

Antitrust in the Digital Age:

Combatting Facebook's Market Dominance

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Section I: Introduction

Why is monopoly power detrimental to our society? Simply put, competition is paramount to the functioning of any free-market system, and spurs innovation, growth, and prosperity. Adam Smith wrote in the *Wealth of Nations*, “If any branch of trade, or any division of labour, be advantageous to the public, the freer and more general the competition, it will always be the more so.”¹ Competition is the invisible regulator in a free-market, aligning selfish, profit-maximizing firms with the social good in an efficient manner through incentives. Prices in competitive markets reflect cost and demand, and thus allow for a productive allocation of capital and labor and promote long-run technology improvement. On the other hand, the monopolist, by virtue of being the sole provider of a good, holds absolute market power. This allows the monopolist to set a price above the socially-optimal competitive equilibrium and construct significant barriers to entry, removing potential competitors and hindering innovation, to ensure the longevity of its market dominance.² In contrast, competition results in increased product variety, quality, and invention, and benefits consumer welfare. The economic literature provides an unequivocal endorsement of competition in order to maximize social welfare and spur economic growth.³

Yet, concerns around monopolistic behavior and corporate consolidation are not solely economic. Indeed, when the first antitrust laws were passed, economic

¹ Adam Smith, *The Wealth Of Nations*, Book II, Chapter II, p.107. Accessed at https://www.earlymoderntexts.com/assets/pdfs/smith1776_2.pdf.

² Note: economists tend to make exceptions for “natural monopolies.” Natural monopolies are oftentimes utilities, e.g. railroads, water pipes, telephone poles, etc.

³ Kovacic & Shapiro, *Antitrust Policy: A Century of Economic and Legal Thinking*, 2000. Also see: Harold Hotelling, “Stability in Competition,” 1929 and Aghion, et al. “Competition and Innovation: An Inverted-U Relationship,” 2005.

considerations were limited in scope and relied heavily on basic economic principles, principally from the writings of Adam Smith a century earlier. There are strong political arguments for the robust enforcement of antitrust legislation in order to achieve vital markets. Senator Sherman said, upon the introduction of his antitrust bill, “if we will not endure a king as a political power, we should not endure a king over the production, transportation and sale of any of the necessaries of life.”⁴ Extreme industrial concentration corrodes democratic government, and stifles individual opportunity and liberty.⁵ Consolidated private power rivals the power of democratically-elected governments and leads to crony capitalism. As Milton Friedman famously argued, competitive capitalism is a necessary condition for political freedom. In this sense, antitrust plays an important Constitutional role, serving as a check on private power, “preventing the growth of monopoly corporations that might transcend the power of elected government.”⁶

However, the United States is once again facing the “Curse of Bigness,” in Supreme Court Justice Brandeis’ words. In the recent years, private power has been allowed to grow unfettered, as American industries become increasingly consolidated. With the acquisitions of Instagram and WhatsApp and the cloning of Snapchat’s distinctive features, Facebook has positioned itself as the monopolist of the social networking and digital advertising industries. This monopoly status grants Facebook tremendous power over the American people with no mechanism for accountability.

⁴ US Congress 1890, 2, 457.

⁵ Moore & Tambini, *Digital Dominance*, edited by Moore & Tambini, 2018, 1.

⁶ Tim Wu, *The Curse of Bigness*, 2018. Ebook.

Although Facebook does not set exploitative prices as the traditional monopolist does, its tepid commitment to the protection of user data privacy and its role in endangering the sanctity of American democracy has induced significant non-pecuniary negative externalities on the American people. Furthermore, its market dominance has suffocated innovation, leading to the establishments of kill zones for aspiring startups. Legislation seems ill-suited to redress the repercussions of Facebook's monopoly status. Instead, the United States government must return to its great tradition of decentralized power and embrace robust antitrust enforcement.

Section II: Antitrust Legislation

From the late nineteenth through early twentieth century, a puissant movement seized control of American society, advancing a vision for a new economic and political order. Known as the Trust Movement, it sought the overhaul of the American economy in favor of a "pure economic autocracy," every sector controlled by a single corporate leviathan.⁷ By 1904, over 2000 mergers had been completed and 42 corporations attained a market share of at least 70 percent,⁸ leaving essentially every major industry under the control of a single monopolist.⁹ The fundamental philosophy of the Trust Movement touched on Plato and Social Darwinism, arguing for a centralized economy controlled by the strongest and smartest men and indifferent to the plight of the poor.

⁷ Wu, 2018.

⁸ Naomi Lamoreaux, 1985, *The Great Merger Movement in American Business, 1895-1904*.

⁹ Wu, 2018.

This consolidation of economic power was antithetical to American federalist tradition and values of equality and posed a new “challenge to [the] Constitution.”¹⁰

The emergence of the Trust Movement led to the passage of the Sherman Antitrust Act of 1890. The Sherman Act had two main provisions: it made illegal actions “in the form of trust ... in restraint of trade,” and declared anyone who “shall monopolize, or attempt to monopolize ... any part of the trade” guilty of a felony.¹¹ The Sherman Act was written in such broad, all-inclusive language that it is an “impossible task” to define its true original meaning.¹²¹³

Nonetheless, it was not until Theodore Roosevelt took office that the Sherman Act was more than a symbolic appeal to the populist wings of the parties. One of Roosevelt’s first actions was to sue the Northern Securities Company, a railroad trust owned by Morgan. The Supreme Court ruled in favor of the Roosevelt Department of Justice and dissolved the trust into three independent railroads. A few years later, the Roosevelt DOJ sued Rockefeller’s Standard Oil, and in 1911, the Supreme Court ruled to break the oil monopoly into 34 separate companies, notably including Exxon, Mobil – which have since merged to form ExxonMobil – and Chevron. Part of this decision was the establishment of the “rule of reason,” stating that restraints were only unlawful under the first section of the Sherman Act if they were found to be “undue” or “unreasonable.”

¹⁰ Wu, 2018.

¹¹ Thompson and Brady, “Antitrust Fundamentals” 1964, 14.

