the ground.²¹ But even if they are smart and industrious, business leaders may simply

²⁰ See Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. REV. 129, 149 (2004) ("Individual companies are neither omniscient, pure-hearted, nor necessarily rational. Indeed, at best, they are out to line their pockets with as much money as they can find. No less a capitalist than Adam Smith warned us not to expect individual private companies to behave in the public interest.") [hereinafter Lemley, *Justifications*]; Christopher R. Leslie, *Rationality Analysis in Antitrust*, 158 U. PA. L. REV. 261, 274-77 (2010).

²¹ Oliver Darcy, *Elon Musk has officially killed Twitter. The zombie platform lives on as X, a disfigured shell of its former self*, CNN (July 25, 2023), <https://www.cnn.com/2023/07/24/media/twitter-x-reliable-sources/index.html>.

guess wrongly about what consumers will want next year or what new technologies will arise to reshape the market, just as central planners might.

Rather, the free market works because no one person or company is making the decisions.²² In a competitive market, businesspeople make the wrong decisions all the time, just as central planners do. But the consequences of those decisions don't infect the market as a whole. Businesses that guess wrong lose money or go out of business.²³ But as long as there is a competitor out there who guesses right, the market provides people what they want.²⁴ But that is likely only if there are multiple competitors making independent decisions.

It is easy to lose sight of that fact. It is all too common in certain circles to extol the virtues of private enterprise as a good in itself – to assume that decisions made by businesses are trustworthy because they are made by businesses. But it is not that capitalists are any better than regulators at seeing the future; capitalism works because the ones who get it wrong fail and are replaced by the ones who get it right.

But that system only works if we have robust market competition. A company that doesn't face competition may make the wrong decision without facing market discipline. If we have no choice, we are stuck trusting the decisions of a single planner just as we would be in a planned economy.

²² See Lemley, *Justifications*, *supra* note 20, at 149 (“The reason we can generally rely on private ordering to produce desirable outcomes is . . . because individual companies are constrained by the discipline of a competitive market. If they are irrational, or poorly informed, or too greedy, other companies will outperform them and take their place.”).

²³ See *id.*

²⁴ See *id.*

In fact, we are likely to be even worse off. Government central planners might at least try to operate with the public interest in mind. Businesspeople unconstrained by competition feel no such compunction. To the contrary, they are repeatedly told that “greed is good”²⁵ and that their job is to maximize their short-term profits.²⁶ Those businesspeople aren’t going to make decisions in the public interest. These days, they aren’t even likely to act in their own company’s long-term best interest.²⁷ They will do whatever makes them the most money today. The only way capitalism works is if competitors can drive them out when their greed leads them to make decisions that help them but hurt everyone else.

Unfortunately, the last forty years have seen the elimination of competition in wide swaths of the economy. The average number of competing firms has dropped in almost all major industries, leaving consumers with fewer choices than they had in previous years for virtually everything.²⁸ And industry after industry has market

²⁵ 20th Century Home Ent, *35 years ago, Gordon Gekko delivered his notorious "Greed is Good" speech in "Wall Street".*, YOUTUBE (Dec. 11, 2022), <https://www.youtube.com/watch?v=kzKE-ErSBN0>.

²⁶ See Jena McGregor, *Group of top CEOs says maximizing shareholder profits no longer can be the primary goal of corporations*, WASHINGTON POST (Aug. 19, 2019), <https://www.washingtonpost.com/business/2019/08/19/lobbying-group-powerful-ceos-is-rethinking-how-it-defines-corporations-purpose/> (noting one pushback against the overwhelming consensus).

²⁷ See *id.* (discussing how the Business Roundtable, which represents the chief executives of 192 large companies, has warned that the short-term decisions made by many CEOs do not benefit the “long-term health” of their businesses).

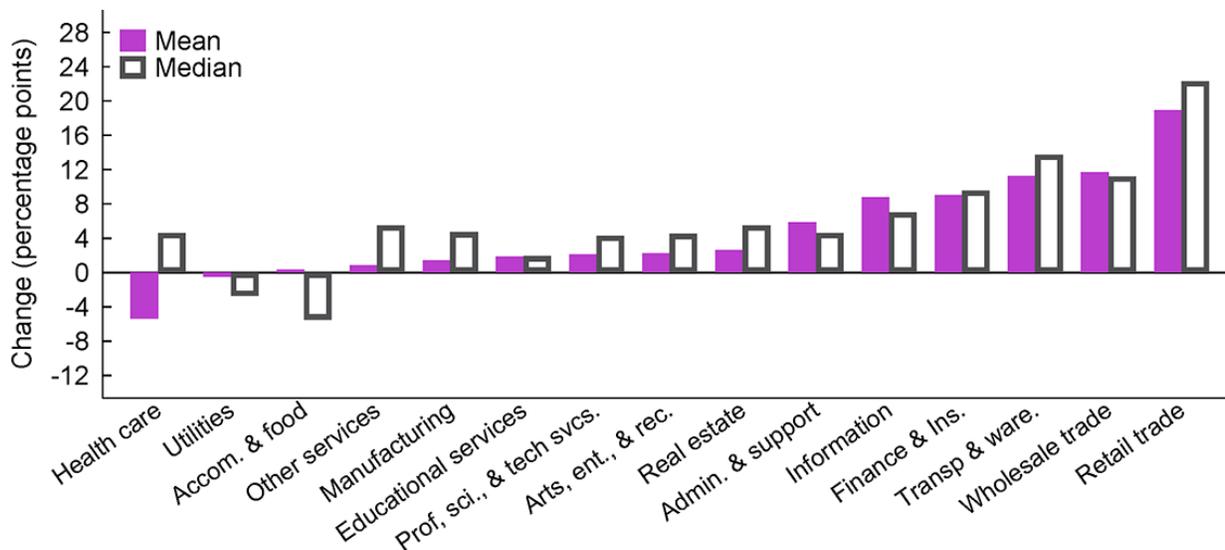
²⁸ See, e.g., JAMES BESSEN, B.U. SCH. L., LAW & ECON. PAPER NO. 17-41, INDUSTRY CONCENTRATION AND INFORMATION TECHNOLOGY (2019), https://scholarship.law.bu.edu/cgi/viewcontent.cgi?article=4166&context=faculty_scholarship (collecting sources reporting on industry concentration levels); GUSTAVO GRULLON ET. AL., SWISS FIN. INST., RSCH. PAPER SERIES NO. 19-41, ARE U.S. INDUSTRIES BECOMING MORE CONCENTRATED? (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2612047; Ryan Decker and Jacob Williams, *A note on industry concentration measurement*, FEDS NOTES (Feb. 3,

concentration levels that would have been unthinkable in a prior generation.²⁹ The result is higher prices for goods across a wide range of industries.³⁰ Below, I discuss several different trends that have contributed to this increased concentration.

A. Mergers

The United States government largely stopped enforcing the antitrust laws after 1980, driven by the Chicago School theory that antitrust enforcement did more harm than

2023), <https://www.federalreserve.gov/econres/notes/feds-notes/a-note-on-industry-concentration-measurement-20230203.html> (showing the increase in the share held by the top four firms in various industries).



For further examples of increasing concentration, see Heather Boushey and Helen Knudsen, *The Importance of Competition for the American Economy*, THE WHITE HOUSE (July 9, 2021), <https://www.whitehouse.gov/cea/written-materials/2021/07/09/the-importance-of-competition-for-the-american-economy/>.

²⁹ See, e.g., Nick Merrill & Tejas N. Narechenia, *Inside the Internet*, DUKE L.J. ONLINE (forthcoming 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4466419 (giving the example of internet backbone transmission, sometimes described as competitive but with a Herschman-Herfindahl index over 6000).

³⁰ See GRULLON ET. AL., *supra* note 28, at 16 (“[L]ack of competition may allow remaining industry incumbents to enjoy wider profit margins by setting higher prices relative to production costs.”).

good.³¹ That led to a wave of merger activity that had not been seen in more than a century, since before we enacted the antitrust laws.³² In case after case, the government did not challenge mergers that significantly concentrated markets.³³ In the 1990s and 2000s, the government wasn't even bringing merger challenges in most cases unless the merger would reduce the market to two, or at most three, competitors.³⁴ And even when it did bring challenges, forty years of indoctrination from the Chicago School meant that courts often rejected those challenges.

The Chicago School's theory was that mergers could bring efficiency benefits.³⁵ And occasionally that is true. But economic evidence suggests that the claimed

³¹ See FILIPPO LANCIERI ET AL., NAT. BUREAU ECON. RSCH., WORKING PAPER 30326, THE POLITICAL ECONOMY OF THE DECLINE OF ANTITRUST ENFORCEMENT IN THE UNITED STATES 2-3 (2022), (explaining how the continued influence of the Chicago School's approach to antitrust contributed to "the demise of antitrust enforcement in the United States").

³² See *M&A Statistics*, IMAA, <https://imaa-institute.org/mergers-and-acquisitions-statistics/#:~:text=Number%20%26%20Value%20of%20M%26A%20Worldwide,4%25%20to%203.8%20trillion%20USD> (last visited Sept. 16, 2023) (showing dramatic increase in the number of mergers each year since the 1980s); Statista Research Department, *Number of merger and acquisition (M&A) transactions worldwide from 1985 to April 2023*, STATISTA (June 6, 2023) <https://www.statista.com/statistics/267368/number-of-mergers-and-acquisitions-worldwide-since-2005/>.

³³ See Jonathan B. Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST 235, 244-45 (Robert Pitofsky ed., 2008) (discussing the lack of antitrust enforcement during the Reagan administration).

³⁴ See John Kwoka, *The Structural Presumption and the Safe Harbor in Merger Review: False Positives or Unwarranted Concerns?*, 81 ANTITRUST L. J. 837, 867, T. 5 (2017); Carl Shapiro & Howard Shelanski, *Judicial Response to the 2010 Horizontal Merger Guidelines*, 58 REV. INDUS. ORG. 51, 64 (2021); D. Daniel Sokol & Sean Sullivan, *The Decline of Coordinated Effects Enforcement and How to Reverse It*, FLA. L. REV. (forthcoming 2023).

³⁵ See LANCIERI ET AL., *supra* note 31, at 2 ("[Chicago School] scholars argued that antitrust should be based on economic principles of price theory and industrial organization, with emphasis on maximizing efficiency or consumer welfare. Drawing on those principles, they argued that antitrust law and enforcement should be narrowed.").

efficiencies of a merger almost never materialize.³⁶ The real “benefit” of a merger between competitors is to the merging parties. It raises their profits by eliminating a source of competition that would drive those profits down.³⁷ But those profits come at the expense of higher prices for consumers³⁸ – and also, as we will see, lower wages for employees.³⁹ As market concentration increases, so do prices. And it’s not just incumbents buying erstwhile competitors. Private equity has increasingly invested, not in helping existing companies grow and prosper, but in “rolling up” hundreds of independent small businesses into a single giant with a series of mergers, each

³⁶ John Kwoka, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* (2014); Orley Ashenfelter et al., *Did Robert Bork Understate the Competitive Impact of Mergers? Evidence from Consummated Mergers*, 57 *J. L. & Econ.* S67 (2014); Lancieri et al., *supra* note __, at 501-02 (“Merger studies uniformly find that consummated mergers have resulted in higher prices and/or that they failed to generate the assumed efficiencies.”); Bruce A. Blonigen & Justin R. Pierce, *Mergers May Be Profitable, but Are They Good for the Economy?*, *HARV. BUS. REV.* (Nov. 15, 2016), <https://hbr.org/2016/11/mergers-may-be-profitable-but-are-they-good-for-the-economy>; Sangjun Cho & Chune Young Chung, *Review of the Literature on Merger Waves*, 15 *J. RISK FIN. MGMT.* 432 (2022), <https://www.mdpi.com/1911-8074/15/10/432> (“many studies support the view that takeovers generally do not create significant value for merged firms’ shareholders in the long run.”); Chris Sagers, *Why Do Corporations Merge and Why Should Law Care?*, 56 *U. Mich. J. L. Reform* 291 (2023) (“Generations of researchers have failed to find evidence that merger and acquisition activity generates any lasting benefits for the combining firms’ owners or anyone else”). For a detailed discussion of efficiencies in mergers, see LOUIS KAPLOW, *HARV. JOHN M. OLIN CTR. FOR LAW, ECON., AND BUS., DISCUSSION PAPER NO. 1056, EFFICIENCIES IN MERGER ANALYSIS* (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3811790.

³⁷ See GRULLON ET. AL., *supra* note 28, at 16-19 (finding that mergers increase profit margins but do not increase efficiency).

³⁸ See Lancieri et al., *supra* note __, at 502 (“after an acquisition, markups increased between 15% and 50% in acquired plants relative to non-acquired plants.”) Lancieri et al. point to multiple studies of the anticompetitive effects of mergers in particular industries. See *id.* at 502-03; Sarah Schutz, *Mergers, Prices, and Innovation: Lessons From the Pharmaceutical Industry* (working paper Nov. 8, 2023) (finding that after mergers, pharmaceutical firms raise drug prices by 19%; they also increase R&D spending, but that increase does not result in additional new drugs making it through the FDA approval process).

³⁹ See, e.g., Tim Wu, *The Curse of Bigness* (2018); Lina M. Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents*, 11 *HARV. L. & POL’Y REV.* 235, 237 (2017).

individually quite small. We have seen this practice with everything from doctors offices to dentists to veterinary medicine to optometrists to third-party Amazon sellers.⁴⁰

Mergers between competitors don't just raise prices today. They also eliminate the market discipline capitalism is supposed to provide. When a less efficient dominant firm buys an upstart competitor, consumers don't just lose the benefits of price competition. They also lose the potential that the upstart could displace the incumbent by developing new technologies and taking its place - what economists call Schumpeterian competition.⁴¹ And the incumbent has little incentive to innovate itself if it knows it can just buy up any company whose new technologies pose a risk to it.⁴² Indeed, the reason Internet companies have not faced Schumpeterian competition in the last two decades is simple: they bought up anyone who might have displaced them.⁴³ Sometimes those companies coopt their former competitors, as Facebook did with Instagram, but often they buy up challengers only to shut them down.⁴⁴ And it's not just internet companies; buying competing brands only to shut them down happens in

⁴⁰ See, e.g., <https://www.economicliberties.us/our-work/the-roll-up-economy/>.

⁴¹ CHRISTOPHER ZIEMNOWICZ, *ENCYCLOPEDIA OF CREATIVITY, INVENTION, INNOVATION AND ENTREPRENEURSHIP* 1171-76 (Elias G. Carayannis ed., 2013), https://link.springer.com/referenceworkentry/10.1007/978-1-4614-3858-8_476#:~:text=Schumpeter's%20theory%20assumed%20that%20innovation,monopolies%20that%20produce%20excessive%20profits.

⁴² *Arrow Replacement Effect*, JEFF FOSSETT (June 5, 2020), <https://jeffreypassett.com/2020/06/05/arrow-replacement.html>.

⁴³ See Mark A. Lemley & Andrew McCreary, *Exit Strategy*, 101 B.U. L. REV. 1, 12-25 (2021) (explaining that many technology startups are acquired by incumbents).

