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A New Gilded Age? Public Opinion, Antitrust, and the Dangers to Market Competition

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Fears of a second Gilded Age—of the excessive wealth and power of America's biggest corporations—have put antitrust back on the Presidential agenda. On July 9, 2021, President Joe Biden released his "Executive Order on Promoting Competition in the American Economy," which argued that "in the early 1900s, Teddy Roosevelt's Administration broke up the trusts controlling the economy—Standard Oil, J.P. Morgan's railroads, and others—giving the little guy a fighting chance." The historical evidence shows otherwise. Federal intervention in leading-edge industries has followed media-driven shifts in public opinion, and the politics of antitrust as a "popular movement" produce mixed results for market competition—in part because activist leaders more often than not "could not tell the difference between federal regulation *of* business and federal regulation *for* business." In theory, antitrust seeks to elevate market competition as the means to govern the economy. But in practice, antitrust action is historically accompanied by other types of regulation that have overwhelmingly benefitted incumbent businesses. Thus, in the context of government regulation, public outrage, and regulatory capture, antitrust will most likely reduce rather than increase competition, efficiency, and innovation in the American economy.

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A new Gilded Age? Public opinion, antitrust, and the dangers to market competition

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Fears of a second Gilded Age—of the excessive wealth and power of America's biggest corporations—have put antitrust back on the Presidential agenda. On July 9, 2021, President Joe Biden released his "Executive Order on Promoting Competition in the American Economy,"[2] which was primarily authored by presidential adviser and Columbia law professor Tim Wu. It "encourages the leading antitrust agencies to focus enforcement efforts on problems in key markets," and to focus in particular on the tech sector. Along with Wu, other allies of Senator Elizabeth Warren have filled out key positions in the new administration—Lina Khan is now chair of the Federal Trade Commission, Bharat Ramamurti is deputy director of the National Economic Council, and Jonathan Kanter will be nominated to run the antitrust division of the Department of Justice. Wu and other members of this "hipster antitrust" movement are seeking an intellectual revolution that, in Wu's words, aims to "bring back antitrust as a popular movement, rather than as an abstract academic thing."[3]

Certain historical myths animate this movement. The executive order justifies its 72 initiatives by arguing that "When past presidents faced similar threats from growing corporate power, they took bold action. In the early 1900s, Teddy Roosevelt's Administration broke up the trusts controlling the economy—Standard Oil, J.P. Morgan's railroads, and others—giving the little guy a fighting chance." In his 2018 book comparing today's tech giants to the trusts of the late 19th century, *The Curse of Bigness*, Wu argued that economic concentration feeds "an appetite for nationalist and extremist leadership," such that "if we learned one thing from the Gilded age, it should have been this: The road to fascism and dictatorship is paved with failures of economic policy to serve the needs of the general public." [4]

The historical evidence shows otherwise, however. Federal intervention in leading-edge industries has followed media-driven shifts in public opinion. The politics of antitrust as a "popular movement" produce mixed results, at best, for market competition. In theory, antitrust seeks to elevate market competition as the key means for governing the economy. In practice, antitrust action is historically accompanied by other types of regulation that have overwhelmingly benefitted incumbent businesses by reducing competitive pressures. In this light, we should not read our most celebrated antitrust cases as unmitigated successes against corporate power. Standard Oil, AT&T, and Microsoft captivated the public and increased support for intervention. But their antitrust cases played out against a backdrop of competition-reducing regulation that favored vested business interests.