¹² Note: there is significant scholarly debate on the true meaning of the Sherman Act, but that is outside the scope of this paper (Thompson & Brady, 1964, 15). Indeed, Crane, “The Institutional Structure of Antitrust Enforcement,” 2011, remarks that understanding the legislative history of the Sherman Act is “tortured” and “unhelpful” (3).

¹³ Wu, 2018.

The development of the “rule of reason” elicited popular outcry that conservative judicial interpretation was eroding the power of the Sherman Act. This objection prompted Congress to pass the Clayton Antitrust Act and the Federal Trade Commission Act in 1914. The Clayton Act explicitly criminalized anticompetitive practices, including price discrimination, tying arrangements and exclusive dealings, and mergers and acquisitions seen to significantly impact competition. The Federal Trade Commission Act replaced the Bureau of Corporations with an independent agency, the FTC, to identify anticompetitive behavior and take action on perceived violations of antitrust law.¹⁴¹⁵

Together, Roosevelt and his successor William Taft filed over 100 cases, including cases against U.S. Steel and AT&T.¹⁶¹⁷ By 1920, almost all of the major trusts had been dissolved or at the very least prosecuted, cementing antitrust law as fundamental component of federal economic policy.¹⁸ Aside from the National Recovery Act of 1933 – an attempt to generate an economic recovery by effectively offering whole industries exemptions from the antitrust laws – that was ruled unconstitutional two years later, antitrust law continued to grow stronger. The Celler-Kefauver Act of 1950 was the last major antitrust legislation and was intended to instigate a more stringent approach toward corporate mergers, granting the government tools to prevent the expansion of

¹⁴ Thompson & Brady, 17, 1964.

¹⁵ Crane, 2011, 20.

¹⁶ Broder, U.S. Antitrust Law and Enforcement, 17-23, 2010.

¹⁷ U.S. Steel and AT&T were two more of J. P. Morgan’s creations. (Tim Wu, 2018, Chapter 3).

¹⁸ Tim Wu, 2018, Chapter 3.

large firms.¹⁹ As Tim Wu writes, “by the 1960s, the antitrust laws and an anti-concentration mandate were broadly accepted as part of a functioning democracy.”²⁰

However, the hegemony of strong antitrust enforcement was soon challenged by Robert Bork and the Chicago School, altering the trajectory of antitrust to this day. In his seminal article “Legislative Intent and the Policy of the Sherman Act,” Bork argued that “courts should be guided exclusively by consumer welfare and the economic criteria which that value premise implies.”²¹ In essence, Bork’s argument is that the government must prove that the purported anti-competitive behavior actually raises prices for consumers. Although this idea originated just a few years earlier in what Richard Posner referred to as the “lunatic fringe,” Bork claimed it was what the members of Congress actually intended when they authored the Sherman Act.²² Herbert Hovenkamp – “today’s reigning dean of antitrust doctrine”²³ – argues that “Bork’s analysis of the legislative history was strained, heavily governed by his ideological agenda. ... Not a single statement in the legislative history comes close to stating the conclusions that Bork drew.”²⁴

Nonetheless, Bork was able to popularize his consumer welfare theories by presenting them as a form of judicial restraint, capitalizing on conservative fears of liberal judicial activism. While the Chicago School grew in prominence, traditional antitrust weakened. There were a few more big cases, with the Department of Justice

¹⁹ Thompson & Brady, 20, 1964.

²⁰ Wu, 2018.

²¹ Bork, 1966, “Legislative Intent and the Policy of the Sherman Act,” *Law & Economics*, 11.

²² Wu 2018.

²³ Wu 2018.

²⁴ Herbert Hovenkamp, 1989, “Protected Classes,” *Michigan Law Review*, 22.

(DOJ) taking on IBM and AT&T in the 70s and early 80s. The suit against IBM was ultimately dropped, while the Reagan administration reached an agreement with AT&T. The last big case, right before the turn of the century, was against Microsoft. Although the DOJ won in the district court, the newly elected Bush administration settled the case. This was “a sign of things to come,” Wu writes, “for with that, the campaigns against monopoly and overconcentration were about to enter their deepest freeze” since the Gilded Age.²⁵

Section III: Facebook

Facebook began in 2003 in Mark Zuckerberg’s Harvard dormitory room, as a way to rate the attractiveness of other Harvard students.²⁶ The site was quickly shut down by the Harvard administration for violating individual privacy, as Zuckerberg used people’s photos without their consent. Membership was initially limited to Harvard students, but was soon rolled out to other colleges: first at Stanford, Yale, and Columbia, and then ultimately to the rest of the Ivy League and Boston-area universities. This methodical and piecemeal expansion continued until September, 2006 when Facebook opened to the public.

In the summer of 2005, the early leader in social networking, Myspace, was acquired by NewsCorp for 580 million dollars.²⁷ NewsCorp was reluctant to gamble its funds, and failed to properly invest in Myspace, resulting in a website overloaded with

²⁵ Wu, 2018.

²⁶ It was originally called “TheFacebook.” Barwise & Watkins, *Digital Dominance*, edited by Moore & Tambini, 2018, 37.

²⁷ Barwise & Watkins, 2018, 37.

advertising.²⁸ This lack of funding and ubiquitous advertising compounded Myspace's cluttered interface and aging technological foundation, and by April 2008 Facebook had overtaken Myspace in unique global visitors.²⁹ While Facebook continued growing, Myspace declined, eventually being sold for 35 million dollars in 2011.³⁰

With Myspace's fall into obscurity, Facebook had dispensed of the first of many rivals. Facebook benefited significantly from timing: Zuckerberg was able to draw ideas off of existing social networking sites like Friendster and Myspace, avoiding similar mistakes, and exploit the coinciding rise of Internet participation.³¹ In addition, earlier social networking sites had primed consumers to the idea of social networking and the market.³² Facebook's model of controlled growth allowed it to grow organically and improve its technological infrastructure in a gradual manner.