⁴⁴ See Colleen Cunningham et al., *Killer Acquisitions*, 129 J. POL. ECON. 649, 651 ("We show that this disincentive to innovate can be so strong that an incumbent firm may acquire an innovative start-up simply to shut down the start-up's projects and thereby stem the 'gale of creative destruction' of new inventions.").

industries from software⁴⁵ to hiking boots⁴⁶ to beer.⁴⁷ But even if they don't buy the company outright, the possibility that an incumbent will pay top dollar for a startup can encourage the startup (and its funders, who want an exit strategy) not to challenge it too aggressively. Along with acquisitions, this is one way incumbents coopt disruption.⁴⁸

Companies, in short, know the risk that they will be displaced by others in a competitive market. They will eliminate that risk by buying out their competition if we let them. And time after time for the last forty years, we have let them, because we have been guided by an outdated view of what neoliberal economics tells us about social welfare.⁴⁹

That has left us with a world in which companies don't see antitrust enforcement as a serious obstacle to mergers. The situation is so bad that when the PGA Tour, the only game in town for professional golf, faced a single upstart challenger in antitrust litigation, the two settled the lawsuit accusing it of having monopoly power – by merging!⁵⁰

⁴⁵ ZDNET Editors, *Worst tech mergers and acquisitions: Oracle and Sun, and the sad tale of Palm*, ZDNET (Feb. 11, 2016), <https://www.zdnet.com/article/worst-tech-mergers-and-acquisitions-oracle-and-sun-and-the-sad-tale-of-palm/>.

⁴⁶ Anders Nielsen, *What happened to Ahnu hiking boots?*, WATERSNAKE, <https://www.watersnake.net/what-happened-to-ahnu-hiking-boots.htm> (last visited Sept. 16, 2023).

⁴⁷ Dave Infante, *Sapporo USA Will Shut Down Anchor Brewing Co.*, VINEPAIR (July 20, 2023), <https://vinepair.com/booze-news/anchor-brewing-company-sale/>.

⁴⁸ See Lemley & McCreary, *supra* note __; Mark A. Lemley & Matthew Wansley, *Coopting Disruption*, __ B.U. L. REV. __ (forthcoming 2025).

⁴⁹ Mark Glick et al., *Why Economists Should Support Populist Antitrust Goals* 20 (Inst. New Econ. Thinking, Working Paper No. 195, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4318169.

⁵⁰ Kevin Draper, *The Alliance of LIV Golf and the PGA Tour: Here's What to Know*, N.Y. TIMES (June 7, 2023), <https://www.nytimes.com/2023/06/07/sports/golf/pga-liv-golf-merger.html>.

B. Interoperability

Some products need to work with other products. Software programs have to run on hardware; video games must work with a particular platform; toasters and hairdryers must be charged using a standard voltage with a compatible plug. We need interface standards to allow those things to work together. Sometimes they are simple standards, as with the three-prong electrical outlet common in the U.S.⁵¹ Sometimes they are more complex.

These interfaces provide potential chokepoints, because the optimal number of such standards is often one.⁵² (We don't want different phone systems that can't talk to each other). A company that controls a standard has the power to decide what downstream products will work with that standard, and therefore the power to control that downstream market. That doesn't mean we can't have competition for products built to work with the standard product. The key to whether competition can exist is whether those interfaces are open or closed.

In previous generations of technology, open standards have generally outperformed closed standards because they allowed the benefit of competition within the standard. The VHS video cassette recorder beat out the competing Betamax (arguably a superior technology) because the VHS standard was open: anyone could make a VHS-

⁵¹ *Power plug & outlet Types A & B*, WORLD STANDARDS (Apr. 10, 2023), <https://www.worldstandards.eu/electricity/plugs-and-sockets/ab/>.

⁵² CORY DOCTOROW & REBECCA GIBLIN, CHOKEPOINT CAPITALISM 4-5 (2022) (Just a handful of firms—and sometimes only one—now control everything from the arts . . . to finance . . . to agribusiness . . . and everything in between . . .”).

compatible device.⁵³ That meant that they were cheaper, and companies competed to make the devices better.⁵⁴ More consumers bought those better devices, and so more movies were released for the VHS than for the Betamax.⁵⁵

The same was true of personal computers. Even though Apple made a better computer in the 1980s, the open nature of the IBM PC architecture meant that many companies competed to make better and cheaper computers based on IBM's original product.⁵⁶ That in turn meant that more companies wrote software for those computers.⁵⁷ Apple maintained a closed system and lost its lead in personal computers, becoming a niche player by the 1990s; it regained stature in the market only after technological changes meant that virtually any software could run on any type of computer.⁵⁸ Ironically, Apple's closed approach survived only because of interoperability.

⁵³ *The Difference Between VHS and Betamax Tapes and How VHS Became the Household Tape*, CAPTURE (Apr. 26, 2023), <https://www.capture.com/blogs/video/vhs-vs-betamax#:~:text=The%20VHS%20vs.,VHS%20as%20the%20clear%20victor> ("While Sony retained control of their Betamax format, JVC shared the VHS format, which made it more available and affordable. This was one of the deciding factors in the format war that left VHS as the clear victor.").

⁵⁴ *Id.* ("When JVC decided to allow other manufacturers in the late 1970s, they drastically brought down the price of VHS tapes and equipment. By 1984, there were over 70 VCR manufacturers . . .").

⁵⁵ *Id.* ("It didn't take long for motion picture companies to begin producing movies in VHS format and completely abandon Betamax simply because VHS was more available and widely used.").

⁵⁶ See Michael J. Miller, *Why the IBM PC Had an Open Architecture*, PCMAG (Aug. 12, 2021), <https://www.pcmag.com/news/why-the-ibm-pc-had-an-open-architecture>.

⁵⁷ *Id.*

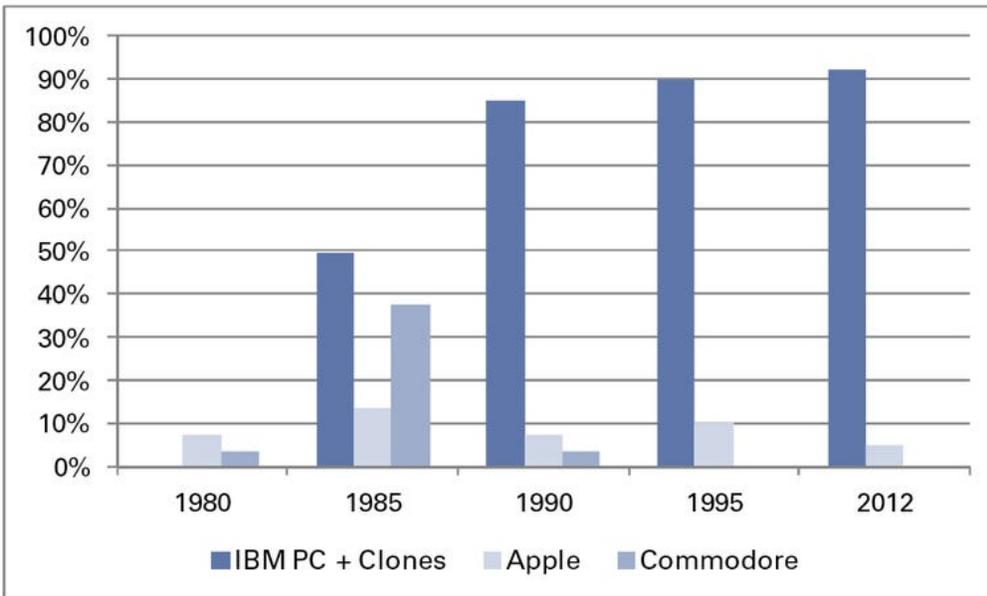
⁵⁸ Jay Yarow, *How Apple Really Lost Its Lead In The '80s*, BUSINESS INSIDER (Dec. 9, 2012), <https://www.businessinsider.com/how-apple-really-lost-its-lead-in-the-80s-2012-12#:~:text=While%20Apple%20struggled%20to%20deliver,computers%2C%20shunning%20Apple's%20balky%20offerings>.

The telephone network was a closed system during the decades when AT&T held a government-granted monopoly; no one could connect devices or services to the telephone network without AT&T's approval.⁵⁹ The opening of that network after the breakup of AT&T in 1984 led to a dramatic explosion in innovation, from hardware to software to cellular telephones.⁶⁰

The most significant example of the success of interoperability is the internet. The open nature of the internet protocol means that it has no “gatekeeper.” Anyone can

Exhibit 71: PC Market Share by shipments

While Apple and Commodore were able to gain early prominence in the personal computer market, the IBM PC + Clones, running Microsoft's operating system, were able to eventually overtake them as AAPL and CBM suffered from limited software development.



Source: Jeremy Reimer, *Total Share: 30 years of personal computer market share figures*; Goldman Sachs Research estimates.

⁵⁹ JERRY KANG & ALAN BUTLER, COMMUNICATIONS LAW AND POLICY 292 (5th ed. 2016) (reviewing history of AT&T from inception to breakup).

⁶⁰ See MARTIN WATZINGER & MONIKA SCHNITZER, CEPR PRESS DISCUSSION PAPER NO. 17635, THE BREAKUP OF THE BELL SYSTEM AND ITS IMPACT ON US INNOVATION (2022), https://www.martin-watzinger.com/uploads/4/9/4/1/49415675/watzinger_schnitzer_breakup_of_bell.pdf.

attach anything to the internet as long as she uses the proper protocol.⁶¹ This “end-to-end” architecture was responsible for the greatest outpouring of innovation in modern history, precisely because no one company held a chokepoint and decided what was permitted on the internet.⁶² It was enshrined in the principle of net neutrality, which meant that internet access providers didn’t charge based on who was sending or receiving data or on the content of that data.⁶³

Unfortunately, interoperability and open interfaces are a vanishing breed in late-stage capitalism. It turns out, not surprisingly, that there is significant money in owning the chokepoint. Companies like Facebook that started out with open APIs decided to close them when their standards became dominant ones, so that they could capture the value of that dominance.⁶⁴

Shutting down interoperability is particularly profitable when a company is vertically integrated. Incumbent companies will often buy companies that depend on

⁶¹ Spandan Pokhrel, *Does the internet have a gatekeeper?*, KATHMANDU POST (Apr. 8, 2023), <https://kathmandupost.com/science-technology/2023/04/08/does-the-internet-have-a-gatekeeper> (explaining that the internet is a decentralized network managed by several international nonprofit organization).

⁶² See J. H. Saltzer et al., *End-to-End Arguments in System Design*, in 2ND INTERNATIONAL CONFERENCE ON DISTRIBUTED SYSTEMS, PARIS, FRANCE 509 (1981); Lawrence Lessig & Mark A. Lemley, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925 (2001).

⁶³ See, e.g., *A History of Net Neutrality in the United States*, MOZILLA, <https://foundation.mozilla.org/en/campaigns/net-neutrality-timeline/> (last visited Sept. 25, 2023); Timothy B. Lee, *Network neutrality, explained*, VOX (May 21, 2015), <https://www.vox.com/2015/2/26/18073512/network-neutrality>. For a general overview of the development of networking standards, see BARBARA VAN SCHEWICK, *INTERNET ARCHITECTURE AND INNOVATION* (2012).

⁶⁴ See *FTC Sues Facebook for Illegal Monopolization*, FED. TRADE COMM’N. (Dec. 9, 2020), <https://www.ftc.gov/news-events/news/press-releases/2020/12/ftc-sues-facebook-illegal-monopolization>.

their platform, giving them an incentive to prefer the acquired company over others and to keep people from using multiple competing sites.⁶⁵ Antitrust law under the influence of the Chicago School has proven even more lenient to these vertical mergers than to horizontal ones, allowing this practice to become widespread.⁶⁶

Some companies also reduce interoperability by deliberately making it hard to build interconnection devices. When IBM dominated the mainframe computer industry, it notoriously changed its plug interfaces to make it harder for third parties to connect their peripherals.⁶⁷ More recently, the Justice Department and the EU have accused Apple of changing its phone interfaces to disadvantage companies that make attachments.⁶⁸ Others, like Qualcomm, use intellectual property (IP) rights to assert control over fundamental standards like cellular networks.⁶⁹ Internet platform companies selectively give access to formerly open platforms, using their control over access to their data and networks to stifle competition.⁷⁰ They even open APIs selectively only to

⁶⁵ See Susan Athey & Fiona Scott Morton, *Platform Annexation*, 84 ANTITRUST L.J. 677, 678-79 (2022).

⁶⁶ See Steven C. Salop, *Invigorating Vertical Merger Enforcement*, 127 YALE L.J. 1962, 1964-65 (2018) (discussing how the influence of Chicago School economic theories has led to limited antitrust enforcement against vertical mergers).

⁶⁷ See *In re IBM Peripheral EDP Devices*, 481 F. Supp. 965, 973 (N.D. Cal. 1979), *aff'd on other grounds*, 698 F.2d 1377, 1382 (9th Cir. 1983) (“Telex and Marshall were but two of the companies which were successful in displacing IBM peripheral equipment by offering it at prices well below those IBM was charging. IBM responded . . . [with] new CPUs . . . that were incompatible with the PCMs’ existing peripherals.”).

⁶⁸ Jon Porter & James Vincent, *USB-C will be mandatory for phones sold in the EU ‘by autumn 2024’*, THE VERGE (June 7, 2022), <https://www.theverge.com/2022/6/7/23156361/european-union-usb-c-wired-charging-iphone-lightning-ewaste>.

⁶⁹ The Ninth Circuit unfortunately blessed this anticompetitive practice in *FTC v. Qualcomm Corp.*, 935 F.3d. 752 (9th Cir. 2019).

⁷⁰ See Mark A. Lemley & Matthew Wansley, *Coopting Disruption*, __ B.U. L. Rev. __ (forthcoming 2025); Daniel Francis, *Monopolizing by Conditioning* (working paper 2024)

companies who promise not to compete with them.⁷¹ And the internet itself is in danger of being replaced by “walled gardens,” as people increasingly access the internet not through open standards over a computer but through hand-held devices that restrict access to apps sold and approved by the device owners.⁷²

The result of this trend is that important markets that used to be open to all comers end up controlled by the companies that rule the chokepoints. Those companies can and do demand significant tolls to use the standard; Apple and Google take 30% of the revenue of apps they allow into their system.⁷³ But they also end up determining what kinds of competition are permissible. Even when it is employed for good ends like computer security or protecting privacy,⁷⁴ that “mother may I” system stifles innovation.

Control over chokepoints also gives incumbents the power to prevent upstarts from deploying technologies that might threaten their dominance. And when it is coupled with vertical integration, this control leads to self-preferencing. That’s why Spotify and Netflix had such a hard time getting approval for their apps on Apple’s App

(identifying and condemning the practice of preferential access by monopolists designed to disadvantage competitors).

⁷¹ See *Crowder v. LinkedIn Corp.*, 4:22-cv-00237-HSG (N.D. Cal. Mar. 21, 2024) (denying motion to dismiss antitrust claim against LinkedIn for conditioning APIs on a promise not to compete).