Yet the analogy with these past cases is inexact. Unlike the giants of the industrial revolution, today's giant software companies are able to achieve self-reinforcing oligopolies, particularly through network

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[1] Prepared for Prepared for the July 29, 2021 research meeting of the Hoover Institution's "Technology, Economics, and Governance" Working Group.
[2] "President Biden Announces Jonathan Kanter for Assistant Attorney General for Antitrust." The White House, July 9, 2021. https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/09/fact-sheet-executive-order-on-promoting-competition-in-the-american-economy/
[3] Cassidy, John. "The Biden Antitrust Revolution." The New Yorker, July 12, 2021.
[4] Wu, Tim. *The Curse of Bigness: Antitrust in the New Gilded Age*. New York: Columbia Global Reports, 2018; Wu has also authored a book analyzing the nature of information-based businesses in Wu, Tim. *The Master Switch: The Rise and Fall of Information Empires*. New York: Alfred A. Knopf, 2010.

effects. Does this mean that, unlike in the past, antitrust action might actually be worth its associated political and regulatory costs? Perhaps. On the one hand, inducing greater competition in industries that tend towards natural monopolies may produce less economically efficient outcomes. Often governments prefer to regulate profitability and pricing in these industries. On the other hand, large business interests have a stellar record in regulatory capture, so antitrust-induced competition might well be the preferable outcome.

The conventional wisdom on U.S. antitrust—law and economics

Conventional histories of U.S. antitrust highlight "a convergence of economics and law without parallel in public oversight of business."[5] A central part of this story is the tension between two principles, one of which favors the plaintiff and the other the defendant:

1. Per se concept—behaviors with no judicially redeeming characteristics which are illegal per se.
2. Rule of reason—behaviors the illegality of which rests on their probable negative effect on market competition or in creating "restraints of trade."

In the conventional view, antitrust law developed in the United States as a response to the rise of trusts and combinations—that is, cross-ownership and management structures that facilitated collusion—and its early application was a key part of the Progressive Era's response to economic concentration. The focus of early antitrust law was (and in large part continues to be) enterprise size, market share, and strategic market positioning. Antitrust was animated by what Supreme Court Justice Louis D. Brandeis termed "the curse of bigness." He hypothesized that firms could be too big to treat employees on equal terms, to be efficient, and to treat rivals fairly. [6]

Antitrust law was radically challenged by Robert H. Bork and Ward S. Bowman in their seminal 1965 article "The Crisis in Antitrust," where they argued that "the only legitimate goal of antitrust is the maximization of consumer welfare."[7] They concluded that while preserving competition would serve consumer welfare, preserving competitors could ironically harm consumer welfare by punishing aggressive pricing and mergers.

With the Chicago School economics revolution, antitrust analysis moved further away from economic structuralism.[8] One change was to equate "consumer welfare" with economic efficiency, encoded by the Reagan Administration's 1982 merger guidelines that aimed to proscribe the "ability of one or more firms profitably to maintain prices above competitive levels." This was a radical departure from the previous 1968 guidelines which aimed "to preserve and promote market structures conducive to competition." Another change was the narrowing of "barriers to entry" to exclude incumbent advantages from economies of scale and capital requirements. "With so many entry barriers discounted, all firms are subject to the threat of potential competition … On this view, market power is always fleeting—and hence antitrust enforcement rarely needed."[9] These changes were what allowed Alphabet Executive

[5] Kovacic, William, and Shapiro, Carl. "Antitrust Policy: A Century of Economic and Legal Thinking," Journal of Economic Perspectives, Volume 14, Number 1, Winter 2000, 43-60
[6] Orbach, Barak Y. and Rebling, Grace Campbell. "The Antitrust Curse of Bigness," *Southern California Law Review* 605 (2012)
[7] Bork, Robert H., Bowman Jr., Ward S. "The Crisis in Antitrust," *Columbia Law Review* Vol. 65 No.3, March 1965.
[8] Khan, Lina M. "Amazon's Antitrust Paradox." *The Yale Law Journal*. Vol. 126 No. 3, January 2017, 564-907. 719.
[9] Khan, 720.