By 2012, Facebook had grown to roughly a billion monthly users, and was prepared to make its first major acquisition.³³ Facebook purchased Instagram, a mobile photo-sharing application with about 30 million users, in April 2012 for 1 billion dollars.³⁴ At the time, Facebook was ridiculed for spending 27 percent of its revenue on a company with 13 employees and no business model.³⁵ Yet, the acquisition was actually

²⁸ Tom Standage, *Writing on the Wall*, 2013.

²⁹ Gil Press, "Why Facebook Triumphed Over All Other Social Networks," *Forbes*, 2018. <https://www.forbes.com/sites/gilpress/2018/04/08/why-facebook-triumphed-over-all-other-social-networks/#3025ae306e9>

³⁰ Barwise & Watkins, 2018, 37.

³¹ *Ibid.*

³² Press, *Forbes*, 2018.

³³ Ami Sedghi, "Facebook: 10 years of social networking, in numbers," *Guardian*, 2014. <https://www.theguardian.com/news/datablog/2014/feb/04/facebook-in-numbers-statistics>

³⁴ Evelyn Rusli, "Facebook Buys Instagram for \$1 Billion," *New York Times*, 2012. <https://dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/>

³⁵ Emil Protalinski, "Instagram's 1 billion users make Facebook's \$1 billion acquisition look brilliant," *Venturebeat*, 2018. <https://venturebeat.com/2018/06/22/probeat-instagrams-1-billion-users-make-facebooks-1-billion-acquisition-look-brilliant/>

very sensible (and, ultimately, successful). Instagram was poised to be a serious competitor to Facebook, especially given Facebook's weak mobile presence. Business writer Nicholas Carlson observed that Instagram "allows people to do what they like to do on Facebook easier and faster."³⁶ The acquisition of Instagram presented Facebook with the opportunity to expand in the mobile market and, more importantly, eliminate its competition.³⁷ Instagram is now reportedly worth 100 billion dollars, accounts for a quarter of Facebook's mobile revenue, and is expected to reach two billion users in the next five years.³⁸

A year later, Facebook reportedly attempted to acquire Snapchat, a mobile application facilitating the sending of momentary photos and short videos, for 3 billion dollars but was rebuffed by CEO Evan Spiegel.³⁹ Shortly before Zuckerberg's offer, Snapchat released a feature, "Stories," that displays a photo or video to all of the user's Snapchat contacts, which was immensely popular. A few years later, Facebook oversaw the release of Instagram's "Stories": a feature so similar to Snapchat's "Stories" that Instagram CEO Systrom admitted that Snapchat deserved all the credit.⁴⁰ Nonetheless, Instagram's "Stories" have outperformed Snapchat's, with 400 million daily

³⁶ Nicholas Carlson, "Instagram Was Facebook's Biggest Threat," Business Insider, 2012.
<https://www.businessinsider.com/instagram-was-facebooks-biggest-threat-2012-4>

³⁷ Emil Protalinski, "Why Facebook acquired Instagram for \$1 billion," ZDnet, 2012.
<https://www.zdnet.com/article/why-facebook-acquired-instagram-for-1-billion/>

³⁸ Emily McCormick, "Instagram is Estimated to Be Worth More than \$100 Billion," Bloomberg, 2018.
<https://www.bloomberg.com/news/articles/2018-06-25/value-of-facebook-s-instagram-estimated-to-top-100-billion>

³⁹ Billy Gallagher, "Copycat: How Facebook Tried to Squash Snapchat," WIRED, 2018.
<https://www.wired.com/story/copycat-how-facebook-tried-to-squash-snapchat/>

⁴⁰ Josh Constine, "Instagram launches 'Stories,'" TechCrunch, 2016.
<https://techcrunch.com/2016/08/02/instagram-stories/>

users compared to Snapchat's 191 million users.⁴¹ Since going public in 2017 Snapchat's stock price has fallen from 27 dollars a share to a mere six dollars, and its market capitalization has fallen from 26 billion to eight billion. CNBC's Jim Cramer projects that Snapchat is due to fall even further.⁴² With the introduction of Instagram "Stories," Zuckerberg sidelined Snapchat as a potential competitor, successfully copying their advantage for his own platform.

In early 2014, Facebook came to an agreement with WhatsApp, a messaging app, to acquire the company for a 19 billion dollars. At the time of the acquisition, WhatsApp had 450 million users, adding a million users a day, and had the largest market share in the smartphone market – followed by Facebook's standalone application Messenger.⁴³ Facebook's purchase was an attempt to improve their own messaging services – for example, by implementing a mobile payment feature from WhatsApp in their own Messenger – and remove a potential competitor, while gaining valuable users in emerging economies, particularly in India. As of October 2018, WhatsApp had 1.5 billion monthly users and Messenger had 1.3 billion monthly users.⁴⁴

During his testimony in front of Congress in April 2018, Zuckerberg struggled to answer Senator Graham's question regarding Facebook's competition. Initially, Zuckerberg claimed that Facebook "overlapped" with "Google, Apple, Amazon,

⁴¹ Sara Salinas, "Instagram Stories has twice as many daily users as Snapchat's service," CNBC, 2018. <https://www.cnbc.com/2018/06/28/instagram-stories-daily-active-users-double-snapchats.html>

⁴² Elizabeth Gurdus, "Even at \$6, Snap's stock still isn't a bargain," CNBC, 2018. <https://www.cnbc.com/2018/11/30/cramer-snaps-stock-still-isnt-a-bargain-at-6-no-reason-to-own-it.html>

⁴³ Adrian Covert, "Facebook buys WhatsApp for \$19 billion," CNN, 2014. <https://money.cnn.com/2014/02/19/technology/social/facebook-whatsapp/index.html>

⁴⁴ "Most popular mobile messaging apps," Statista. <https://www.statista.com/statistics/258749/most-popular-global-mobile-messenger-apps/>

Microsoft,” but when pressed on whether these companies actually offered the same service, was unable to name a single competitor.⁴⁵ Given that Facebook acquired all of its competitive threats, Zuckerberg’s answer was indeed somewhat truthful: Facebook’s dominance in the social networking and digital advertising markets allows it to consider the other technological giants as its competitors.