⁷² See *Epic Games v Apple Inc.*, 67 F.4th 946 (9th Cir. 2023); Simon Rockman, *The walled garden has happened*, ZDNET (Dec. 6, 2011), <https://www.zdnet.com/article/the-walled-garden-has-happened/>.

⁷³ Austin Carr, *Apple’s 30% Fee, an Industry Standard, Is Showing Cracks*, BLOOMBERG (May 3, 2021), <https://www.bloomberg.com/news/newsletters/2021-05-03/apple-s-30-fee-an-industry-standard-is-showing-cracks#xj4y7vzkg>. However, both companies now half this percentage for apps that make less than \$1 million a year.

⁷⁴ On antitrust and privacy protection, see Erica Douglas, *The New Antitrust/Data Privacy Law Interface*, 130 YALE L.J. FORUM 647 (2021). Rory Van Loo notes that companies often use privacy as a pretext for anticompetitive acts. Rory Van Loo, *Privacy Pretexts*, 108 CORNELL L. REV. 1 (2022); cf. Mark A. Lemley, *The Contradictions of Platform Regulation*, 1 J. FREE SPEECH L. 303 (2021) (noting the tensions between privacy protection and antitrust enforcement).

Store; Apple didn't want to allow competition with its own music and video businesses.⁷⁵ And it's why you can't use any web browser other than Safari on the iPhone; even if you think you're using Firefox or Chrome, you're in fact using a shell written over what is in fact the (far less efficient) Safari browser.⁷⁶ And it's why video game console makers are buying game makers and locking in content on their platforms instead of responding to consumer demand for cross-platform play.⁷⁷ Companies that find natural market chokepoints do their best not only to hold on to them but to expand that control into adjacent markets.

C. Aftermarkets, resale, and the right to repair

A third source of competition companies would like to eliminate comes from their own products. A monopolist may be the only one who makes a product in a particular industry, but they are not the only ones who can sell that product. The monopolist's own

⁷⁵ See Ariel Shapiro & Jacob Kastrenakes, *Spotify pulls audiobook purchases from iOS app after Apple blocks updates*, THE VERGE (Oct. 27, 2022), <https://www.theverge.com/2022/10/27/23426631/spotify-apple-pulls-audiobook-purchases-ios-app>; Andrew Cunningham, *Report: Apple blocks Spotify app update after in-app subscription removal*, ARS TECHNICA (June 30, 2016), <https://arstechnica.com/gadgets/2016/06/spotify-accuses-apple-of-anticompetitive-behavior-after-app-update-is-blocked/>.

⁷⁶ Section 2.5.6 of Apple's App Store Review Guidelines requires "[a]pps that browse the web" to use WebKit, which is the Safari web browser engine. See *App Store Review Guidelines*, APPLE, <https://developer.apple.com/app-store/review/guidelines/> (last visited Sept. 16, 2023); WEBKIT, <https://webkit.org/> (last visited Sept. 16, 2023).

⁷⁷ Microsoft locked Zenimax/Bethesda's content into its platform after the companies merged. Brendan Sinclair, *Phil Spencer stresses exclusivity in ZeniMax deal*, GAMESINDUSTRY.BIZ (Mar. 11, 2021), <https://www.gamesindustry.biz/phil-spencer-stresses-exclusivity-in-zenimax-deal>. It has promised not to do the same with Call of Duty after it acquires Activision; so far, that promise has swayed the courts to allow the merger. *FTC v. Microsoft Corp.*, No. 23-cv-02880-JSC (N.D. Cal. July 10, 2023), <https://www.cand.uscourts.gov/wp-content/uploads/2023/07/FTC-v-Microsoft.pdf>. That merger is only one example of a consolidation that has made platform companies the dominant force in the video game industry, holding eight of the ten largest game company spots in 2022, up from five in 2012. <https://superjoost.substack.com/p/platform-power-by-the-numbers>.

customers may resell the products they buy to others. Each resale is a potential lost sale for the monopolist. Worse (for the company), the existence of a resale market threatens the company's control over price. Clever buyers can undo a price discrimination scheme by engaging in "arbitrage" – buying up goods in bulk where they are cheap and reselling them to those the company would like to charge higher prices.⁷⁸ Charging above-market prices for new goods may make used goods competitive.⁷⁹ And if the product costs enough, consumers can "compete" too by keeping durable goods longer and fixing them when they break.

Companies are doing their best to shut down these forms of "consumer competition." They are targeting resale markets using IP law, arguing (so far with only limited success) that they should be allowed to block arbitrage and importation⁸⁰ and prevent resales on online marketplaces.⁸¹ They have had more success using contract law to prevent resales, claiming that they are merely "licensing" software and even books for one-time use and prohibiting resale.⁸² They have persuaded the courts that the right to

⁷⁸ Anna-Louise Jackson, *Understanding Arbitrage*, FORBES (Dec. 16, 2022), <https://www.forbes.com/advisor/investing/what-is-arbitrage/>.

⁷⁹ See PASQUALE SCHIRALDI, LONDON SCH. OF ECON. AND POLIT. SCI., RSCH. PAPER NO. EI48, SECOND-HAND MARKETS AND COLLUSION BY MANUFACTURERS OF SEMIDURABLE GOODS (2009) ("[T]he potential substitutability of different vintages means the availability of used units lowers the monopolist's new unit price.").

⁸⁰ See *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519 (2013); *Impression Prods. v. Lexmark Int'l*, 137 S. Ct. 1523 (2017).

⁸¹ *Tiffany v. eBay*, 600 F.3d 93 (2d Cir. 2010); *Williams Sonoma v. Amazon.com*, 2019 WL 7810815 (N.D. Cal. 2019). See Daniel R. Cahoy, *Trademark's Grip Over Sustainability*, 94 U. COLO. L. REV. 1043 (2023) (noting the risks of trademark challenges to the right to repair).

⁸² See Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 31–32, 40–41 (1994); Mark A. Lemley, *The Benefit of the Bargain*, 2023 WIS. L. REV. 237, 255 (2023) ("Courts will even enforce contracts that take away the very item the deal was supposed to provide, turning

resell books you buy doesn't apply at all in digital form.⁸³ They are "tethering" digital goods to their platforms, so that things like books, music, and video games that have traditionally been bought and therefore owned must instead dial home to the mothership and can be remotely deleted or bricked (including, ironically, George Orwell's 1984).⁸⁴

The result is that content is disappearing for the first time in forty years.⁸⁵ Companies are turning product features of durable goods like cars into subscription services, as BMW infamously did with "subscriptions" to its seat heaters.⁸⁶ They are using glue and non-standard screws to prevent you from opening your phone case.⁸⁷ They are imposing technological controls to enforce those lockout and tethering schemes, and then turning to a mutant form of copyright law – the anticircumvention provisions of the Digital Millennium Copyright Act (DMCA)⁸⁸ – to declare the act of trying to access content you own to be a crime. And they're not just doing it to computers and phones.

purchases of media and consumer goods into involuntary rentals terminable at will by the company without notice.").

⁸³ See *Capitol Records v. ReDigi*, 910 F.3d 649 (2d Cir. 2018).

⁸⁴ Brad Stone, *Amazon Erases Orwell Books From Kindle*, N.Y. TIMES (July 17, 2009), <https://www.nytimes.com/2009/07/18/technology/companies/18amazon.html>; Mark A. Lemley, *Disappearing Content*, 101 B.U. L. REV. 1255, 1262 (2021) ("But streaming had one important, unforeseen effect – it took control over what content was available out of the hands of consumers. Unlike DVDs or digital downloads, which were (mostly) buy-and-keep arrangements, what you can stream at any given time depends on what is available on streaming platforms.").

⁸⁵ See generally Lemley, *Disappearing Content*, supra note 84.

⁸⁶ James Vincent, *BMW starts selling heated seat subscriptions for \$18 a month*, THE VERGE (July 12, 2022), <https://www.theverge.com/2022/7/12/23204950/bmw-subscriptions-microtransactions-heated-seats-feature>.

⁸⁷ See Michael A. Carrier, *How the Federal Trade Commission Can Use Section 5 to Strengthen the Right to Repair*, 37 BERKELEY TECH. L.J. 1145, 1165-66 (2022) (discussing how Apple and Microsoft engaged in this practice).

⁸⁸ 17 U.S.C. §1201.

The DMCA has been used to try to prevent people from fixing their tractors,⁸⁹ buying replacement clickers for garage door openers,⁹⁰ refilling printer toner cartridges,⁹¹ operating MRI machines,⁹² and even fixing McDonald's ice cream machines.⁹³

Companies are also cracking down on the ability to repair your own devices or have them repaired by third parties.⁹⁴ They increasingly make it hard to open or fix devices, installing digital locks to defeat repair efforts and then again using the DMCA to make it illegal to break those locks.⁹⁵ They void the warranty if you try to repair your device or have it repaired by a third party – and then use the very fact that they refuse to honor the warranty as an argument that consumers can't resell a good once it's been fixed

⁸⁹ See Michael A. Carrier, *The Right to Repair, Competition, and Intellectual Property*, 15 LANDSLIDE (December 2022/January 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4323277. A district court recently held that John Deere's efforts to block users and third parties from repairing their tractors could violate the antitrust laws. *In re: Deere & Co. Repair Serv. Antitrust Litig.* No. 3:22-cv-50188 (N.D. Ill. Nov. 27, 2023).

⁹⁰ *Chamberlain Group v. Skylink Techs.*, 381 F.3d 1178 (Fed. Cir. 2004).

⁹¹ *Hewlett-Packard v. Repeat-o-Type Stencil Mfg. Co.*, 123 F.3d 1445 (Fed. Cir. 1997); *Lexmark Intern., Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004).

⁹² See *Philips Med. Sys. v. TEC Holdings, Inc.*, 2023 WL 2064201 (W.D.N.C. Feb. 16, 2023) (noting the anticompetitive effects of the DMCA being used in this way but finding the court had not power to prevent it).

⁹³ Kyle Wiens, *POV: Congress is preventing us from fixing McDonald's ice cream machines*, FAST COMPANY (July 14, 2023), <https://www.fastcompany.com/90923565/congress-mcdonalds-ice-cream-machines>.

⁹⁴ See AARON PERZANOWSKI, *THE RIGHT TO REPAIR: RECLAIMING THE THINGS WE OWN* (2021), <https://www.cambridge.org/core/books/right-to-repair/D4FBBD5AE06602029E8680BDC7FA93A6#:~:text=Perzanowski%20explains%20why%20we%20%2D%20and,%20text='Why%20can't%20we%20just,ownership%20before%20it's%20lost%20forever>. For an overview of the right to repair, see Shubha Ghosh, *The Continuing Right to Repair*, 37 BERKELEY TECH. L.J. 1097 (2022).

⁹⁵ See Madison Bower, *Keeping the DMCA Away from Functional Use*, 35 BERKELEY TECH. L. J. 1067, 1067 (“[T]he anticircumvention provisions [of the DMCA] have allowed makers of functional products, like calculators, appliances, and cars, to sue consumers who repair or modify those products.”).

because it will confuse the buyer.⁹⁶ Companies are even “bricking” products – designing them to shut down if third parties try to repair them. And not just consumer products – a train manufacturer apparently designed the trains to shut down if third parties tried to repair or modify them.⁹⁷

Even where they haven’t been able to stop repair altogether, they have done their best to drive third party repair shops out of business, asserting pretextual patent claims over spare parts,⁹⁸ conspiring to deprive car repair shops of parts and using design patent law to stop their manufacture,⁹⁹ using bogus claims of trade secrecy to prevent repair shops from having access to the data needed for repair, and even using copyright law to prevent computer repair shops from turning the computer on in order to fix it!¹⁰⁰

We’ve grown used to the idea that we can resell used cars as long as we tell the buyer what condition they’re in and fix our dishwasher when it breaks, but companies are trying hard to make sure that form of competition doesn’t spread to other devices like phones. If they succeed, have no doubt that they will be coming for the used car market too.

D. Regulatory Capture

⁹⁶ See *Otter Products, LLC, et al. v. Triplenet Pricing, Inc.*, 1:19-cv-00510 (D. Col. Nov. 10, 2021).

⁹⁷ <https://arstechnica.com/tech-policy/2023/12/manufacturer-deliberately-bricked-trains-repaired-by-competitors-hackers-find/>.

⁹⁸ *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195 (9th Cir. 1997).

⁹⁹ See, e.g., *LKQ Corp. v. General Motors*, 2023 WL 328228 (Fed. Cir. 2023), *en banc review granted*, 71 F.4th 1383 (Fed. Cir. 2023). Full disclosure: I represent LKQ in this case.

¹⁰⁰ See *MAI v. Peak Computing*, 991 F.2d 511, 519 (9th Cir. 1993) (affirming an injunction preventing Peak Computing from repairing MAI computers on grounds that “the loading of software into the RAM creates a copy under the Copyright Act.”). Congress passed a law in 1998 that overruled this decision, but only in a very limited context. 17 U.S.C. §117(d).

The most straightforward way to prevent competition is to get it outlawed. A variety of regulations, passed for some combination of good and bad reasons, restrict or affirmatively prohibit competition in a series of important markets. Some were passed because we believed competition wouldn't work in the industry, and a promise to prevent competition was part of the bargain for price regulation. We abandoned those entry restrictions in a host of markets from the 1970s to the 1990s, and in virtually every case (ground transportation, air travel, telephony, electric power) it turned out that both competition and innovation were possible in markets we once thought weren't amenable to competition.¹⁰¹ The Biden Administration has taken further steps to try to eliminate regulatory rules that prevent entry.¹⁰²

But while regulations that insulated companies from competition were a bad idea, it is not enough to deregulate them. We still need to ensure that the deregulated monopolists face real competition. And while those markets have more competitors than they did under entry regulation, many of them are still quite concentrated and not fully competitive.

And other restrictions on market entry persist. Some 30% of all occupations require licensing to enter, raising prices in those industries by 25% on average.¹⁰³ Some

¹⁰¹ See Mark A. Lemley & Mark P. McKenna, *Unfair Disruption*, 100 B.U. L. REV. 71, 78-82 (2020).

¹⁰² FACT SHEET: White House Competition Council Announces New Actions to Lower Costs and Marks Second Anniversary of President Biden's Executive Order on Competition, THE WHITE HOUSE (July 19, 2023), <https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/19/fact-sheet-white-house-competition-council-announces-new-actions-to-lower-costs-and-marks-second-anniversary-of-president-bidens-executive-order-on-competition/#:~:text=To%20turn%20the%20tide%2C%20almost,government%E2%80%9D%20a%20pproach%20to%20promoting%20competition.>

¹⁰³ See Morris M. Kleiner & Evgeny Vorotnikov, *Analyzing Occupational Licensing Among the States*, 52 J. REG. ECON. 132, 134 (2017).

of those restrictions make sense for health and safety reasons. We don't want unlicensed doctors and airline pilots, for instance. But many others seem unnecessary – like entry regulations for people cutting hair – or are tied to anticompetitive restrictions that are clearly the product of lobbying, like exclusive territories for car dealers.¹⁰⁴

Even when barriers to entry were adopted for good reasons, long experience shows that the industry beneficiaries can and will game the regulatory system to protect themselves from competition. There is good reason to regulate entry into the pharmaceutical industry, for instance, and good reason to reward innovation in that industry with a temporary monopoly in the form of patent protection.¹⁰⁵ But the industry has become expert at gaming both of those systems to extend control and prevent competition long after patents and regulatory exclusivity should have expired.¹⁰⁶ Pharmaceutical companies regularly employ a variety of practices to leverage regulatory rules to prevent competition the law is supposed to allow. Many of these have been going on for decades, such as paying potential competitors to stay out of the market,¹⁰⁷ using regulatory loopholes to “product hop” by making minor tweaks to products to avoid

¹⁰⁴ See Rory Van Loo, *Broadening Consumer Law: Competition, Protection, and Distribution*, 95 NOTRE DAME L. REV. 211 (2019).