Chairman Eric Schmidt, during a 2011 Senate Judiciary Committee antitrust hearing, to claim: "It's also possible to not use Google search," because competition is "one click away."[10] Google at the time had a market share between 80% and 90%, at least 12 times larger than its next largest competitor, Yahoo.[11] Today, Google's market share stands at 92.4%.[12]

Lina M. Khan has argued in the *Yale Law Journal* article "Amazon's Antitrust Paradox" that the dominant tech firms have created conflicts of interest by using their dominant platforms to promote their own services against those of their competitors. This is in line with the reasoning advanced by the European Commission when it fined Google for giving more prominence to its own shopping service in search results. Khan has also suggested a presumption of predation with below-cost pricing, which others have argued creates pernicious long-term effects on productive investment, worker wages, product quality, and consumer choice.[13] User data and privacy could also fit into the antitrust framework, as the basis for charges such as those brought by Germany's Federal Cartel Office against Facebook for bullying "users into agreeing to terms and conditions that allow the company to gather data on their web-surfing activities in ways they might not understand,"[14] or South Korean and Japanese investigations against Facebook and Google for the "indiscreet collection of information" and their monopoly over consumer big data.[15] Scholars like Barak Orbach and Khan have questioned the usefulness of the consumer welfare principle for antitrust law,[16] and their desire to return to "structural" concerns with competition reflects not only new economic knowledge, but also the discipline's general shift to left over the last generation.[17]

Wagging the dog—the Standard Oil "story"

In the case of Standard Oil, the standard media narrative was that Rockefeller succeeded not through superior competition, but through anticompetitive rebates and predatory pricing. Writing in *The Atlantic* in 1881, Henry Lloyd described Standard Oil's and Rockefeller's success as the product of "conspiracy with the railroads," and that "after the Standard had used the rebate to crush out the other refiners, who were its competitors in the purchase of petroleum in the wells, it became the only buyer, and dictated the price."[18] The rise of trusts aggravated the public's fear of monopoly. Arguing for his anti-trust law before the Senate in 1890, Sherman argued: "The sole purpose of such a combination is to make competition impossible. It can control the market … reduce prices in a certain locality and breakdown competition and advance prices at will where competition does not exist."[19] These narratives gained currency as the industry's prestige declined. As economist Robin Hanson puts it, as new technologies

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[10] "Schmidt on Antitrust: Competition is One Click Away," *NBC*, September 21, 2011.
[11] Stoffel, Brian. "Google Stock: Buy It and Hold It For Life," The Motley Fool, May 20, 2013. Using data from Netmarketshare, Market Watch, Webpronews, Clickz, Onestat, and Websidestory.
[12] Statcounter, Global Stats. https://gs.statcounter.com/search-engine-market-share
[13] White, Gillian. "How American Business Got So Big," The Atlantic, November 18, 2016.
[14] Dwyer, Paula. "Should America's Tech Giants be Broken Up?" Bloomberg, July 20, 2017.
[15] Jaewon, Kim. "South Korean antitrust agency moving to control Google, Facebook." Nikkei Asia, June 26, 2017.
[16] Orbach, Barak Y. "The Antitrust Consumer Welfare Paradox," *Journal of Competition Law & Economics 133* (2011)
[17] However, the level of acceptance economic thinking must receive before being incorporated into antitrust practice remains hard to discern, see Gavil, Andrew. "After Daubert: Discerning the Increasingly Fine Line Between the Admissibility and Sufficiency of Expert Testimony in Antitrust Litigation." Antitrust law Journal, Fall, 65, 663-711.
[18] Lloyd, Henry. "The Story of a Great Monopoly," Atlantic Monthly, March 1881,
[19] "Senate, March 21, 1890." Volume 2 of Bills and Debates in Congress Relating to Trusts, United States. Congress House Committee on the Judiciary. Department of Justice, U.S. Government Printing Office, 1903. 95.

“age, these systems will change less, eroding their high status derived from being fashionable. They will become stable utilities that we all use ... and that we regulate, often heavily.”[20]

These currents created a booming market for journalists like Ida Tarbell, whose *History of Standard Oil* turned public opinion against Rockefeller and his allegedly anti-competitive tactics.[21] According to this widely accepted narrative, it was the Progressive crusade against corporate power that rectified matters. In the end, these narratives provided the political impetus for the 1911 landmark judgment in *Standard Oil Co. of New Jersey v. United States*, which broke Standard Oil up into 34 separate firms—even though, as historians and economists have since shown, the case did not rest on solid facts.