The top three mobile social networking applications in the United States, as of July 2018, were Facebook (169 million unique monthly users), Instagram (117 million), and Facebook Messenger (111 million). Together, these three applications, all owned by Facebook, control more users than the remaining platforms combined. No other platform has even reached 100 million unique users (Twitter is fourth place with 70 million, and the numbers quickly drop off from there).⁴⁶ While some argue that Facebook’s market dominance is less secure than traditional monopolies due to “multihoming,” the notion that users can be on multiple platforms at once, this seems an unfounded objection. Clearly, Facebook’s platforms control the majority of the social networking market share in the United States, and when platforms have threatened their dominance, Facebook was able to acquire them (Instagram, WhatsApp) or replicate their advantage successfully (Snapchat).

Globally, Facebook accounts for four of the top six networks: Facebook (first with 2.234 billion users), WhatsApp (third with 1.5 billion), Facebook Messenger (fourth with

⁴⁵ Sarah Jeong, “Zuckerberg struggles to name a single Facebook competitor,” *Verge*, 2018. <https://www.theverge.com/2018/4/10/17220934/facebook-monopoly-competitor-mark-zuckerberg-senate-hearing-lindsey-graham>

⁴⁶ “Most popular mobile social networking apps,” *Statista*. <https://www.statista.com/statistics/248074/most-popular-us-social-networking-apps-ranked-by-audience/>

1.3 billion), and Instagram (sixth with 1 billion). The other two networks are Google's YouTube (1.9 billion) and WeChat (1.1 billion), only relevant in the Chinese market where Facebook is banned.⁴⁷ Excluding China from consideration, the majority of the digital world is active on Facebook (not including Instagram or WhatsApp).⁴⁸

Facebook operates in what economists consider winner-take-all economies. These markets exhibit drastic economies of scale, as software and digital content have especially low marginal costs but have substantial up-front, development costs. In essence, they become more efficient as the company increases in size. In addition, digital goods are non-rivalrous: that is, their consumption is not impacted by someone else's consumption unlike tangible goods; and are experience goods, meaning that users need to be informed – either through personal experience or experts – to judge their quality. This significantly increases switching costs and increases the value of familiar brands. These features inherent to technology markets all benefit the market leader – Facebook – and encourage market concentration.⁴⁹

Digital markets include two additional characteristics that further this paradigm. First, they promote both direct (within-market) and indirect (cross-market) network effects. That is, the utility that a Facebook user derives from their network experience increases as more users join (direct). As for indirect effects, Facebook connects six groups: “friends as message senders, friends as message receivers, advertisers, app developers, and business as both message senders and receivers.”⁵⁰ Thus, the utility of

⁴⁷ Social Media Usage Worldwide, Statista.

⁴⁸ Moore & Tambini, 2018, 5.

⁴⁹ Barwise & Watkins, 2018, 24.

⁵⁰ Evans & Schmalensee, *Matchmakers: The New Economics of Multisided Markets*, 2016.

the aforementioned Facebook user increases with the growth of the other groups, as increases in magnitude in all categories allow users to be matched more effectively with their complimentary needs.⁵¹ Second, digital markets enable the “real-time collection and automated analysis” (machine learning) of user data, which in turn drives constant product improvement.⁵² The more detailed the data, the better the user experience, resulting in the expansion of the userbase, thus allowing for the collection of even more data. This recursive relationship reinforces the winner-take-all nature of the markets and offers digital companies incentives to provide free services in order to capture more users and their data.⁵³ These structural features of digital markets make Facebook’s position as the dominant provider “unassailable.”⁵⁴

Indeed, Barwise and Watkins argue that once a technology firm has become dominant in a winner-take-all market, it is nearly impossible to displace. More likely, they contend, is that these companies will be eclipsed by another company in a new, adjacent technology market.⁵⁵ Yet, to counter this, technology companies invest extremely heavily in research and development in emerging product markets, oftentimes unrelated to the main product – like Facebook’s acquisition of the leading virtual reality headset company, Oculus Rift, for 3 billion dollars.⁵⁶ Overall, Facebook has acquired 74 companies. When Facebook is unable to “buy out a promising rival,” it

⁵¹ Barwise & Watkins, 2018, 23-24.

⁵² *Ibid*, 25.

⁵³ *Ibid*, 28.

⁵⁴ *Ibid*, 28.

⁵⁵ *Ibid*, 24.

⁵⁶ “Ranking of the 20 companies with the highest spending on research and development,” Statista. <https://www.statista.com/statistics/265645/ranking-of-the-20-companies-with-the-highest-spending-on-research-and-development/>

usually “copies these features with growing success,” further cementing its market dominance.⁵⁷ This combined with Facebook’s sheer size, lack of competitors, and the winner-take-all features of digital markets makes Facebook’s monopoly status unquestionable.

Section IV: Implications

Facebook’s market dominance is evident. The relevant question of the current decade is not whether Facebook is a monopoly, but whether this monopoly status is inefficient or harmful to consumer welfare and society at large, and if it is, what should be done to combat this. Earlier, this paper outlined economic theory and the anti-democratic effects of concentrated industry. Still, digital and technology companies operate in different markets with drastically different business models than traditional firms in economic theory. This paper will now evaluate whether these arguments apply to Facebook.

Recall, economic theory supposes that the monopolist constructs barriers to entry, thus enshrining its own power and suffocating its challengers. Without competition, there exists no incentive to innovate – and without innovation, growth is stagnant. Simply, the monopolist stifles growth to preserve its own market power. There is significant evidence that Facebook impedes innovation by “killing off” startups and other competitors.⁵⁸

⁵⁷ Barwise & Watkins, 2018, 38.