¹⁰⁵ See Roberto Mazzoleni and Richard R. Nelson, *The benefits and costs of strong patent protection: a contribution to the current debate*, 27 RSCH. POL'Y 273 (1998) (highlighting studies concluding that the pharmaceutical industry is one of the few sectors in which patents are consistently effective and necessary to recoup firms' financial investments).

¹⁰⁶ On the problems of evergreening of pharmaceutical patents, abuse of the regulatory exclusivity, and collusive settlements that pay competitors to stay out of the market, see 1 HERBERT HOVENKAMP ET AL., *IP AND ANTITRUST* ch. 15, 16 (3d ed. 2011).

¹⁰⁷ See, e.g., *FTC v. Actavis*, 570 U.S. 136 (2013).

generic competition,¹⁰⁸ filing false petitions to delay generic approval,¹⁰⁹ and even listing things like software on the FDA registry limited to drug patents.¹¹⁰ The result is that a patent system designed to carefully calibrate incentives for new inventions and a regulatory system designed to ensure safe drugs have been hijacked to generate hundreds of billions of unintended pharmaceutical company profits every year at the expense of consumers.¹¹¹

Companies in other regulated industries, like electric power, are also adept at capturing regulators and using regulation to prevent innovation that threatens their monopoly.¹¹² That doesn't mean we don't need behavioral regulation, but it does raise the spectre of "regulatory capture" – of agencies that come over time to serve the interests of the capitalists they are supposed to be holding in check.

¹⁰⁸ See, e.g., *New York v. Actavis*, 787 F.3d 638 (2d Cir. 2015); Stacey L. Dogan & Mark A. Lemley, *Antitrust Law and Regulatory Gaming*, 87 TEX. L. REV. 685 (2009).

¹⁰⁹ See, e.g., 1 Herbert Hovenkamp et al., *IP AND ANTITRUST* ch. 15.

¹¹⁰ See, e.g., *Jazz Pharms. v. Avadel CNS Pharms.*, ___ F.4th ___ (Fed. Cir. Feb. 24, 2023).

¹¹¹ The U.S. spends \$603 billion on medicines every year. <https://www.statista.com/statistics/238689/us-total-expenditure-on-medicine/>. That is more than twice per capita what other developed countries spend, suggesting a social cost of roughly \$330 billion per year. That cost difference is attributable to patent and regulatory abuse, combined with the fact that private rather than government actors negotiate drug prices in the U.S. I discuss the price negotiation issues *infra* notes ___-___.

¹¹² See Lemley & McKenna, *supra* note 101, at 78 ("Incumbents often use regulation to insulate themselves from competition. A long literature discusses the history of incumbents warping regulations originally intended to check their power into tools for protecting themselves against disruptive entry."). In California, the electric utilities persuaded the Public Utilities Commission to radically increase the price and reduce the benefits of installing solar power because its success was a threat to their business model. See Deven R. Desai & Mark A. Lemley, *Editorial: Scarcity, Regulation, and the Abundance Society*, in 7 FRONTIERS RSCH. METRICS AND ANALYTICS 1 (Jan. 25, 2023), <https://www.frontiersin.org/articles/10.3389/frma.2022.1104460/full> (discussing this history).

It is important to distinguish between regulations that prevent competition and regulations that govern behavior in the marketplace for reasons related to health, safety, or environmental effects. Regulation that interferes with competition is almost always a bad idea, and companies often have an incentive to encourage those restrictions. But avoiding entry regulation doesn't mean we should avoid legitimate behavioral regulations. Indeed, as we will see, we may need more regulation of behavior even as we get rid of rules that protect incumbents from competition.

Whether it is by buying up the competition, locking up the supply of complementary goods, preventing used goods from competing with new ones, or persuading the government to make competition illegal, incumbents have grown adept at making sure the "free market" doesn't include effective competition.

II. *Gumming Up the Works*

Even where incumbent companies can't eliminate competition entirely, they are working hard to make competition less robust by making it harder for customers to find what they are looking for and to switch between suppliers.¹¹³ Competition depends not just on having competitors to choose from, but also on a reasonably efficient system for consumers to find those competitors, compare prices and product quality, and actually switch suppliers.¹¹⁴

¹¹³ Thomas M. Krattenmaker & Stephen Salop, *Raising Rivals' Costs to Gain Power Over Price*, 96 YALE L.J. 209 (1986).

¹¹⁴ See Steven Salop and Joseph Stiglitz, *Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 REV. ECON. STUD. 493, 493 ("The central implication of costly

The internet has the ability to make competition truly efficient, providing one-stop shopping where consumers can easily find alternatives, compare their prices, read reviews, and make a purchase. But companies are targeting every aspect of that system, trying to throw sand in the gears to make it harder for consumers to realize they have a choice and to exercise that choice. In the process, they have corrupted the internet, turning it from a mechanism for a truly efficient market to a tool for preventing consumer choice. Here's how.

A. The "enshittification" of the internet

If you want to consider switching from one company to another, the first thing you need to know is what your alternatives are. The internet of the 1990s made enormous strides in helping users find what they wanted. Amazon gave you "the everything store,"¹¹⁵ offering the products you wanted for sale. Yelp! and other review sites allowed you to evaluate those products. Facebook, Netflix, Spotify, and TikTok all made their mark by figuring out what you wanted to see and hear and showing it to you. And Google made it possible to see what was out there with a single click. Its search engine was so good that in the 2000s it featured an "I'm feeling lucky" button that would take you directly to the first search result.¹¹⁶ More often than not, it was the thing you were looking for.

information-gathering is that the equilibrium will not occur at the perfectly competitive price. . . . Consumers would be unwilling to gather the extra information needed to switch stores or brands.").

¹¹⁵ See BRAD STONE, *THE EVERYTHING STORE: JEFF BEZOS AND THE AGE OF AMAZON* (2013).

¹¹⁶ *The Life and Demise (?) of Google's "I'm Feeling Lucky" Button*, STANDING CLOUD (Oct. 26, 2022), <https://www.standingcloud.com/im-feeling-lucky-google/> ("[I]f you use the same keyword phrase in Google and click the 'I'm Feeling Lucky' Button instead, the search engine

Google doesn't promote its "I'm feeling lucky" button anymore. And no wonder. Every one of the companies I just mentioned rose to dominance because they were better than everyone else at figuring out what you wanted and showing it to you more quickly and easily than their competitors. But once those competitors disappeared, by competition or by merger, what Cory Doctorow calls "the enshittification of the internet" set in.¹¹⁷ The very companies that made their mark by giving you what you wanted to see now had a captive audience. And it turned out that others would pay good money to show you what *they* wanted you to see instead. Sometimes those were ads, which increased in frequency and became harder and harder to distinguish from organic search results. Sometimes they were pay-for-placement deals in which a producer could jump the queue and show you their product instead of the one best suited to you for a fee. And sometimes they were self-dealing, with companies showing you their own affiliate products before more attractive alternatives from third parties.

The combined result? Internet search is worse today at each dominant firm than it was a decade ago. Google's first search page is filled with self-preferencing and third-party deals, especially for any search term that might be construed as a customer looking to buy something.¹¹⁸ You may have to scroll down pages to find organic search results.

skips the search results and directly takes you to the top-ranking page for that search term or phrase.").

¹¹⁷ Cory Doctorow, *The 'Enshittification' of TikTok*, WIRED (Jan. 23, 2023), <https://www.wired.com/story/tiktok-platforms-cory-doctorow/>.

¹¹⁸ Danny Sullivan, *Are Google's Results Getting Too Ad-Heavy & Self-Promotional?*, SEARCH ENGINE LAND (July 9, 2013), <https://searchengineland.com/google-results-too-ad-heavy-166226>. Search has other problems, including the growth of "affiliate marketing" and low-quality AI-generated content increasingly populating search results. See Janek Bevendorff et al.,

Amazon’s product list can no longer be relied on to give you the closest match to what you’re looking for as opposed to the product that gives Amazon the biggest cut.¹¹⁹ Spotify engages in “pay to playlist” in which it promotes songs and podcasts for which it has deals, and even tells artists it will promote them if they take a smaller royalty.¹²⁰ Facebook and even TikTok have polluted their feed with content they want to push rather than content you want to see.¹²¹ What should have been – and once was – a potent tool for consumer choice has become instead a pay-to-play tool for consumer manipulation.

Concealing prices and fees. Once you find the products you might want, the next thing you need to know is what they cost. Numerous state laws require gas stations and grocery stores to post their prices prominently.¹²² The goal is to avoid deception and bait-and-switch tactics. But in most cases you have to go into the store to know what things will cost.¹²³

Is Google Getting Worse? A Longitudinal Investigation of SEO Spam in Search Engines (working paper 2024).

¹¹⁹ Aditya Karla, *Amazon copied products and rigged search results to promote its own brands, documents show*, REUTERS (Oct. 13, 2021), <https://www.reuters.com/investigates/special-report/amazon-india-rigging/>; Rory van Loo & Nikita Aggarwal, *Amazon’s Pricing Paradox*, ___ HARV. J. L. & TECH. ___ (forthcoming 2024) (showing that Amazon charges higher prices than people anticipate, in part by manipulating search results to hide lower-priced products).

¹²⁰ Christopher Buccafusco & Kristelia García, *Pay-to-Playlist: The Commerce of Music Streaming*, 12 U.C. IRVINE L. REV. 805, 829 (2022) (“Spotify has recently announced ‘Discovery Mode,’ an alternative promotional opportunity that won’t require any upfront costs, but which will only be available in exchange for an artist or label agreeing to accept a lower-than-market royalty payment.”).

¹²¹ Doctorow, *supra* note 117.

¹²² For a collection, see <https://www.nist.gov/pml/owm/us-retail-pricing-laws-and-regulations-state>.

¹²³ Requirements that gas stations post their prices prominently are an exception. *See, e.g.*, <https://www.cdfa.ca.gov/dms/programs/petroleum/petInfoGuideBusiness.pdf>.

Here too the internet promised to be a powerful consumer tool for comparison-shopping, because you no longer had to drive around looking for deals at different stores. And for a while it was. But not anymore. While you can still find prices on sites like Amazon and Google Shopping – and that is a real benefit – those prices are increasingly not standard prices offered to everyone, but algorithmically generated prices that differ depending on your purchase history, the time of day, the browser you use, where you live, what you looked at on Facebook recently, and a host of other factors.¹²⁴ So while the internet has provided price transparency in one sense, it has also increased opacity and made reliable comparison-shopping harder.

Further, even sites that offer you price comparisons often do so only within their domain. Amazon will show you prices for the products it carries, but it won't show you products it doesn't carry, or even tell you they exist.¹²⁵ Buy.com will do the same. And all the shopping sites use contract law, IP law, and even the Computer Fraud and Abuse Act (CFAA), a criminal law designed to prevent computer hacking, to prevent independent third parties from scraping their sites and giving a true price comparison.¹²⁶

¹²⁴ Le Chen et al., *An Empirical Analysis of Algorithmic Pricing on Amazon Marketplace*, in WWW '16: PROC. 25TH INT'L CONF. WORLD WIDE WEB 1339, <https://mislove.org/publications/Amazon-WWW.pdf>; Julia Angwin and Surya Mattu, *Amazon Says It Puts Customers First. But Its Pricing Algorithm Doesn't*, PROPUBLICA (Sept. 20, 2016), <https://www.propublica.org/article/amazon-says-it-puts-customers-first-but-its-pricing-algorithm-doesnt>; Van Loo & Aggarwal, *supra* note __. Christopher Leslie demonstrates how this creates antitrust problems. Christopher R. Leslie, *Predatory Pricing Algorithms*, 98 N.Y.U. L. REV. 1 (2023).

¹²⁵ See *Multi-Time Machine, Inc. v. Amazon.com*, 804 F.3d 930 (9th Cir. 2015). Full disclosure: I represented Amazon in this lawsuit.

¹²⁶ See, e.g., *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058 (9th Cir. 2016); Lemley, *Terms of Use*, *supra* note 82, at 473-74 (giving examples of cases in which scraping was prohibited). Indeed, Facebook proudly advertises its efforts to stop scraping. See Jessica Romero, *Leading the Fight Against Scraping-for-Hire*, META (Jan. 12, 2023),

Companies also bury fees – what Cory Doctorow calls “drip pricing.”¹²⁷ Baggage and seat fees on airlines are a notorious example, but restaurants, rental cars, and any number of other companies conceal the total price a customer will pay by including hidden fees.¹²⁸ Doing so prevents robust price competition. That’s its point. As Cory Doctorow puts it, this is “an iron law of cons: any time someone adds complexity to a proposition bet, the complexity exists solely to make it hard for you to figure out if you’re getting a good deal.”¹²⁹

Co-opting review sites. Once you know what products are available and what they cost, the next thing you want to know is whether they are any good. Here too the internet of the 2000s offered the promise of real market efficiency, with sites like Yelp! and Trip Advisor crowd-sourcing reviews to give people a composite picture of what others thought of the product. Unfortunately, the enshittification of the internet has struck review sites too. Yelp! makes money by partnering with some of the very sites it reviews, and it has a strong incentive to bias the reviews in favor of its partners and against those who don’t partner with it.¹³⁰ TripAdvisor has deleted reviews that

<https://about.fb.com/news/2023/01/leading-the-fight-against-scraping-for-hire/>. Fortunately, it has recently been unsuccessful in suing search firms for scraping. *Meta Platforms, Inc. v. Bright Data Ltd.*, No. 3:23-cv-00077-EMC (N.D. Cal. Jan. 23, 2024).

¹²⁷ Cory Doctorow, *Amazon is a Ripoff*, <https://pluralistic.net/2023/11/06/attention-rents/>. And not drip in the current, good sense, either.

¹²⁸ *The hidden cost of junk fees*, CFPB (Feb. 2, 2022), <https://www.consumerfinance.gov/about-us/blog/hidden-cost-junk-fees/>; Elaine Glusac, *The Latest on Resort Fees and Transparency*, N.Y. TIMES, Oct. 21, 2023, at B3.

¹²⁹ Doctorow, *Ripoff*, *supra* note __.