Reassessing Standard Oil—the nature of technological revolution

The economic history of the 19th century oil industry, however, belies the media’s narrative of excessive consolidation and monopolistic pricing. One of Tarbell’s most powerful tropes was the destruction of America’s numerous oil entrepreneurs. “Life ran swift and ruddy and joyous in these men. They were still young, most of them under forty, and they looked forward with all the eagerness of the young who have just learned their powers … They would bring the oil refining to the region where it belonged. They would make their towns the most beautiful in the world … But suddenly, at the very heyday of this confidence, a big hand reached out from nobody knew where, to steal their conquest and throttle their future.”[22]

Yet consolidation was only natural in an industry near the heart of the Industrial Revolution—that is, the transition from organic to mineral power.[23] The oil industry followed the patterns described by the London School of Economics’ Carlotta Perez’s more recent work on technological development.[24] The slow adoption of a new technology accelerates and then inflects into an S-curve, along the way undergoing standardization, consolidation, efficiency, and ubiquity.[25]

We must remember that oil refineries were revolutionary because they transformed illumination, and thus the very pace and quality of American life.[26] In 1800, $20 allowed a household to purchase 5,500 candle hours per year for evening illumination. By 1890, with kerosene, those $20 could purchase 73,000 candle hours per year.[27] Thus, Rockefeller was praised for bringing down the price of kerosene

[20] Hanson, Robin. “Tech Regs Are Coming,” *Overcoming Bias*, January 12, 2014.
[21] Sorkhabi, Rasoul. “Standard Oil I - Ida Tarbell: Pioneering Oil Industry Journalist,” GEO ExPro, Vol. 8, No. 2, 2011, 26-30.
[22] Tarbell, Ida. The History of the Standard Oil Company. New York, NY: McClure, Phillips & Company, 1904. 36–37.
[23] Wrigley, E.A. *Continuity, chance, and change: The character of the industrial revolution in England*. Cambridge: Cambridge University Press, 1988.
[24] Perez, Carlota. “Finance and Technical Change: A Long-term View.” *African Journal of Science, Technology, Innovation and Development*, Vol. 3 No.1, 2011. 10-35; Perez, Carlota. *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*. Elgar 2002.
[25] Sorkhabi, Rasoul. “Standarad Oil II - John D. Rockefeller: The First and Richest Oil Tycoon.” GEO ExPro. Vol. 8, No. 3, 2015. 82-90.
[26] Gordon, Robert J. *The Rise and Fall of American Growth: The U.S. standard of living since the Civil War*. Princeton: Princeton University Press, 2016. 94-128.
[27] Nordhaus, William. “Do Real Output and Real Wage Measures Capture Reality? The History of Lighting Suggests Not,” in Bresnahan and Gordon, eds. *The Economics of New Goods*. Studies in Income and Wealth, vol. 58. Chicago: University of Chicago Press for NBER. 29-70.

from 26 cents in 1870, when his market share was 4%, to 7 cents in 1890, when his market share reached 90%.[28]

Standard's continuously declining prices made plausible the idea of predatory pricing. However, John McGee's exhaustive examination of voluminous court records and triangulation with other sources demonstrates that Standard did not engage in predatory pricing—that is, selling below cost. Standard oil agents, internal correspondence shows, were not permitted to take losses on their sales.[29] Other studies suggest that predatory pricing itself is more of a "reputational" signal to deter future entrants into an industry. But unless this is done by selling at a loss, it is unclear how it is anticompetitive.[30]

In short, Standard Oil followed the trajectory that we would expect of a competitive firm in a leading-edge industry.

The rise and rise of federal intervention—the triumph of "conservatism"

The "New Left" historian Gabriel Kolko demonstrated in two seminal books—*Railroads and Regulation*[31] and *The Triumph of Conservatism*[32]—that much of the early "progressive" legislation and regulation in fact originated not with reformers, but with regulated industries themselves.