⁵⁸ Noah Smith, “Big Tech Sets Up a ‘Kill Zone’ for Industry Upstarts,” Bloomberg, 2018. <https://www.bloomberg.com/opinion/articles/2018-11-07/big-tech-sets-up-a-kill-zone-for-industry-upstarts>

Anecdotally, NYU Marketing Professor Galloway remarks that throughout dozens of VC pitches by small firms there is a constant narrative: “We don’t compete directly with [Facebook] ... but would be great acquisition candidates.”⁵⁹ He also notes that the number of IPOs and VC-funded firms has been steadily declining.⁶⁰ Indeed, the Economist reports that “venture capitalists are wary of backing startups in online search, social media, mobile and e-commerce. It is perceived as dangerous.”⁶¹ Startups are bullied into selling, or face being copied into bankruptcy – just like what Facebook’s “Instagram Stories” did to Snapchat after refusing Zuckerberg’s acquisition offer. In fact, Facebook acquired Onavo, an Israeli analytics startup, in 2013 to track the market share and usage of its competitors.⁶² According to Onavo, it “collect[s] your mobile data traffic” to “analyze your use of websites, apps, and data ... to improve Facebook’s products and services.”⁶³ Facebook has erected significant barriers to entry, sending most ambitious startups to the “kill zone.”⁶⁵

Certainly, a few acquisitions have tremendous success stories, like Instagram. Nonetheless, many others are left to fade away, due to a lack of monetary and emotional investment in the startups after purchase. These ideas are not rejected by the market; they are simply forgotten about. Perhaps more worrisome, if future inventors

⁵⁹ Scott Galloway, “Silicon Valley’s Tax-avoiding, Job-killing, Soul-sucking Machine,” Esquire, 2018. <https://www.esquire.com/news-politics/a15895746/bust-big-tech-silicon-valley/>

⁶⁰ Galloway, Esquire, 2018.

⁶¹ “American tech giants are making life tough for startups,” The Economist, 2018. <https://www.economist.com/business/2018/06/02/american-tech-giants-are-making-life-tough-for-startups>

⁶² Onavo was used to monitor Snapchat and influenced Facebook’s decision to acquire WhatsApp.

⁶³ Paul Wagenseil, “Apple Boots Facebook’s Nosy VPN out of App Store,” Tom’s Guide, 2018. <https://www.tomsguide.com/us/apple-facebook-onavo,news-27869.html>

⁶⁴ Apple kicked Onavo off of the App Store earlier this year due to this behavior.

⁶⁵ Smith, 2018.

worry that their ideas will just be copied by a larger platform, there is no incentive to innovate in the first place.⁶⁶ Economist Ian Hathaway found significant evidence of kill zones in the “social/platform software” industry: first financings in this industry have declined by 25 percent annually since 2014.⁶⁷⁶⁸

Economic theory also suggests that monopolists will restrict supply and raise prices on the consumer. This analysis is clearly not applicable to Facebook or other digital platforms, as they do not charge a price nor is there “limited” supply. However, tweaking this slightly, Facebook imposes a non-pecuniary cost on society, lowering consumer welfare just as the monopolist does with monetary prices. Facebook’s role in aiding foreign adversaries in undermining American democracy and cavalier, apathetic attitude toward user privacy can be thought of as a negative externality shouldered by the American populace.

The first signal that Facebook negatively influenced American democracy surfaced after the 2016 United States Presidential Election. Allegations arose that Facebook’s platform enabled Russian trolls to enact widespread disinformation campaigns, amplified incendiary and false stories through Facebook’s engagement algorithms, and even monetized these stories. For example, a false story with the headline "Hillary Clinton In 2013: 'I Would Like To See People Like Donald Trump Run For Office; They’re Honest And Can’t Be Bought'" received 480,000 shares, reactions

⁶⁶ Smith, 2018.

⁶⁷ Ian Hathaway, “Platform Giants and Venture-Backed Startups,” 2018.

<http://www.ianhathaway.org/blog/2018/10/12/platform-giants-and-venture-backed-startups>

⁶⁸ Wen and Zhu, “Threat of Platform-Owner Entry and Complementor Responses: Evidence from the Mobile App Market,” NET Institute Working Paper, 2018, find similar evidence for Apple and Google.

and comments in the span of a week. In contrast, the *New York Times*' report detailing Trump's 916-million-dollar loss on his 1995 tax returns only received 175,000 Facebook interactions in a month.⁶⁹ Additionally, it was reported that a company based in Russia spent over 100,000 dollars on divisive political advertisements in the two years leading up to the campaign, and operated hundreds of fake pages.⁷⁰ As Stanford Law Professor Nate Persily writes, "Most of the 2016 [election] story revolves around the online explosion of campaign-relevant communication from all corners of cyberspace [...] fake news, social-media bots ... propaganda from inside and outside the United States."⁷¹

In February 2018, the Department of Justice charged 13 Russians and three companies for an attempt to undermine American elections. In the indictment, Facebook and Instagram were mentioned over 40 times while Twitter was mentioned nine times, and YouTube only once.⁷² Facebook was the predominant tool used by Russian intelligence to subvert the election. Facebook's advertising tools allowed the Russians to optimize their propaganda in real-time, determining what messages received the most engagement and with what audience. "Facebook ... let Russia profile citizens here in the U.S. and figure out how to manipulate us," Jonathan Albright, Director at Columbia's Tow Center for Digital Journalism, said.⁷³ Certainly, these problems did not

⁶⁹ Silverman & Alexander, "How Teens In the Balkans Are Duping Trump Supporters With Fake News," BuzzFeed News, 2018. <https://www.buzzfeednews.com/article/craigsilverman/how-macedonia-became-a-global-hub-for-pro-trump-misinfo>

⁷⁰ Olivia Solon, "Facebook says likely Russia-based group paid for political ads during US election" Guardian, 2018. <https://www.theguardian.com/technology/2017/sep/06/facebook-political-ads-russia-us-election-trump-clinton>

⁷¹ Nate Persily, "The 2016 U.S. Election," Journal of Democracy, 2017.

⁷² Frenkel & Benner, "To Stir Discord in 2016, Russians Turned Most Often to Facebook," NYT, 2018. <https://www.nytimes.com/2018/02/17/technology/indictment-russian-tech-facebook.html?module=inline>

⁷³ Frenkel & Benner, 2018.

only exist on Facebook, but Facebook’s immense size and reach obliges it to do better than smaller platforms – like Reddit or Twitter.