¹³⁰ Many business owners claim that Yelp! hides negative reviews for its advertising partners and promotes negative reviews for businesses which refuse to pay for partnership; Yelp! has denied these allegations. See Stephen Phillips, *Yelp: What Business Owners Should Know About It*, SCHEDULING INSTITUTE (Nov. 14, 2019), <https://schedulinginstitute.com/blog/yelp-what->

contained detailed allegations of sexual assaults by hotel employees at hotels that had business deals with TripAdvisor.¹³¹ Intermediaries can delete bad reviews for its favored companies. Yelp! and other review sites have considerable discretion over which reviews to highlight, giving all those sites substantial power to boost the companies with whom they have business partnerships.¹³² And they do. Other “independent” reviewers, like Underwriters’ Laboratories, are funded by the companies they review, and some are paid hundreds of thousands of dollars by companies for the right to use their reviews in advertising.¹³³ And many sites that seem to be independent review sources, including Rotten Tomatoes, Metacritic, TripAdvisor, and Goodreads, are in fact owned by the very companies they purport to evaluate neutrally.¹³⁴

Review sites that are explicitly run by the companies whose products are being reviewed have an even more obvious conflict of interest. For example, Amazon has a detailed review system that generally gets high marks. But it ignores its own review system in order to promote its own lower-ranked products over the ones its algorithm

[business-owners-should-know/](#). Yelp has also been accused of removing or hiding positive reviews unless a site does business with it. *See* Levitt v. Yelp! Inc., 765 F.3d 1123, 1127-29 (9th Cir. 2014).

¹³¹ Raquel Rutleder & Andrew Mollica, *TripAdvisor Removed Warnings About Rapes and Injuries at Mexico Resorts, Tourists Say*, MILWAUKEE J. SENTINEL, Nov. 1, 2017.

¹³² The extent to which Yelp! does this is a matter of dispute, but the FTC has received thousands of complaints over the practice. *See* Daren Fonda, *Yelp Gets Bad Reviews Over Its Business Practices*, KIPLINGER (June 03, 2016), <https://www.kiplinger.com/article/spending/t062-c000-s002-yelp-gets-bad-reviews-over-its-business-practices.html>.

¹³³ Matthew Dolan, *Auto Awards Clouded by Fees*, Wall St. J., May 10, 2010. For detailed discussion, see Jim Gibson, *Against Reputation* (working paper 2024).

¹³⁴ Gibson, *supra* note __, at [draft at 60]

recommends.¹³⁵ Google likewise ignores its own Page Rank algorithm to engage in self-preferencing – promoting its own verticals like shopping and restaurant reviews over objectively better search results from competitors.¹³⁶

And if all of that wasn't bad enough, you can hire companies to suppress bad reviews for you; companies like reputation.com specialize in getting information you don't like (true or false) taken off the internet. And other sites engage in "review gating," submitting false reports about bad reviews for their clients.¹³⁷ Still others submit fake reviews as a business model.¹³⁸

The result is that a system with the potential to get customers the information they need to make good decisions has been coopted to promote the businesses who pay to play the game (or who own the board).

Dark Patterns and Auto-Renews. A third way companies raise barriers to competition is by making it easy to accidentally enter into a deal and very hard to get out of that deal. Many of these shady business tactics have been around for decades and take

¹³⁵ Daniel Konstantinovic, *Amazon prioritizes search results for its own products above competitors, per The Markup report*, INSIDER INTELLIGENCE (Oct. 18, 2021), <https://www.insiderintelligence.com/content/amazon-prioritizes-search-results-its-own-products-above-competitors-per-markup-report>; Gibson, *supra* note __, at [draft at 57]; Van Loo & Aggarwal, *supra* note __; Yonathan Arbel, *Reputation Failure*, 54 WAKE FOREST L. REV. 1239, 1290 (2019).

¹³⁶ *General Court confirms self-preferencing abuse of Google Shopping*, SIMMONS & SIMMONS (Nov. 23, 2021), <https://www.simmons-simmons.com/en/publications/ckwc99r3u1gs00b738mzxax1e/general-court-confirms-self-preferencing-abuse-of-google-shopping>.

¹³⁷ *See* *Yelp! Inc. v. Reviewio, Inc.*, 3:23-cv-06508 (N.D. Cal. Filed Dec. 18, 2023), <https://www.law360.com/articles/1778709/yelp-accuses-reputation-co-of-suppressing-bad-reviews>

¹³⁸ Stuart A. Thompson, *Mounting a New Effort to Combat Fake Reviews*, N.Y. TIMES, Nov. 14, 2023, at A1.

familiar forms: recurring charges that come with the promise that you will “pay no money now and can cancel anytime.” They count on the fact that people won’t cancel, and if they do, they make canceling hard. Indeed, there are well-recognized patterns designed to make it hard to cancel ongoing subscriptions.¹³⁹ Companies let you sign up with a click but make you call to cancel.¹⁴⁰ And when you call, you will likely spend endless minutes on hold, only to be transferred from person to person who tries to persuade you not to cancel.¹⁴¹ Other companies charge fees to switch away from their service. Cloud storage providers, for instance, charge you to leave – a very real problem given that they have all your data.¹⁴² Even companies that promise refunds often make it very hard to deliver on that promise, as anyone who has had a flight cancelled knows. And if you end up in a dispute over any of these practices, the company will most likely prevent you from bringing suit, forcing you to arbitration instead to avoid public accountability.¹⁴³

The internet has only made efforts to lock people into interactions and transactions more sophisticated. Companies spend time and effort designing their websites – not to

¹³⁹ Attila Tomaschek, *Canceling Online Subscriptions Is Confusing, Difficult and Absurd... by Design*, CNET (Apr. 4, 2022), <https://www.cnet.com/tech/services-and-software/canceling-online-subscriptions-confusing-difficult-absurd-by-design/> (discussing how many companies employ similar “dark patterns” to make it difficult for customers to cancel services).

¹⁴⁰ *Id.*

¹⁴¹ *Id.* See also David McCabe, *U.S. Files Suit Against Adobe Over the Fees for Software*, N.Y. Times, June 18, 2024 (discussing government suit challenging Adobe’s efforts to make it hard to cancel its subscription software services).

¹⁴² Google commendably ended this practice, but Microsoft and Amazon continue to do it. See <https://www.bloomberg.com/news/articles/2024-01-11/google-googl-ends-switching-fees-for-cloud-data-pressuring-amazon-microsoft>.

¹⁴³ See, e.g., Mark A. Lemley & Christopher R. Leslie, *Antitrust Arbitration and Merger Approval*, 110 Nw. U. L. REV. 1 (2015).

improve the user experience but to do the opposite.¹⁴⁴ They make it harder to find what you are looking for, encouraging you to click on buttons that appear to lead to content but in fact lead to ads¹⁴⁵ and opening windows while deliberately hiding the “close” button.¹⁴⁶ They write false “clickbait” headlines to lure you to their page so they can increase their impression count.¹⁴⁷ They add “nudges” to push you to click what they want you to click when you have a choice, requiring more clicks to protect your data than to allow tracking cookies on websites, for instance, for instance.¹⁴⁸ And they go to great lengths to make sure you stay on their page as long as possible, even when you are trying to leave. Facebook, for example, has gone so far as to essentially stop showing users posts that link to external pages, because people might follow those links and therefore leave the Facebook site.¹⁴⁹ The upshot of all of this is that, as Gregory Dickinson explains, “[i]t

¹⁴⁴ See, e.g., Harry Brignull, *Dark Patterns: Deception Vs. Honesty in UI Design*, in *INTERACTION DESIGN: USABILITY* 338 (2011).

¹⁴⁵ Eric Ravenscraft, *How to Spot – and Avoid – Dark Patterns on the Web*, WIRED (July 29, 2020), <https://www.wired.com/story/how-to-spot-avoid-dark-patterns/>. These “dark patterns that manipulate consumer behaviour are now a pervasive feature of digital markets. Koh & Seah, *Unintended Consumption: The Effects of Four E-commerce Dark Patterns*, 11 *CLEANER & RESPONSIBLE CONSUMPTION* 100145 (2023) (showing that less sophisticated users are particularly vulnerable to dark patterns); Amit Zac et al., *Dark Patterns and Online Consumer Vulnerability*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4547964 (showing that even sophisticated users are affected by dark patterns).

¹⁴⁶ See Gregory Day & Abbey Stemler, *Are Dark Patterns Anticompetitive?*, 72 *ALA. L. REV.* 1 (2020); Dickinson, *supra* note __, at 1637.

¹⁴⁷ See Supavich Fone Pengnate et al., *Effects of Clickbait Headlines on User Responses: An Empirical Investigation*, 30 *J. INT’L TECH. INFO. MGMT.* 1 (2021). Alarming, almost all of the top twenty Google results for “clickbait headlines” were websites telling you how to write and use clickbait to attract attention. Enshittification indeed.

¹⁴⁸ Midas Nouwens et al., *Dark Patterns After the GDPR: Scraping Consent Pop-Ups and Demonstrating Their Influence* (2020), <https://doi.org/10.1145/3313831.3376321>; Dickinson, *supra* note __, at 1639-40.

¹⁴⁹ See Gracey Joyce, [Case Study] *Where to Place Links for Greater Engagement in Facebook Posts: Based On a Survey of 51,054,216 Posts*, LIGHTSPAN DIGITAL (Nov. 17, 2021), <https://lightspandigital.com/blog/case-study-place-links-engagement-facebook-survey/>

is impossible to navigate today's apps and websites without routinely encountering counterintuitive default settings, pressured choices, and deceptively structured interfaces, all designed to benefit their creators at the expense of the customer."¹⁵⁰

All of this is designed to make money from users not by giving them what they want, but by *preventing* them from getting what they want. And it succeeds; one recent study finds that companies can as much as triple their revenues by relying on subscriptions inattentive consumers forget to cancel.¹⁵¹ It is another way of making short-term revenue by imposing search and switching costs, reducing the efficiency of the market.

Co-Opting Price Intermediaries. Incumbent firms have also grown adept at coopting intermediaries designed to facilitate market competition, just as they have co-opted consumer-friendly innovations like review sites. A great example is pharmacy benefit managers (PBMs). PBMs were set up in response to the radical increase in drug prices driven in part by the manipulation of the patent and regulatory systems I mentioned above.¹⁵² The idea was that they would serve as a purchasing intermediary,

(conducting a study that found Facebook posts without external links receive more than double the engagement of similar posts with external links).

¹⁵⁰ Dickinson, *supra* note __, at 1641.

¹⁵¹ Liran Einav et al., *Selling Subscriptions* 14 (Stan. Inst. Econ. Policy Rsch., Working Paper No. 23-23, 2023), <https://siepr.stanford.edu/publications/working-paper/selling-subscriptions> ("Inattention (relative to 'perfect' attention) modestly increases revenues for some services . . . but triples revenues for others . . . It is plausible to suspect that this subscription service would not be viable from a business perspective if not for its subscribers' inattention.").

¹⁵² See Elizabeth Seeley & Aaron S. Kesselheim, *Pharmacy Benefit Managers: Practices, Controversies, and What Lies Ahead*, THE COMMONWEALTH FUND (March 26, 2019), <https://www.commonwealthfund.org/publications/issue-briefs/2019/mar/pharmacy-benefit-managers-practices-controversies-what-lies-ahead> ("To help manage their pharmaceutical costs, health insurers frequently contract with pharmacy benefit managers (PBMs), third-party administrators that manage the prescription drug benefit on behalf of the

giving pharmacies (and therefore end payer customers and insurance companies) the benefits of negotiating power.¹⁵³

The reality, however, turned out to be very different. Pharmaceutical companies quickly coopted PBMs, striking a deal in which the pharmaceutical company raised the drug price even further, then gave the PBM a substantial “discount” back to the original, already-high price.¹⁵⁴ The PBM got paid for obtaining a “discount,” and the pharmaceutical company kept its high price.¹⁵⁵ Insurers paid more, not less, because they also had to pay the PBM for negotiating the “discount.”¹⁵⁶ And consumers lost out too, because many of these PBM deals came with a promise of exclusivity: in exchange for the supposedly-lower price, insurance companies would only fully reimburse for one drug in the class, leaving consumers and doctors unable to obtain more affordable treatment options.¹⁵⁷ And because PBMs drive out independent pharmacies,¹⁵⁸ patients end up with even less choice.

insurer. PBMs help health plans negotiate payment rates with manufacturers through the use of formularies and utilization management tools.”).

¹⁵³ *Id.*

¹⁵⁴ See, e.g., Robin C. Feldman, *Perverse Incentives: Why Everyone Prefers High Drug Prices – Except for Those Who Pay the Bills*, 57 HARV. J. LEGIS. 304, 327 (2020).

¹⁵⁵ See *id.* (“[T]he drug company can offer a sweeter deal to a PBM, without absorbing the full cost of that sweetener. The drug company collects the same final price for the drug, but the PBM can command a higher fee from the health plan in light of the greater discount.”).

¹⁵⁶ See *id.* at 326 (“Insurers pay their PBMs based on the extent of the discount that a PBM can negotiate with individual drug companies.”).

¹⁵⁷ See *id.* at 337-39 (explaining how rebate programs obtained by PBMs have sometimes resulted in insurance plans only covering brand-name medications).

¹⁵⁸ See Christopher R. Leslie, *Pharmacy Deserts and Antitrust Law*, __ B.U. L. REV. __ (forthcoming 2024).

When companies cannot eliminate competition altogether, they have done their best to make it hard to compete. By perverting technologies designed to facilitate consumers finding what they want and switching suppliers, companies have made it harder to compete and helped lock consumers into products even if they could switch and would be better off doing so.

III. Capital and labor.

The third leg of the triad insulating capitalists from market competition involves not consumers, but workers. Capitalism is, as its name suggests, focused on encouraging the investment of capital. In theory, capital investment drives employment and economic growth by allowing entrepreneurs to build new companies that in turn employ workers, increase productivity, and improve products for consumers. A rising tide lifts all boats, including those carrying workers.

In practice, however, capitalists in the modern world have found ways to tip the boat, making sure that capital benefits at the expense of labor. Some of that imbalance results from the increasing market power I discussed the first section. Some of it comes from legal efforts to prevent effective bargaining power by employees. And some of it comes from structural ways the law favors capital over labor.

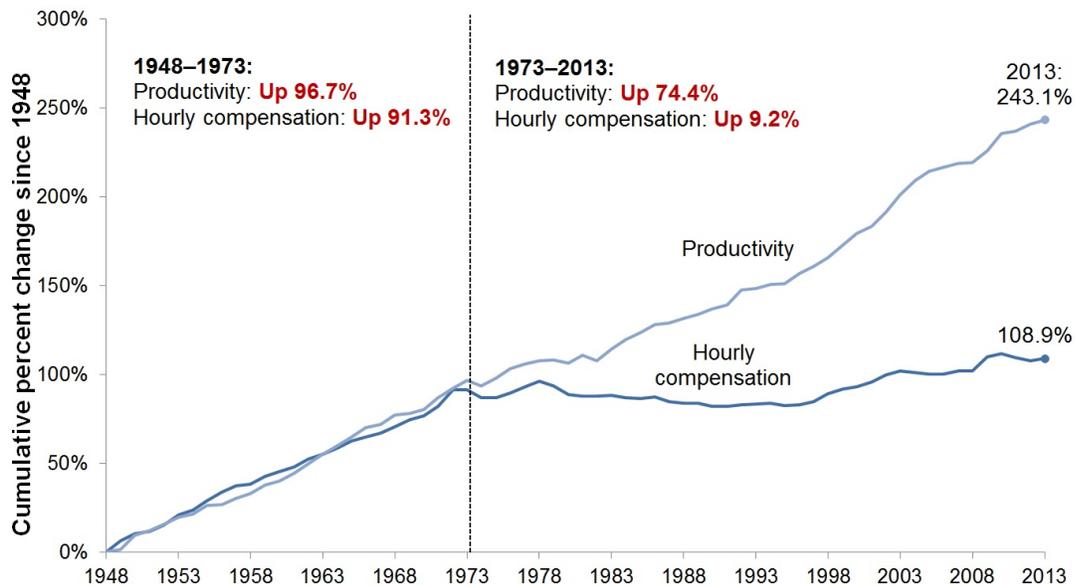
A. Market Power, Employee Bargaining, and Mergers

We have already seen how industry after industry is consolidating through a wave of unchecked mergers. As I discussed above, in large part that has been a failure of antitrust enforcement against mergers that threaten to reduce competition.