The railroads, in fact, were the single most important advocates of federal regulation from 1877 to 1916 because of their inability to form rate-setting cartels. Federal regulations would also short-circuit state legislatures, where populist movements held more sway. Rate regulation under the newly created Interstate Commerce Commission thus gave railroad owners the two things they most wanted—rate maintenance and the elimination of rebates. The Transportation Act of 1920 determined a level of reasonable profit for these now regulated utilities. Thus, while only 39% of rails paid dividends in 1888, at a rate of 2.1 percent, by 1910 those numbers rose to 67% and 5 percent.[33] This type of regulation of "natural monopolies" by setting rates and limiting entry had strong anticompetitive effects, as has been shown in Carl H. Fulda's study of inland water-carriers, aircraft, and motor carriers.[34]

It appears that the impetus for enforcing antitrust laws, which had been on the books for years, was rising popular discontent with big business. This discontent was channeled most strongly through the House of Representatives, while the Executive and Senate served as countervailing forces. At the turn of the century, politicians of both parties were no longer able to continue ignoring the trust issue. The 1900 Democratic platform pledged "an unceasing warfare in nation, State and city against private monopoly in every form." Even Republicans committed to "condemn all conspiracies and combinations intended to restrict business, to create monopolies."[35]

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[28] Epstein, Alex. "Vindicating Capitalism: The Real History of the Standard Oil Company." The Objective Standard. May 20, 2008.
[29] McGee, John S. "Predatory Price Cutting: The Standard Oil (N. J.) Case." *The Journal of Law & Economics*, Vol. 1 Oct., 1958, 137-169
[30] Yamey, Basil S. "Predatory Price Cutting: Notes and Comments." *The Journal of Law & Economics*, Vol. 15, No. 1 Apr., 1972, 129-142.
[31] Kolko, Gabriel. *Railroads and Regulation 1877-1916*. W. W. Norton & Company, 1970.
[32] Kolko, Gabriel. *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916*. Free Press, 1977.
[33] Interstate Commerce Commission. Statistics of Railway sin the United States, 1916. Washington, 1918.
[34] Fulda, Carl H. *Competition in the Regulated Industries: Transportation*. Little, Brown and Company, Boston, 1961.
[35] Kolko (177), 63-64.

Silicon Valley's fall from grace—news, news, and fake news

Silicon Valley's experience with political movements for regulatory and antitrust intervention in many ways recapitulate Standard Oil's. Today's tech giants pioneered the commercial development of the Internet, creating a "halo" effect around much of Silicon Valley in the eyes of consumers. This political popularity has weakened in recent years. The election of Donald Trump in 2016 significantly diminished it. In the subsequent years, the right grew increasingly worried about censorship and bias. After all, FEC disclosures from the 2016 presidential campaign showed that 95% of tech employee dollars went to Hillary Clinton, and only 4% to Donald Trump.[36] The left pushed conspiracy theories about Russian interference and panic about labor's declining share of national income and imminent automation-driven layoffs.[37] All this played out across big tech itself—on newsfeeds and timelines on Facebook and Twitter.

The social media landscape only accelerated political divisions between the public and tech, and within tech companies themselves. Corporate PR busily opposed Trump's withdrawal from the Paris climate change accord, his ban on transgender people serving in the military, and his intended repeal of Obama's Deferred Action for Childhood Arrivals (DACA) program. Comparisons to Hitler were common, even as tech firms internally became hostile to diverse political viewpoints. Google fired engineer James Damore over his memo on "Google's ideological echo chamber," while Palmer Luckey, founder of Oculus, faced charges of irresponsibility for donating to a group supporting Trump's campaign.