In the immediate aftermath of the election, Zuckerberg infamously denied Facebook’s role in the election.⁷⁴⁷⁵ He claimed that 99% of posts on Facebook were “authentic” and that it was a “pretty crazy idea” to think fake news had an impact on the election.⁷⁶ In light of more information – and perhaps for publicity reasons – Zuckerberg later apologized for ridiculing these fears. Nonetheless, Zuckerberg’s initial dismissiveness and scorn has colored Facebook’s subsequent actions as tepid and perfunctory.

The bombshell *New York Times* report on Facebook in November 2018 essentially confirmed this: Sheryl Sandberg, Facebook’s COO, and the rest of the executive leadership – Zuckerberg was not present, as he was on a “listening tour” – were more interested in salvaging their reputation than combating disinformation and rooting out bad actors. In early 2016, Facebook’s network security chief, Alex Stamos, identified Russian hackers crawling Facebook for accounts connected to the presidential campaigns, and discovered accounts linked to these Russian hackers messaging journalists about the stolen DNC emails.⁷⁷ On his own volition, Stamos decided to investigate the “extent of Russian activity” on the platform, and by January

⁷⁴ Mark Zuckerberg, Facebook Post. <https://www.facebook.com/zuck/posts/10103253901916271>

⁷⁵ Aarti Shahani, “Zuckerberg Denies Fake News on Facebook Had Impact On The Election,” 2016. <https://www.npr.org/sections/alltechconsidered/2016/11/11/501743684/zuckerberg-denies-fake-news-on-facebook-had-impact-on-the-election>

⁷⁶ Lora Kolodny, “Zuckerberg claims 99% of Facebook posts ‘authentic,’ denies fake news there influenced election,” TechCrunch, 2016. <https://techcrunch.com/2016/11/13/zuckerberg-claims-99-of-facebook-posts-authentic-denies-fake-news-there-influenced-election/>

⁷⁷ Frenkel & Confessore et al., “Delay, Deny, and Deflect,” NYT, 2018. <https://www.nytimes.com/2018/11/14/technology/facebook-data-russia-election-racism.html>

2017, it was clear that Stamos' initial investigation had "only scratched the surface of Russian activity on Facebook." Yet, Sandberg and Joel Kaplan, brought on by Sandberg for a Republican perspective, pushed back, arguing that implicating Russia would upset Republicans and tarnish the platform's reputation.⁷⁸ Eventually, it was agreed to publish a report on information operations on Facebook – though there was no mention of Russia.⁷⁹

As Facebook employees uncovered more Russian advertisements, pages, and accounts, Facebook decided it had to go public with a statement, which understated Russian activity and thus had to be revised twice. Ultimately, Facebook acknowledged that 126 million people had seen Russian posts.⁸⁰ As more details became known to the public, Zuckerberg agreed to testify in front of Congress. Concurrently, Facebook went on the offensive to deflect criticism and avoid responsibility, hiring Definers Media to publish negative articles on other technology companies, primarily Apple and Google, and to portray its critics as anti-Semitic and as funded by liberal financier George Soros.⁸¹

Ultimately, it is unclear whether fake news proved a pivotal role in deciding the presidential election: Allcott and Gentzkow find that the average American adult encountered and remembered several fake news articles.⁸² Howard found that in the in

⁷⁸ Frenkel & Confessore et al, 2018.

⁷⁹ Weedon, Nuland, & Stamos, "Information Operations and Facebook," Facebook Newsroom, 2017. <https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1.pdf>

⁸⁰ Isaac & Wakabayashi, "Russian Influence Reached 126 Million Through Facebook Alone," New York Times, 2017. <https://www.nytimes.com/2017/10/30/technology/facebook-google-russia.html?module=inline>

⁸¹ Frenkel & Confessore et al, 2018.

⁸² Allcott & Gentzkow, "Social Media and Fake News in the 2016 Election," Journal of Economic Perspectives, 2017.

the leadup to the presidential election one in every two news stories in Michigan were “junk.”⁸³ Yochai Benkler suggests that the right-wing media ecosystem – Fox News, Breitbart, the Daily Caller, etc. – bear much more responsibility for the rise of disinformation in the mainstream Republican Party than Facebook or other social media platforms.⁸⁴ Future research will be necessary to determine the true effect of Facebook on the election. Yet, two things are clear: Russian intelligence utilized Facebook’s platform in an attempt to destabilize American democracy; and Facebook’s commitment to uncovering the truth is at best superficial.

Moreover, Facebook’s dedication (or lack thereof) to the privacy of its users’ data was brought into question in early 2018 when the *Guardian*, in collaboration with the *New York Times*, reported on a major scandal involving the Trump campaign, Facebook, and Cambridge Analytica, a relatively unknown political consulting firm.⁸⁵ Cambridge Analytica paid hundreds of thousands of Facebook users to take a personality test on a Facebook application titled “thisisyourdigitallife”. These users filled out an informed consent agreement, permitting their data to be collected for academic use.⁸⁶ However, unbeknownst to the users and their friends, the application also harvested data from their Facebook friends, leading to a data pool of 87 million users,

⁸³ Howard & Gorwa, “Facebook could tell us how Russia interfered in our elections. Why won’t it?” *Washington Post*, 2017. https://www.washingtonpost.com/opinions/facebook-could-tell-us-how-russia-interfered-in-our-elections-why-wont-it/2017/05/19/c061a606-3b21-11e7-8854-21f359183e8c_story.html?noredirect=on&utm_term=.c48169395a16

⁸⁴ Yochai Benkler, *Network Propaganda*, 2018.

⁸⁵ Cambridge Analytica was also active in the 2016 Brexit vote, and the Mexican general election.

⁸⁶ Cadwalladr & Graham-Harrison, “Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data beach,” *Guardian*, 2018. <https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election>

71 million of whom were in the United States.⁸⁷⁸⁸ The data collected was detailed enough to create robust psychographic profiles for users in order to determine “whether a political voter was, say, a neurotic introvert, a religious extrovert, a fair-minded liberal or a fan of the occult.”⁸⁹ Cambridge Analytica provided a variety of services for the Trump campaign, including modeling Trump voters, designing target audiences for advertisements, and determining where to hold rallies and buy television advertisements.⁹⁰ The fact that such extensive user data was available to third-party platforms without that person’s consent clearly violated data privacy laws, and provoked public outcry.