That increased concentration doesn't just raise prices to consumer. It also reduces wages. In part that is because of bargaining inequality. Labor unions have declined to a vanishingly small part (6%) of the private U.S. workforce¹⁵⁹ at the same time corporate concentration is higher than at any time in recent memory. And non-labor employees have fewer options in a more concentrated market, so it's harder to move for a better wage or to demand a raise. The result is, not surprisingly, that wages have stagnated over the past forty years even as the return to capital has grown.¹⁶⁰ As labor-management bargaining power has become more unequal, economic growth is no longer benefiting the vast majority of Americans.

¹⁵⁹ BUREAU OF LABOR STATISTICS, UNION MEMBERS — 2022 2 (2023), <https://www.bls.gov/news.release/pdf/union2.pdf>.

¹⁶⁰ Lawrence Mishel et al., *Wage Stagnation in Nine Charts*, ECONOMIC POLICY INSTITUTE (Jan. 6, 2015), <https://www.epi.org/publication/charting-wage-stagnation/>.



See also Filippo Lancieri et al., *The Political Economy of the Decline of Antitrust Enforcement in the United States*, 85 *Antitrust L.J.* 441, 500-01 (2023) (“While median earnings of male full-time workers in the United States grew 36% in real terms from 1960-1980, they did not change at all from 1980-2016”; that was not true for workers in other western countries).

This is not just a structural problem, though. Our legal rules reinforce this inequality. For instance, a significant reason courts and agencies have allowed mergers to proceed over the past forty years is that they have been persuaded that those mergers will generate “efficiencies.”¹⁶¹ It turns out, however, that most of those “efficiencies” actually reflect the exercise of market power upstream, generally in the labor market.¹⁶²

While antitrust normally focuses on the risk of exercising monopoly power downstream, hurting consumers, a parallel economic theory worries about “monopsony,” or the exercise of buyer market power against employees and suppliers.¹⁶³ Just as a monopoly can reduce output and raise prices to consumers, a monopsony can reduce demand for labor and reduce the wages it pays below the market-clearing price.¹⁶⁴ The effects parallel those with monopoly. Monopsony is inefficient because it reduces production and employs fewer people at lower wages than would be justified by market demand. And while a monopsonist drives wages down, because it has market power, it

¹⁶¹ See Herbert Hovenkamp, *Selling Antitrust*, 73 HASTINGS L.J. 1621, 1625-28 (2022) (discussing how the “consumer welfare” theory promoted by Robert Bork has influenced many to believe that “any efficiencies associated with a firm’s size are very likely to outweigh any restriction of output on the consumer welfare scale.”); Patrice Bougette et al., *When Economics Met Antitrust: The Second Chicago School and the Economization of Antitrust Law*, 16 ENTER. & SOC’Y 313, 341 (“[T]he diffusion of the Chicago models affected the enforcement agencies before the Supreme Court. . . . From that time on, mergers have been considered efficiency enhancers, benefiting the competitiveness of firms and consumers who enjoy lower prices.”).

¹⁶² Glick et al., *supra* note 49, at 20 (“‘claimed “efficiencies” premised on a reduction in buy-side competition [such as monopsony or increased power in bilateral bargaining] are not efficiencies at all.’ . . . an ‘efficiency’ which, for any reason, even in a perfectly competitive input market, reduces economic rent in that market, overstates ‘efficiency’ because it does not account for the reduction in the input market’s surplus.”).

¹⁶³ See Eric A. Posner et al., *Antitrust Remedies for Labor Market Power*, 132 HARV. L. REV. 536, 549-53 (2018) (discussing the intellectual history of monopsony); Roger D. Blair & Jeffrey Harrison, *MONOPSONY IN LAW AND ECONOMICS* (2010).

¹⁶⁴ *Id.* at 556.

doesn't pass those lower wages on in the form of lower prices to consumers, as a competitive firm might.¹⁶⁵ Rather, the monopsonist takes the "savings" as profit, just as a monopolist does when it reduces output and raises prices.¹⁶⁶ In fact, things are even worse than that. A firm with monopsony power will act as if its marginal costs are higher, not lower, in the downstream market. So while wages go down, the firm makes business decisions as if its costs have gone up, reducing labor inputs and therefore reducing downstream output.

But in our modern antitrust world, we have all but forgotten the problems with monopsony that parallel the problems with monopoly.¹⁶⁷ There are very few buyer market power cases, and virtually none that involve labor as opposed to suppliers.¹⁶⁸ The creation of monopsony power has been recharacterized not as an antitrust harm, but as an "efficiency" that allows the merged firm to underpay workers and capture the resulting profit.¹⁶⁹ And a focus on "consumer welfare" rather than total social welfare has come to dominate antitrust, largely as an historical accident rather than for any

¹⁶⁵ See Laura Alexander & Steven C. Salop, *Antitrust Worker Protections: The Rule of Reason Does Not Allow Counting Out-of-Market Benefits*, 90 U. CHI. L. REV. 273, 281 (2023) ("The classical monopsonist realizes that if it restricts the number of workers it hires, it will be able to pay less to those fewer hired workers, and it calculates its marginal cost of labor based on this assumption. As a result, it maximizes profits by setting a lower wage and hiring fewer workers.").

¹⁶⁶ See *id.*

¹⁶⁷ Eric Posner is one of the few who has been calling attention to this problem. See, e.g., Posner et al., *supra* note 163. See also Hovenkamp, *supra* note 161, Alexander & Salop, *supra* note 165.

¹⁶⁸ A rare exception is *Weyerhaeuser Company v. Ross-Simmons Hardwood Lumber Company*, 549 U.S. 312 (2007). The current FTC action against Amazon promises to be another.

¹⁶⁹ See Laura Alexander & Steven C. Salop, *Antitrust Worker Protections: The Rule of Reason Does Not Allow Counting of Out-of-Market Benefits*, 90 U. CHI. L. REV. 273 (2023); Mark Glick, Gabriel A. Lozada, & Darren Bush, *Why Economists Should Support Populist Antitrust Goals*, 2023 UTAH L. REV. 769, 792-96.

plausible economic reason.¹⁷⁰ The result is that antitrust law not only doesn't stop efforts to create labor or supplier monopsonies; it affirmatively encourages them.

That is particularly problematic because labor monopsonies transfer money from poorer people (workers) to richer people (corporations and shareholders).¹⁷¹ While the Chicago School approach to antitrust focuses on market efficiency, it makes the decidedly unrealistic assumption that rich people and poor people value an additional dollar equally. They don't. The diminishing marginal utility of money is well established.¹⁷² Ignoring it makes for bad antitrust policy; affirmatively preferencing transfers from the poor to the rich makes for even worse policy.

B. *Agreements to Prevent Wage Competition*

Companies haven't stopped at monopolizing labor markets and reducing wages. They regularly enter into contracts designed to prevent employees from changing jobs. Some of those agreements do so directly; more than 20% of the American workforce are subject to noncompete agreements that literally prevent them from quitting their job and going to work for a competitor, generally for a period of one or two years.¹⁷³ Many noncompetes even bind low-wage employees like Jimmy John's sandwich makers who

¹⁷⁰ See Mark Glick & Darren Bush, *Breaking Up Consumer Welfare's Antitrust Policy Monopoly*, 56 SUFFOLK U. L. REV. 201 (2023).

¹⁷¹ See Laura Alexander, *Monopsony and the Consumer Harm Standard*, 95 GEO. L.J. 1611 (2007).

¹⁷² *Id.* at 222-225; Glick et al., *supra* note __, at 780-86.

¹⁷³ *Non-Compete Clause Rulemaking*, FED. TRADE COMM'N (Jan 5, 2023), <https://www.ftc.gov/legal-library/browse/federal-register-notices/non-compete-clause-rulemaking>.

aren't developing or using trade secrets.¹⁷⁴ And noncompetes are sometimes enforceable even if the employee doesn't leave voluntarily; in some states a company can fire an employee and still prevent them from taking another job!¹⁷⁵

While California and an increasing number of states refuse to enforce noncompetes,¹⁷⁶ most states enforce them. The result is to depress wages and reduce employee mobility.¹⁷⁷ And while noncompetes are theoretically supposed to protect investments in innovation, the evidence shows that they reduce innovation by making it harder for employees with a good idea to start a new company.¹⁷⁸ In fact, innovation has flourished in states that ban noncompetes compared to those that enforce them.¹⁷⁹

¹⁷⁴ See Sandeep Vaheesan & Matthew Jinoos Buck, *Non-Competes and Other Contracts of Dispossession*, 2022 MICH. ST. L. REV. 113, 122 (2020) (“The sandwich chain Jimmy John’s included a broad noncompete clause in the hiring packet given to store employees.”).

¹⁷⁵ See Kenneth J. Vanko, *You're Fired - And Dont Forget Your Non-Compete: The Enforceability of Restrictive Covenants in Involuntary Discharge Cases*, 1 DEPAUL BUS. & COMM. L.J. 1 (2002) (discussing the different approaches different states have towards the enforceability of noncompetes in the case of termination).

¹⁷⁶ See *Edwards v. Arthur Andersen*, 44 Cal. 4th 937 (Sup. Ct. 2008).

¹⁷⁷ See MARK A. LEMLEY & ORLY LOBEL, UNIV. SAN DIEGO SCH. L., RSCH. PAPER NO. 21-010, BANNING NONCOMPETE AGREEMENTS TO CREATE COMPETITIVE JOB MARKETS (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3773893; Evan Starr, *The Use, Abuse, and Enforceability of Non-Compete and No-Poach Agreements*, ECONOMIC INNOVATION GROUP (Feb. 2019), <https://eig.org/non-compete-brief/> (collecting studies).

¹⁷⁸ See, e.g., On Amir & Orly Lobel, *How Noncompetes Stifle Performance*, HARV. BUS. REV. (Jan./Feb. 2014), <https://hbr.org/2014/01/how-noncompetes-stifle-performance>; Matt Marx, *Non-compete Agreements: Barriers to Entry ... and Exit?*, 12 INNOVATION POL'Y AND ECON. 1, 51 (2012) (“[I]n the biotech industry, the enforcement of non-competes discouraged the founding of new firms following liquidity events such as acquisitions or initial public offerings, which should enable senior executives and key technical personnel to leave and start a new company.”); Vaheesan & Buck, *supra* note 174, at 161 (“Relatively easy labor mobility across firms promotes innovation and invention.”); Matthew S. Johnson et al., *Innovation and the Enforceability of Noncompete Agreements* (NBER, Working Paper 31487, 2023), <https://www.nber.org/papers/w31487>.

¹⁷⁹ See Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts:*

Noncompetes aren't alone. Many employees (even in states that ban noncompetes) are subject to nondisclosure agreements (NDAs) designed to prevent the loss of trade secrets.¹⁸⁰ Camilla Hrdy and Christopher Seaman have shown that many of those NDAs actually reach far beyond trade secrets, precluding the disclosure of any information about the employer.¹⁸¹ Even without a noncompete, employers also frequently require employees to sign nonsolicitation agreements that prevent them from hiring their fellow employees or working for the clients they had at a former firm.¹⁸² They even impose “stay or pay” clauses that require employees to pay tens of thousands of dollars in order to leave their job – a particularly noxious form of exit tax.¹⁸³ And an alarming number of employees are required to sign noncompetes even in states where they are illegal.¹⁸⁴ Employees may not know they are illegal, or may not have the time

Silicon Valley, Route 128, and Covenants Not to Compete, 74 N.Y.U. L. REV. 576, 602-613 (arguing that California's refusal to enforce noncompetes is a primary reason why it became an innovation leader in the United States). For a more general overview of the differences between U.S. states with and without noncomeptes, see ANNALEE SAXENIAN, REGIONAL ADVANTAGE (1996).

¹⁸⁰ Camilla Alexandra Hrdy & Christopher B. Seaman, *Beyond Trade Secrecy: Confidentiality Agreements That Act Like Noncompetes*, 133 YALE L.J. (forthcoming 2023) (manuscript at 14) (on file with authors), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4384661 (“Confidentiality agreements are extremely common in the workplace. While comprehensive data is lacking and usage varies by industry, it is assumed confidentiality agreements ‘are widely and increasingly used in employment contracts of all types.’”).

¹⁸¹ *See id.*

¹⁸² *See* PETER S. MENELL ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE ch. 2.D (2023 ed.).

¹⁸³ *See* <https://www.nytimes.com/2023/11/20/magazine/stay-pay-employer-contract.html>.

¹⁸⁴ *See* Evan Starr et al., *The Behavioral Effects of (Unenforceable) Contracts*, 36 J. L., ECON., AND ORG. 633 (2020).

and money to challenge them, so these illegal contracts still deter people from changing jobs.¹⁸⁵

Most outrageously, a large number of companies (including most of the major tech companies) entered into “no-poach agreements” in which they promised not to hire each other’s employees.¹⁸⁶ Those agreements are unquestionably illegal per se under any rational antitrust system; they are agreements not to compete.¹⁸⁷ Indeed, they are likely criminal.¹⁸⁸ But that didn’t stop people like Steve Jobs and other highly-placed tech executives from just deciding that they didn’t want to face competition for their employees. After all, if employees could change jobs at will, they could negotiate higher salaries. While the antitrust agencies have started cracking down on no-poach agreements, courts have been surprisingly resistant to enforcing the law,¹⁸⁹ and enforcing

¹⁸⁵ *Id.* at 665 (“[A] noncompete is associated with both a longer tenure and a reduced propensity to leave for a competitor even when the noncompete in question is unenforceable under state law.”).

¹⁸⁶ See Tom Krazit, *DOJ settles no-recruit claims against tech companies*, CNET (Sept. 24, 2010), <https://www.cnet.com/culture/doj-settles-no-recruit-claims-against-tech-companies/>.

¹⁸⁷ *Cf.* *Deslandes v. McDonald’s USA*, 2023 WL 5496957 (7th Cir. Aug. 25, 2023) (reversing dismissal of per se claim in franchise no-poach agreement).