Yet no amount of progressive virtue-signaling could save Silicon Valley, which began to be routinely criticized in the press after 2016. In the mainstream media's telling, Big Tech's original sin was to allow Trump to win the presidency. However, the public has since been convinced to punish Big Tech for the crimes of monopoly. Recalling the sentiments of the Progressive Era, the media has successfully upturned the trust and goodwill that consumers had for the largest tech companies. Instead, opinion today is shaped by the carelessness and impunity revealed through episodes such as the Cambridge Analytica scandal. As in the late 1800s, suspicion and anger against big business, not facts about competition, are the political fuel for antitrust action.

The return of monopoly?

Older technology firms such as Intel and HP were subject to industrial dynamics of hardware production and distribution and could not build self-reinforcing oligopolies. But software can turn myths (or dreams) of monopoly into reality. Peter Thiel argued in his book *Zero to One* that competition is for suckers; only monopolists have the privilege to think about something other than survival and invest in the future.[38] For example, Alphabet thinks of itself as "the embodiment of 'big science' and 'the world's laboratory' unfettered by politics and unsoiled by commercial interests."

Software's monopoly power lies in network effects. Preferential attachment models, such as those developed by the physicist Albert-László Barabási, describe markets where strength begets strength. Y-Combinator's Sam Altman concurs, "We're looking for businesses that get more powerful with scale

[36] Chidea, Farai. "Nearly All Of Silicon Valley's Political Dollars Are Going To Hillary Clinton." FiveThirtyEight, October 25, 2016.
[37] Autor, David, Dorn, David, Katz, Lawrence F., Patterson, Christina, Van Reenen, John. "The Fall of the Labor Share and the Rise of Superstar Firms." *Quarterly Journal of Economics*, 2019. https://economics.mit.edu/files/12979
[38] Thiel, Peter. *Zero to One: Notes on Startups, or How to Build the Future*. Crown Business, 2014.

and that are difficult to copy." Thus, funding unprofitable growth, even at a staggering loss nearing $1BN per quarter for Uber, was rational because a market with strong network effects provides the entry barriers under which these losses will be recouped.

Ecosystem dominance and user data access also enable firms like Apple, Google, or Amazon to use app stores, search results, or online marketplaces to promote their own services, and push their own products. As the Nobel Prize Committee explained in its summary of economist Jean Tirole's work: "Mastering one link of a chain can allow a monopolist to make profits in the market of the next link. In reality, it is often by distorting competition in a neighboring market that a monopolist is able to make a profit."[39] Software reconfigures industries into two-sided markets, such as Uber and Airbnb, that obviate the need to own relevant assets. These markets produce just a few dominant firms, an effect compounded by the aggressive use of patents in software markets.[40]

The economics of software are profoundly difference from the economics of traditional or industrial firms in one important respect—returns to scale. Pre-digital giants like, say, Walmart achieved scale through aggressive pricing, much like Standard Oil. Competing this way takes its toll; Walmart's most first quarter net profit margins this year were 1.97%.[41] In contrast, software firms get more profitable as they grow in size. Facebooks' profit margins over the same quarter were 35.75% and Google's were 29.94%. Amazon might seem the exception at 7.47%, but this aggregate number hides the truth that Amazon is a hybrid of two distinct businesses—only one of which has increasing returns to scale. Amazon Web Services, the world's dominant cloud provider, operating margins of 30.8%, while Amazon.com (its retail division), had margins of 4.94%. Amazon's software business accounted for 12.4% of revenues but 46.9% of margins![42]

Does this mean antitrust is not only inevitable, but desirable? In some markets, demand is satisfied at the lowest cost by one firm—a natural monopoly—even as that firm gains incredible pricing power. In these cases, increasing competition actually reduces economic efficiency. However, as Richard A. Posner has argued, the most politically plausible alternative to antitrust is various attempts at "constructive reform," including price, profit, and entry controls. Yet limiting entry to reduce waste through regulatory agencies' "certificating power has been used to limit greatly the growth of competition in the regulated industries."[43] In short, given the political demands of the moment, antitrust action might be the least harmful policy response.