While the Cambridge Analytica scandal was the most covered example of Facebook’s tenuous commitment to user privacy, it was not the only one. In the aftermath of the Cambridge Analytica scandal, users were given the option to download their data. Some users found that Facebook had saved videos they had deleted or never even published.⁹¹ Other users discovered that Facebook had been collecting their call log and SMS data.⁹² Recently, it was leaked that Facebook granted continued access to users’ and their friend’s data to companies spending at least 250,000 dollars

⁸⁷ Hanna Kozłowska, “The Cambridge Analytica scandal affected nearly 40 million more people than we thought,” Quartz, 2018. <https://qz.com/1245049/the-cambridge-analytica-scandal-affected-87-million-people-facebook-says/>

⁸⁸ Josh Horwitz, “Outside the US, the Philippines saw the most Facebook user data go to Cambridge Analytica,” Quartz, 2018. <https://qz.com/1245355/outside-us-philippines-saw-most-facebook-user-data-go-to-cambridge-analytica>

⁸⁹ Rosenberg, Confessore & Cadwalladr, “How Trump Consultants Exploited the Facebook Data of Millions,” New York Times, 2018. <https://www.nytimes.com/2018/03/17/us/politics/cambridge-analytica-trump-campaign.html>

⁹⁰ Rosenberg, Confessore & Cadwalladr, 2018.

⁹¹ Madison Kircher, “Ever Record a Video on Facebook? Facebook Still Has it.” New York Magazine, 2018. <http://nymag.com/intelligencer/2018/03/facebook-secretly-saved-videos-users-deleted.html>

⁹² Tom Warren, “Facebook has been collecting call history and SMS data from Android devices,” Verge, 2018. <https://www.theverge.com/2018/3/25/17160944/facebook-call-history-sms-data-collection-android>

on advertisements or to especially lucrative companies, like Lyft or Netflix.⁹³ Finally, both of WhatsApp's original founders resigned over disputes regarding Facebook's handling of user privacy.^{94,95}

“Move Fast and Break Things” – Facebook's official motto until 2014 – is an accurate representation of the company's unconditional success. In the nascent market, Facebook exhibited tremendous growth and attained a colossal global presence. Facebook unquestionably moved fast. Yet, this prioritization of growth over user privacy and security imposed significant social costs on the American people. It revealed private information to nefarious, third-parties and foreign adversaries, and endangered the very foundation of American democracy. However, Facebook's stranglehold over the social networking market renders the American consumer powerless. Deleting Facebook is a futile effort if the alternative is also owned by Facebook. Facebook has been given the opportunity to self-regulate with no avail: it is now the time for the United States government to intervene.

⁹³ Sue Halpern, “Facebook's Very Bad Month Just Got Worse,” New Yorker, 2018.

<https://www.newyorker.com/tech/annals-of-technology/facebooks-very-bad-month-just-got-worse>

⁹⁴ Olson, „WhatsApp Cofounder Brian Acton Gives the Inside Story on #DeleteFacebook and Why He Left \$850 Million Behind,” Forbes, 2018. <https://www.forbes.com/sites/parmyolson/2018/09/26/exclusive-whatsapp-cofounder-brian-acton-gives-the-inside-story-on-deletefacebook-and-why-he-left-850-million-behind/#360671dc3f20>

⁹⁵ Elizabeth Dwoskin, “WhatsApp founder plans to leave after broad clashes with parent Facebook,” Washington Post, 2018. https://www.washingtonpost.com/business/economy/whatsapp-founder-plans-to-leave-after-broad-clashes-with-parent-facebook/2018/04/30/49448dd2-4ca9-11e8-84a0-458a1aa9ac0a_story.html?noredirect=on&utm_term=.401d4cde3c9d

Section V: Recourses

There are two plausible forms of government action: government regulation or antitrust enforcement. This paper takes a pessimistic view on coercive regulation intended to properly align Facebook's profit-maximizing incentives with the social good. A variant of Moore's Law applies more generally to the technological world: digital technology and software grow exponentially. There is no way to predict what new technologies and products will exist even ten years from now: will AR/VR be a success? What will AI look like? Will it be distinguishable from human intelligence? To put this in perspective: today's smartphones have "more computing power than the Cray 2 – a supercomputer that in 1985 cost \$17.5 million and weighed 2,500 kilograms;" a full human genome sequence that cost 100 million dollars in 2002 and 1000 dollars today "might cost less than a cup of coffee by 2020."⁹⁶ Gridlocked, ineffectual lawmaking bodies that consequently produce slow and reactive legislation are not well-matched with fast-moving technology markets. For example, it is not technology that is hindering progress on self-driving cars, but rather regulatory ones. Even though autonomous vehicles are substantially safer – both for the driver and for pedestrians – current U.S. regulations restrict their experimentation and use.⁹⁷ This is a consequence of archaic regulations, and costs tens of thousands of lives in preventable accidents annually. Technology moves significantly faster than society's legal and ethical codes, making effective legislation difficult.

⁹⁶ Vivek Wadhwa, "Law and Ethics Can't Keep Pace with Technology," MIT Technology Review, 2014. <https://www.technologyreview.com/s/526401/laws-and-ethics-cant-keep-pace-with-technology/>

⁹⁷ Marc Scribner, "Outdated Auto Safety Regulations Threaten the Self-Driving Revolution," Wired, 2018. <https://www.wired.com/story/outdated-auto-safety-regulations-threaten-the-self-driving-revolution/>

Furthermore, judging from Zuckerberg's testimony in Congress, it does not even seem feasible for American policymakers to draft reasonable legislation. Senator Orrin Hatch asked Zuckerberg, "How do you sustain a business model in which users don't pay for your service?" while Senator Roy Blunt claimed he had his "Facebook address" on his business card.⁹⁸ If American legislators cannot grasp the underlying business model of Facebook or distinguish between Apple and Google,⁹⁹¹⁰⁰ they certainly cannot be trusted to enact effective legislation. On the other hand, Senator Lindsey Graham requested that Zuckerberg submit his own suggestions for regulations. Just because legislators are unable to understand digital markets or Facebook's business model, Facebook should certainly not be given the power to construct the regulations that govern its operations. Facebook seeks to maximize its profits and growth, while governmental regulation should seek to maximize the social good: these incentives do not align. Any opportunity extended to Facebook to shape governmental regulation is simply a continuation of self-regulation, which has clearly failed.