¹⁸⁸ Cooper Spinelli and Eric Akira Tate,

No-Poach Case Alert: DOJ’s No-Poach Strategy Dealt Another Blow As Court Tosses Case Before It Reaches Jury, JDSUPRA (May 12, 2023), <https://www.jdsupra.com/legalnews/no-poach-case-alert-doj-s-no-poach-3641250/#:~:text=Overview%20of%20DOJ%20No%2DPoach%20Enforcement&text=Criminal%20liability%20under%20the%20Sherman,to%2010%20years%20in%20prison.&text=The%20DOJ%20brought%20its%20first,no%2Dpoach%20agreements%20in%202021> (listing several cases in which the Department of Justice has brought criminal charges in connection with no-poach agreements).

¹⁸⁹ Matt Modell & Harlan Rosenson, *DOJ Suffers Historic Defeat in its Fourth Failed Criminal No-Poach Prosecution but Shows No Sign of Letting Up Enforcement*, NAT’L L. J. (May 24, 2023), <https://www.law.com/nationallawjournal/2023/05/24/doj-suffers-historic-defeat-in-its-fourth-failed-criminal-no-poach-prosecution-but-shows-no-sign-of-letting-up-enforcement/>; <https://www.law360.com/articles/1766482/doj-abandons-last-remaining-no-poach->

the law doesn't seem to have stopped the practice. Companies are willing to break the law if they can drive down employee wages by doing so.

C. *Taxing Labor, Not Capital*

Finally, our tax system fundamentally encourages investment in capital, not labor. We tax revenue from capital at a substantially lower rate than revenue from wages.¹⁹⁰ Not surprisingly, our society encourages investing in buildings and computers over investing in employees. It compounds the previous problems, driving down wages by rewarding companies for replacing employees with technology.

The tax discrepancy is another reason why we have lost the middle class, concentrating all the returns to economic growth in capital (and the top 1%) at the expense of the vast majority of Americans.¹⁹¹ And it is one of the reasons for the moral panic over new technologies that threaten to displace workers, from self-driving cars to generative AI.¹⁹² Workers rightly worry that we have set up economic incentives to reward capitalists for eliminating their jobs. And when we do, they will find it harder to get another job, both because they may be bound by noncompetes or their kin and because there are fewer competitors to work for.

prosecution. For a discussion of the case law, see Eric A. Posner & Sarah Roberts, *No-Poach Antitrust Litigation in the United States* (working paper Nov. 1, 2023).

¹⁹⁰ Ingram, *supra* note 12.

¹⁹¹ See Nick Buffie, *5 Little-Known Facts About Taxes and Inequality in America*, CENTER FOR AMERICAN PROGRESS (Aug. 30, 2022), <https://www.americanprogress.org/article/5-little-known-facts-about-taxes-and-inequality-in-america/> (explaining how the lower tax rate for capital gains and qualified dividends contribute to income inequality).

¹⁹² See Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460, 510-15 (2015) (discussing the implications of an economy with decreases scarcity and need for labor).

Taxing labor more than capital is fundamentally regressive. Rich people pay much less in taxes than poor people in large part because their income comes in the form of capital gains taxed at a lower rate.¹⁹³ And while in theory the lower tax rate for capital gains is justified by the economic value of capital reinvestment, in practice that is no longer true. Vast swaths of capital gains are passive, reflecting the holding of stock or real property in the hands of rich people and corporations that do nothing productive with them. Rewarding being rich both encourages the incentives of capitalists to avoid competition and amplifies the negative effects on the working class.

A robust market does not just include competition to provide goods and services to customers. It also requires robust competition in the labor market. Companies, aided by government policy, have found ways to short-circuit the labor market, increasing their own returns at the expense of employees.

IV. Freeing the Market

The coopting of capitalism didn't happen by accident. The drive by capitalists to eliminate the threat of market competition may or may not be inherent in capitalism itself. But even if capitalists trying to rig the game is inevitable, giving in to it is not. We have the tools to ensure that competition flourishes in a free market. And a surprising number of them are legal tools. In many cases they are tools we have long used but have

¹⁹³ Zach Liscow, *Redistribution for Realists*, 107 IOWA L. REV. 495 (2022).

abandoned in the past several decades. We just need to pick them up again, to regulate in the service of a free market that actually works.

We should begin by ensuring that a competitive market has what it needs most: competitors. Mergers among competitors should be disfavored. The empirical data suggests that most of the claimed efficiencies of such a merger are either illusory or in fact reflect disruption in an upstream supply market. Mergers between companies with significant market share and even small competitors should be presumptively illegal. Indeed, perhaps the only legitimate justification for a large company buying its competitor is if it can show that otherwise they would have gone out of business.¹⁹⁴ And even then a competitor purchase should be a last resort after other merger options have failed.¹⁹⁵ Courts and agencies also need to take a closer look at a series of small transactions that until now have flown under the radar screen. Even if no one merger in a private equity rollup or a big tech startup acquisition strategy seems to pose an imminent competitive threat, the combination of hundreds of such acquisitions is a

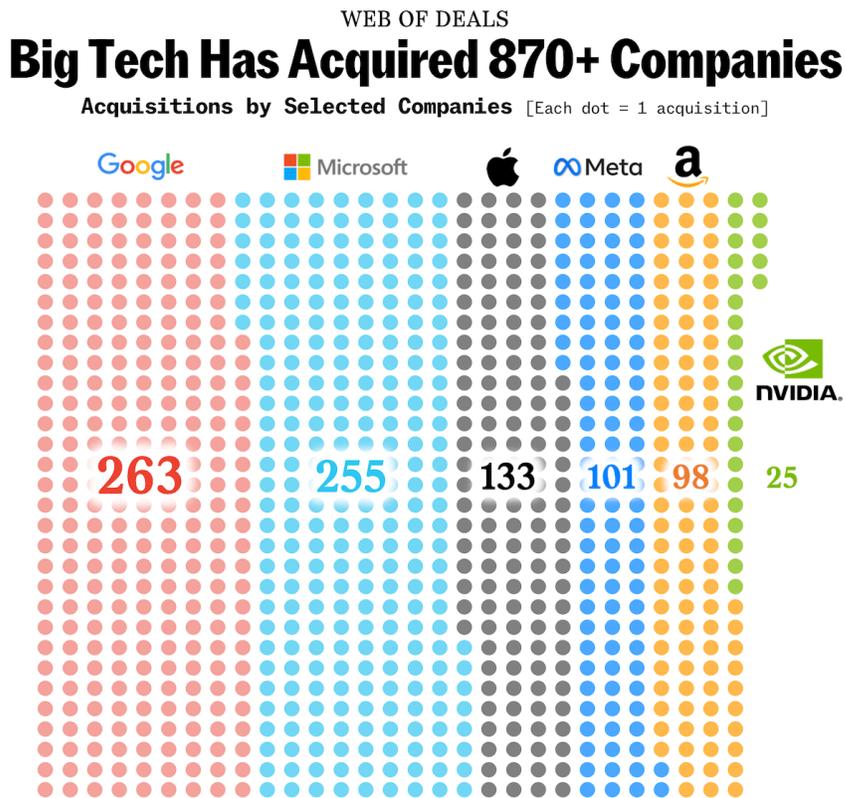
¹⁹⁴ Lemley & McCreary, *supra* note 43, at 96 (“[I]n many cases, the alternative to merger is not continued competition by the acquired firm but watching that firm fail.”).

¹⁹⁵ *Id.* at 97 (“We propose applying this principle to create a strong rebuttable presumption against incumbent acquisitions of direct competitors and a weak rebuttable presumption against incumbent acquisitions of other firms.”).

problem.¹⁹⁶ And the six largest internet companies have acquired at least 870 companies between them.¹⁹⁷

The Biden Administration has shown an admirable willingness to challenge mergers that would have passed without question in prior administrations, including going after private equity rollups.¹⁹⁸ And the Justice Department and the FTC have issued commendable new merger guidelines that will subject problematic mergers to much more serious scrutiny.¹⁹⁹ But the agencies don't themselves get to decide what the

¹⁹⁶ See Feldman & Lemley, *Atomistic Antitrust*, *supra* note __.



¹⁹⁷ CHARTR

Source: Crunchbase Chart, *Missing: Thousands of*

Stocks, April 28, 2024.

¹⁹⁸ See, e.g., *FTC v. U.S. Anesthesia Partners, Inc.*, 4:23-CV-03650, 2024 U.S. Dist. LEXIS 85714 (S.D. Tex. May 13, 2024) (allowing antitrust case to proceed against rolled-up entity, though not against the private equity firm that funded and profited from it); Jade Martinez-Pogue, *FTC Chair Decries PE's Healthcare Impacts As Probe Starts*, Law360, March 5, 2024.

¹⁹⁹ U.S. DEP'T JUST. AND FED. TRADE COMM'N, *MERGER GUIDELINES* (2023), <https://www.justice.gov/atr/2023-merger-guidelines>.

law is. And time and again in the last two years, the government has brought meritorious antitrust claims, only to lose in court.²⁰⁰

The hostility of courts to those challenges suggests that we need to educate courts steeped in decades of Chicago ideology. That is a long-term process. Congress may need to help it along by making it harder to buy your competitor, creating a presumption against horizontal mergers or even a flat ban on mergers by companies above a certain size or market share.²⁰¹ Senator Klobuchar’s CALERA Act would do just that.²⁰² And we should drastically cut back on merger law’s reliance on efficiency claims, distinguishing true productive efficiencies from the far more common claim that a merger will reduce labor costs by creating a monopsony that is actually economically inefficient.²⁰³ And we need to be willing to revisit the worst mergers allowed during the period of

²⁰⁰ To be fair, that record may be turning around with government wins in challenges to the Illumina-Grail and JetBlue-Spirit mergers, see *Illumina, Inc. v. FTC*, __ F.4th __ (5th Cir. Dec. 15, 2023); *United States v. JetBlue Airways Corp.*, 1:23-cv-10511-WGY (D. Mass. Jan. 16, 2024), and several other recent deals fell apart without the need for litigation after the government challenged them. <https://theankler.com/p/anti-trust-hurdles-awaiting-warnermount>. And the sheer number of merger challenges – the largest in recent history – has made mergers a riskier prospect than they were four years ago. That’s a good thing. <https://www.bloomberg.com/news/articles/2023-12-18/biden-antitrust-enforcers-set-new-record-for-merger-challenges>

²⁰¹ See Fiona Scott Morton, Kartikeya Kandula, and Karissa Kang, *Do We Need a New Sherman Act?*, 2022 COLUM. BUS. L. REV. 42 (arguing for a combination of legislative, executive, and judicial reforms).

²⁰² S.225, 117th Cong. (2021).

²⁰³ See Eric Posner, *Introduction to the Symposium on Labor Market Power*, 90 U. CHI. L. REV. 261, 262 (2023) (“Monopsony like monopoly thus results in two types of harm – deadweight loss (or loss of economic efficiency) and maldistribution.”).

underenforcement, like Facebook’s purchase of Instagram and LiveNation’s purchase of Ticketmaster.²⁰⁴

At a bare minimum, Congress and the agencies should put severe limits on the current practice of entering into a facially anticompetitive merger and then promising to behave in ways that reduce some of the harms from the merger. These conduct-based remedies have become increasingly popular as antitrust review of mergers has become more permissive.²⁰⁵ But they almost never work, and there are plenty of examples of companies going back on their promises after the merger is completed and facing no consequences.²⁰⁶ We should favor structural over conduct remedies, banning mergers altogether when we can. But even if we can’t, the conduct promises should be binding; a failure to abide by the promise should automatically invalidate the merger, no matter the inconvenience to the company that broke the rules. Will that be hard? Sure. That’s a reason not to allow the merger in the first place. But if we won’t do that, it ought to be the merging companies who bear the risk of breaking their promises, not the rest of us.

Next, we should limit the power that companies that hold chokepoints have over competition in adjacent markets. The ideal way to do this is to open industry standards to competition, making the standards themselves available to all comers on equal terms

²⁰⁴ Both are currently the subject of antitrust challenges. See *FTC v. Facebook Inc.*, 581 F. Supp. 3d 34 (D.D.C. 2022); *United States v. LiveNation Ent., Inc.*, No. 1:24-cv-03973 (S.D.N.Y. May 23, 2024), <https://www.justice.gov/atr/media/1353101/dl>. For discussion of the need for breakups in certain cases, see Rory Van Loo, *In Defense of Breakups: Administering a “Radical” Remedy*, 105 CORNELL L. REV. 1955 (2020).

²⁰⁵ See Logan Billman & Steven C. Salop, *Merger Enforcement Statistics: 2001-2020*, 85 *Antitrust L.J.* 1, 4 (2023) (documenting the rise of successful efforts to persuade courts to accept an anticompetitive merger with proposed modifications); Steven C. Salop & Jennifer Sturiale, *Fixing “Litigating the Fix,”* *ANTITRUST L.J.* (forthcoming 2023).

²⁰⁶ See *id.*; JOHN KWOKA, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* (2015).

– or at least allowing what Cory Doctorow calls “adversarial interoperability” through practices like scraping price data and linking to a user’s social graph from a competing company.²⁰⁷ Some things may be so important that we treat them as infrastructure to which everyone must have access.²⁰⁸ But we can also target the effects of such chokepoint control. We could ban vertical integration by the owners of standards altogether, as FTC Chair Lina Khan has suggested.²⁰⁹ Alternatively, we could ban self-preferencing by vertically integrated companies that own standards, as a bill considered in the last Congress would have done,²¹⁰ though doing so is more challenging to enforce than a complete ban. And even if we don’t do either thing, we should be less willing to allow vertical mergers by incumbents. If we do allow those mergers, we could condition them on a robust mandate that the company allow interoperability and avoid self-preferencing. Perhaps we could go even further, introducing a general interoperability principle in regulated industries.²¹¹ Finally, we could restore the net neutrality mandate that was the informal norm for the early decades of the internet and the rule during the Obama

²⁰⁷ <https://www.eff.org/deeplinks/2019/06/adversarial-interoperability-reviving-elegant-weapon-more-civilized-age-slay>.

²⁰⁸ See BRETT M. FRISCHMANN, *INFRASTRUCTURE: THE SOCIAL VALUE OF SHARED RESOURCES* (2012).

²⁰⁹ Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973 (2019).

²¹⁰ S. 2992, 117th Cong. (2022).

²¹¹ See Fiona M. Scott Morton et al., *Equitable Interoperability: The “Supertool” of Digital Platform Governance*, 40 Yale J. Reg. 1013 (2023) (arguing that interoperability can help drive competition in industries that naturally tend towards concentration).

administration.²¹² The goal, as Jim Speta puts it, is “to address concerns about the currently dominant platforms by using law to make it easier to have *more platforms*.”²¹³

Third, we should protect the rights of resale and repair. Courts (and if necessary, Congress) must hold the line against efforts to twist IP law to prevent the resale of physical products. Congress should amend the Copyright Act to extend that resale right to digital goods as well. And states should enact right to repair legislation of the sort that has recently passed in Colorado, Massachusetts, Minnesota, and California.²¹⁴ Protecting the rights to repair and resell used goods not only preserves a form of competition, it also helps the environment. Our culture of making disposable goods that we replace with new ones every few years may benefit the companies that sell those new goods, but it’s not sustainable in a world of diminishing resources.