Conclusion: Between Scylla and Charybdis—the challenge of defending free markets

Marc Andreesen famously wrote in 2011 that "software is eating the world,"[44] meaning that software would become increasingly important in the operation of economic sectors that were not then considered

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[39] "Market power and regulation". The Prize in Economic Sciences. The Royal Swedish Academy of Sciences, 2014.
[40] Salop, Steven and Shapiro, Carl. "Jean Tirole's Nobel Prize in Economics: The Rigorous Foundations of Post-Chicago Antitrust Economics." *Antitrust*, Vol. 29, No. 2, Spring 2015.
[41] "Walmart releases Q1 FY22 Earnings," *Walmart*, May 18, 2021. https://corporate.walmart.com/media-library/document/q1-fy22-earnings-release/_proxyDocument?id=00000179-7c07-d966-af7b-7c6f75110000
[42] "Amazon.com Announces First Quarter Results," Business Wire, April 29, 2021. https://www.businesswire.com/news/home/20210429006037/en/Amazon.com-Announces-First-Quarter-Results
[43] Posner, Richard A. "Natural Monopoly and Its Regulation," *Stanford Law Review* Vol. 21, 1968. 548-643
[44] Andreessen, Marc. "Why Software Is Eating The World." The Wall Street Journal, August 20, 2011.

to be part of Silicon Valley. As software eats the world and creates fast-paced, winner-takes-all markets, antitrust might seem like our only hope.

Greater antitrust enforcement will likely produce mixed results. On the one hand, it is clear that the case against Standard Oil was driven more by political expediency than solid economic reasoning. On the other hand, economists now have frameworks for thinking about network effects and patents, which are important and unique features of the software markets and firms with increasing returns to scale.[45] Antitrust cases will thus move away from flawed measures of market share and pricing power, and towards preventing adjacent market distortions and conflicts of interest in digital "marketplaces." Yet judicial philosophies will change only slowly. Post-Chicago School understandings of antitrust might take decades to produce significant case and administrative law, as older judges retire, and new ones are sworn in.

But history teaches that our most successful cases of antitrust enforcement—Standard Oil, AT&T, Microsoft—were the exceptions rather than the rule. The wave of public discontent with Big Tech might make antitrust action politically possible, but at a heavy cost. As Kolko warned about the passions of the political crowds nearly 50 years ago: "National progressivism is able to short-circuit state progressivism, to hold nascent radicalism in check by feeding the illusions of its leaders—leaders who could not tell the difference between federal regulation *of* business and federal regulation *for* business."[46]

Defending free markets from regulated rent-seeking will be very difficult. As software inexorably advances into "commanding heights" industries such as finance and healthcare, where regulatory capture is the established modus operandi, regulated profitability may be the future. For example, despite public vilification and elaborate new regulations (e.g., the Dodd-Frank Act) in the aftermath of the 2008 crisis, the five biggest U.S. banks have achieved record profits, with an average net income of $41.73BN for 2009-2014, up from $25.08BN for 2002-2008.[47]

The administration's executive order does little to inspire hope that antitrust action will be a net benefit to American society. The "whole-of-government effort to promote competition in the American economy" includes "72 initiatives by more than a dozen federal agencies." The irony of the Biden administration's embrace of antitrust "hipsters" is that no one involved has learned the lessons of history—that antitrust, in the context of government regulation, public outrage, and regulatory capture, will most likely reduce rather than increase competition, efficiency, and innovation in the American economy. In view of the natural monopolies that characterize today's Internet-based economy, these adverse outcomes are a greater risk today than they were in the days of John D. Rockefeller.

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[45] Tirole, Jean. "Payment Card Regulation and the Use of Economic Analysis in Antitrust." *Competition Policy International*, Spring 2011, Vol. 7. No. 1.

[46] Kolko (1970), 285

[47] Leong, Richard. "Profits at big U.S. banks soar since crisis: New York Fed." Reuters, October 7, 2015; analysis from Tobias Adrian, Michael J. Fleming, Or Shachar, Daniel Stackman, Erik Vogt. "Changes in the Returns to Market Making," Liberty Street Economics. Federal Reserve Bank of New York. October 7, 2015.