Fourth, we should limit or eliminate regulatory exclusivity and licensing barriers to entry wherever possible. Regulation for health and safety is often a good thing; regulation that creates an exclusive supplier almost never is. Even where we need exclusive rights to encourage invention, as in the pharmaceutical industry, we should

²¹² See *supra* note 63.

²¹³ Jim Speta, *The Past’s Lessons for Today: Can Common Carrier Principles Make for a Better Internet?*, 106 MARQ. L. REV. 741, 743 (2023).

²¹⁴ WBZ-News Staff, *Right to Repair law can now be enforced in Massachusetts as feds reverse course*, CBS NEWS (Aug. 23, 2023), <https://www.cbsnews.com/boston/news/right-to-repair-law-massachusetts-auto-repair-nhtsa/>; Kevin Purdy, *Minnesota enacts right-to-repair law that covers more devices than any other state*, ARS TECHNICA (May 25, 2023), <https://arstechnica.com/gadgets/2023/05/minnesota-enacts-right-to-repair-law-that-covers-more-devices-than-any-other-state/>; <https://www.theverge.com/2023/9/13/23871712/california-right-to-repair-act-sb-244>; Colo. H.B. 1121 (signed May 12, 2024). For further discussion, see Perzanowski, *supra* note 94; Aaron Perzanowski, *Mandating Repair Scores*, 37 BERKELEY TECH. L.J. 1123 (2022).

police the boundaries of those rights carefully. The law should not be afraid to deprive companies of patents or regulatory exclusivity if they abuse those exclusive rights. The Biden Administration has begun using its new power under the IRA as the largest buyer of drugs to negotiate prices for a few drugs, something every other country has been doing for decades.²¹⁵ But we can do more to fix the tangled mess that pharmaceutical regulatory exclusivity has become. We should reform the patent system to prevent evergreening, adopting Robin Feldman’s “one and done” proposal under which you get a patent for a term of years, but no power to artificially extend it with follow-on patents.²¹⁶ We should aggressively target other efforts to use regulatory capture to delay generic drug entry, as the FDA has begun to do by targeting false listing of irrelevant patents in the FDA’s “Orange Book.”²¹⁷ And that targeting must include not just injunctions against market delay years after the fact; the government needs to be able to force disgorgement of profits obtained by unlawful acts.²¹⁸

²¹⁵ *HHS Selects the First Drugs for Medicare Drug Price Negotiation*, U.S. DEP’T HEALTH AND HUMAN SERVICES (Aug. 29, 2023), <https://www.hhs.gov/about/news/2023/08/29/hhs-selects-the-first-drugs-for-medicare-drug-price-negotiation.html>.

²¹⁶ See Robin Feldman, *‘One and done’ for new drugs could cut patent thickets and boost generic competition*, STAT (Feb. 11, 2019), <https://www.statnews.com/2019/02/11/drug-patent-protection-one-done/>; S. Sean Tu & Mark A. Lemley, *What Litigators Can Teach the Patent Office About Pharmaceutical Patents*, 99 WASH. U. L. REV. 1673, 1713-15 (2022).

²¹⁷ See <https://news.bloomberglaw.com/ip-law/teva-boehringer-drugs-among-ftc-targets-threatening-exclusivity>. For other suggestions to target regulatory gaming, see Jorge L. Contreras & Arti K. Rai, *Orange Book Over-Declaration of Pharmaceutical Patents: The Advantages of Ex Ante Over Ex Post Review*, Health Affairs, Dec. 13, 2023; Michael A. Carrier, *A Simple Solution to the Problem of “Product Hopping,”* Harv. Health Pol’y Rev. (2021).

²¹⁸ The Supreme Court took away the FTC’s authority to order disgorgement in *AMG Capital Mgmt. v. FTC*, 593 U.S. __ (2021). But Congress could and should restore it.

Fifth, once we have competitors, we need to make the process of actually competing swift and painless. The internet offers powerful tools in this regard, but they have been coopted. Here, too, regulations that make the market work can help. Regulators can ensure price transparency (making it easy to find the price of a good and preventing companies from hiding additional fees and costs).²¹⁹ They can regulate the behavior of review sites, requiring disclosure of any reviews that are connected to the company being reviewed and any payments the review site receives. Disclosure rules have worked well in other industries, from food labeling to energy efficiency – as long as they are quite prominent. And they can regulate “drip pricing” by requiring full disclosure of “junk fees” upfront, as the FTC has recently proposed doing.²²⁰

Regulators can also strictly control auto-renewals and junk fees and make it easy to cancel subscriptions. The Federal Trade Commission has recently proposed new rules to do just that. Both the FTC and the DOJ have recently brought suits against large tech companies alleging they deliberately make it hard to cancel their subscription services.²²¹ The CFPB adopted a new rule restricting credit card late fees.²²² They can restrict dark patterns by limiting the use of some particularly deceptive practices and by requiring

²¹⁹ See Rory Van Loo, *Inflation, Market Failures, and Algorithms*, 96 S. Cal. L. Rev. 825, 871 (2023) (proposing a “Price Transparency Act”).

²²⁰ <https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/11/biden-harris-administration-announces-broad-new-actions-to-protect-consumers-from-billions-in-junk-fees/>.

²²¹ *FTC Takes Action Against Amazon for Enrolling Consumers in Amazon Prime Without Consent and Sabotaging Their Attempts to Cancel*, FED. TRADE COMM’N (June 21, 2023), <https://www.ftc.gov/news-events/news/press-releases/2023/06/ftc-takes-action-against-amazon-enrolling-consumers-amazon-prime-without-consent-sabotaging-their>; McCabe, *supra* note __ (discussing U.S. case against Adobe).

²²² Jon Hill, *CFPB Adopts Rule to Slash Credit Card Late Fees By Billions*, Law360, March 5, 2024.

identification of advertisements and conspicuous links. Once again, the Federal Trade Commission is on the job.²²³ And the Biden Administration has taken positive steps to target autorenewals and practices that make refunds hard or require them to be in credits for future purchases.²²⁴ They can regulate the misbehavior of intermediaries like pharmacy benefit managers. The FTC is proposing to do that too.²²⁵ And if they don't ban vertical integration by monopolists, they can impose rules regulating self-preferencing by those monopolists.²²⁶ The FTC is aggressively taking positive steps on consumer protection issues, using an expansive view of its authority to prevent unfair competition. But right now the FTC can't require bad actors to disgorge their ill-gotten gains; they can only order future bad behavior to stop.²²⁷ If the FTC is hamstrung by courts,²²⁸ Congress may have to step in to tackle some of these issues.

²²³ *FTC Report Shows Rise in Sophisticated Dark Patterns Designed to Trick and Trap Consumers*, FED. TRADE COMM'N (Sept. 15, 2022), <https://www.ftc.gov/news-events/news/press-releases/2022/09/ftc-report-shows-rise-sophisticated-dark-patterns-designed-trick-trap-consumers>; Lindsay Wilson, *Is There a Light at the End of the Dark-Pattern Tunnel?*, 91 GEO. WASH. L. REV. 1048 (2023); Chris O'Malley, *FTC Sues Doxo, Signaling 'Dark Patterns' Crackdown Still Underway*, THE RECORDER, May 7, 2024.

Cf. Gregory M. Dickinson, *Privately Policing Dark Patterns*, 57 Ga. L. Rev. 1633 (2023) (recommending the use of private tort suits to combat dark patterns).

²²⁴ See, e.g., Hannah Sampson, *What fliers need to know about new refund rules for airlines*, WASH. POST, April 24, 2024, <https://www.washingtonpost.com/travel/2024/04/24/canceled-flight-refund-lost-bag-rules/>.

²²⁵ Celine Castronuovo, *FTC Walks Back Years of Support for Pharmacy Benefits Middlemen*, BLOOMBERG LAW (July 20, 2023), <https://news.bloomberglaw.com/health-law-and-business/ftc-adopts-policy-statement-rescinding-drug-middlemen-advocacy>.

²²⁶ Khan, *supra* note 209; Lina M. Khan, Chair, Fed. Trade Comm'n, Remarks at the Charles River Associates Conference (Mar. 31, 2022).

²²⁷ See *AMG v. FTC*, __ U.S. __ (2021) (barring equitable remedies in FTC lawsuits in district court); Wilson, *supra* note __.

²²⁸ That is a real risk. While the FTC has been around for more than a century, that hasn't stopped an activist conservative judiciary from attacking both its structure and its remedial powers as unconstitutional. *Axon v. FTC*, __ U.S. __ (2023) (allowing constitutional challenge to the independent nature of the FTC itself to proceed).

None of this will completely prevent the enshittification of the internet. The only real way to do so is to ensure competition among platforms and restrict or eliminate vertical integration or preferencing. But at a minimum, we can regulate the means by which dominant platforms line their own pockets by making it harder, not easier, for us to find what we are looking for.

Sixth, we should ban agreements designed to make it harder for employees to take new jobs. Noncompete agreements and overbroad NDAs and nonsolicitation agreements do far more social harm than good, and we should ban them, as – you guessed it – the FTC recently proposed.²²⁹ No-poach agreements are already illegal, but we should be even more aggressive in enforcing the law. And the government should crack down on union-busting efforts by companies eager to prevent efforts to give workers more bargaining power.²³⁰

Seventh, we need to fix our tax system. The historic justification for favoring capital is that capital investment will multiply its effect, benefiting labor and consumers too. That’s no longer happening. Companies and rich individuals spend money buying (or buying back) stock and buying and shutting down competitors rather than investing in building companies. And our tax system rewards them for buying and trading stock rather than employing people to make things. That system is out of whack.

²²⁹ *FTC Proposes Rule to Ban Noncompete Clauses, Which Hurt Workers and Harm Competition*, FED. TRADE COMM’N (JAN. 5, 2023), <https://www.ftc.gov/news-events/news/press-releases/2023/01/ftc-proposes-rule-ban-noncompete-clauses-which-hurt-workers-harm-competition>.

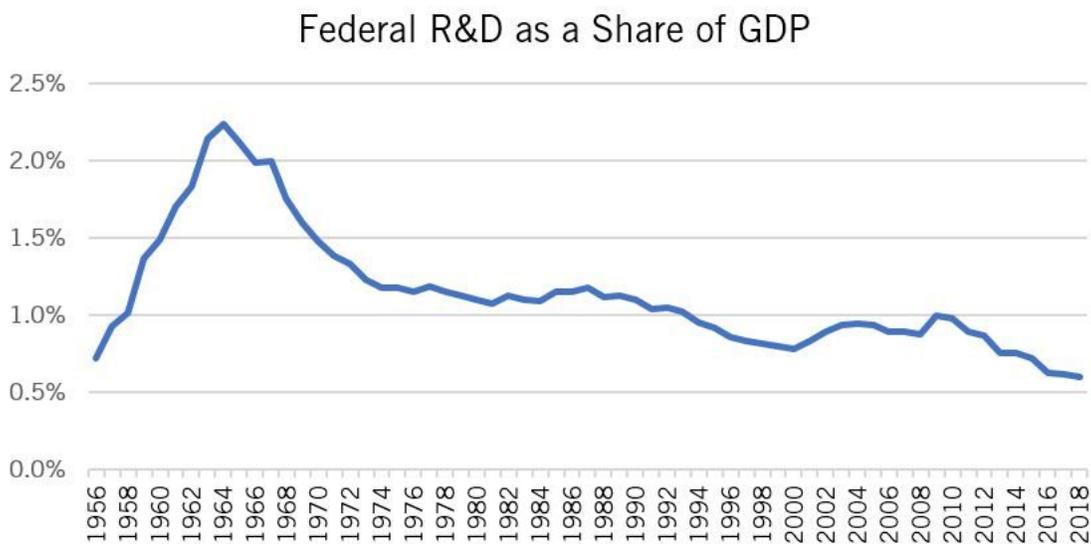
²³⁰ *See, e.g., Justin Stabiley, Why scrutiny of Starbucks’ alleged union violations is boiling over now*, PBS NEWS HOUR (Mar. 29, 2023), <https://www.pbs.org/newshour/economy/the-union-busting-practices-that-landed-starbucks-in-hot-water>.

That doesn't mean we don't need capital investment; we do. But we need labor too. And more important, we need the social system that actually paying employees enough that they can join the middle class. Not punishing those who earn revenue in the form of wages seems like a sensible first step towards leveling the playing field.

Finally, the government needs to reinvest in scientific research. Government spending on research and development in the 20th century paid enormous dividends for decades. Indeed, much of what we think of as the successes of private entrepreneurship - including the internet but even the smartphone - trace to government research projects.²³¹ Public funding for basic research has declined dramatically in recent decades as a percentage of GDP, from over 2% in the 1960s to barely over 0.5% today,²³² as we

²³¹ See MARIANA MAZZUCATTO, *THE ENTREPRENEURIAL STATE: DEBUNKING PUBLIC VS. PRIVATE-SECTOR MYTHS* (2013).

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Caleb Foote & Robert D. Atkinson, *Federal Support for R&D Continues Its Ignominious Slide*, ITIF (Aug. 12, 2019), <https://itif.org/publications/2019/08/12/federal-support-rd-continues-its-ignominious-slide/>.

turned the pursuit of innovation over to capitalists. Private investment in R&D is great and we should encourage it. But it is a complement to, not a substitute for, government funding of research.

The problems capitalism faces are big and daunting. There is no magic solution. But there are a number of fixes that will help, and some that will help quite a lot. Perhaps surprisingly for a problem that is fundamentally economic, the fixes are almost all legal rules. Some of these fixes are easy; some are hard. We live in an era when the idea of passing anything through Congress, much less sensible policy, seems old-fashioned and faintly ludicrous. And some of these changes – to the tax system, the more radical antitrust changes – may require legislation. But many of these are things that are already in the law if we only have the guts to use the tools that are already in our hands. That's because many of our laws already reflect the balanced capitalism that had worked so well in the post-World War II era.

Indeed, it is remarkable how many of the things that would free the market are things the Federal Trade Commission, the Antitrust Division, and other government agencies are already trying to do in the Biden Administration. They are taking merger enforcement seriously, targeting dark patterns and auto-renewals, seeking to ban noncompetes, and targeting the enshittification of the internet. These aren't (or shouldn't be) partisan initiatives. They are efforts to ensure that the market has a chance to work for everyone.

Not surprisingly, this has upset a lot of people, not least because the revolution is being led by a young woman of color.²³³ The headwinds against reform are substantial, because the capitalists who have hijacked capitalism have everything to lose from the prospect of the FTC freeing the market. The odds are that the dominant capitalists will kill the reform movement and preserve their monopolies, continuing to insulate themselves from competition. But the verdict is in from forty years of our return to robber barons, and it's not pretty. If we are to save capitalism – and indeed to save our democracy – we need to make sure the capitalists don't succeed. The law offers us the tools to do just that. And the time for us to do it is now.

²³³ Cory Doctorow, *Why they're smearing Lina Khan*, PLURALISTIC (July 14, 2023), <https://pluralistic.net/2023/07/14/making-good-trouble/>.