Nonetheless, effective legislation is not impossible. This paper will present a few potential considerations for legislative recourses in the United States. It is important to note that since U.S. legislation in technology markets is negligible and concerns regarding privacy violations and disinformation are relatively recent developments, these legislative proposals are fairly broad and lack nuance.

⁹⁸ Emily Stewart, "Lawmakers seem confused about what Facebook does and how to fix it," Vox, 2018. <https://www.vox.com/policy-and-politics/2018/4/10/17222062/mark-zuckerberg-testimony-graham-facebook-regulations>

⁹⁹ Stewart, 2018.

¹⁰⁰ Adi Robertson "Google's Ceo had to remind Congress that Google doesn't make iPhones," Verge, 2018. <https://www.theverge.com/2018/12/11/18136377/google-sundar-pichai-steve-king-hearing-granddaughter-iphone-android-notification>

First, there is considerable discussion on holding Facebook accountable for the content posted and propagated on its platform. Germany has already taken strides in this direction, passing the Netzwerkdurchsetzungsgesetz (NetzDG) in the summer of 2017, which sought to combat hate speech and the dissemination of disinformation by holding platforms accountable. Certainly, this legislation would be unconstitutional in the United States, where hate speech is regarded as legitimate speech, unlike in Germany. Yet, more broadly, it is possible to imagine some form of American legislation that would hold Facebook responsible for illegal speech on their platform. There are significant free speech considerations of such legislation. Daphne Keller, former Associate General Counsel at Google and currently at the Center for Internet and Society at Stanford, argues that platforms subjected to intermediary liability laws routinely “err on the side of caution,” taking down perfectly legitimate speech to avoid potential legal troubles.¹⁰¹ In addition, she argues that there are many “novel and disputed questions surrounding long-standing legal doctrines” and thus there is unclear legal precedent for private companies to effectively adjudicate speech. There are also moral concerns with establishing a private company as the arbiter of good and bad speech. On the other hand, according to Facebook’s Head of Global Policy Monica Bickert, the passage of NetzDG has not actually resulted in an increase in deleting posts – as those that are flagged under NetzDG mostly violate Facebook’s Community Guidelines.¹⁰² This legislation also passes a considerable burden on smaller platforms: while Facebook can

¹⁰¹ Daphne Keller, “Internet Platforms,” Hoover Working Group on National Security, Technology, and Law, Aegis Series Paper No. 1807, 2018.

¹⁰² I know the class was technically off the record, but since this is not going outside of this class, I figured I would include this.

afford to hire personnel to monitor speech on its platforms and lawyers to resolve the legality of content, smaller platforms cannot. Such a burden would likely drive startups and smaller platforms into bankruptcy, thus further solidifying Facebook's market dominance. More research on the ramifications of Germany's NetzDG as well as a more informed policy dialogue in the United States are necessary to ascertain what a potential "NetzDG-Lite" could look like and whether it would be effective in addressing disinformation and hate speech online.

Second, regulation should seek to modernize American tax laws. Technology companies are uniquely positioned to avoid national taxes, as they are not geographically tied to a location. They can store their assets and intellectual property in tax havens: for example, Facebook transferred its "online platform and marketing intangibles" to Ireland in 2010 for favorable tax rates.¹⁰³ In 2016, Facebook paid 30 million Euros of taxes in Ireland on 12.6 billion dollars of revenue – a 0.3 percent tax rate.¹⁰⁴ According to the S&P Global Market Intelligence, Facebook pays 3.8 percent of its profits in combined tax rates, covering federal, state, local and foreign taxes.¹⁰⁵ In contrast, the S&P 500 average is 27 percent and retail giants like Walmart and CVS pay 31.2 and 38.8 percent respectively. Technology companies "owe their dominance to innovation, but also to tax avoidance," Foer writes. Facebook's tax practices stifle potential competitors, who are unable to take advantage of tax loopholes and thus

¹⁰³ "Facebook Facing Shareholder Scrutiny for Its Offshore Tax Avoidance," Institute on Taxation and Economic Policy, 2018. <https://itep.org/facebook-facing-shareholder-scrutiny-for-its-offshore-tax-avoidance/>

¹⁰⁴ *Ibid.*

¹⁰⁵ David Leonhardt, "The Big Companies that Avoid Taxes," *New York Times*, 2016. <https://www.nytimes.com/2016/10/18/opinion/the-big-companies-that-avoid-taxes.html>

cannot reap massive profits. Closing loopholes and forcing Facebook to pay its fair tax burden, may modestly equalize the market for future competitors, but will likely not challenge Facebook's monopoly status in any serious way.

Finally, Congress could establish the Data Protection Agency – similar to Senator Elizabeth Warren's formation of the Consumer Financial Protection Bureau in the wake of the financial crisis. A central authority would mark a significant improvement over the current situation, where an ambiguous patchwork of different laws – all with different immediate purposes – governs.¹⁰⁶ Having a principal agency dedicated to data security would also simplify compliance issues for companies. The nuances of the structure and authority of such an agency are contested. There have been calls for the United States to adopt similar legislation as the European Union's General Data Protection Regulation (GDPR), which granted European citizens significantly more control over the use of their data and threatened substantial fines if companies were found in violation of the GDPR – up to four percent of annual revenue.¹⁰⁷¹⁰⁸ The GDPR also allows for citizens to request and sue to expunge their data from company databases if it is deemed to be erroneous.¹⁰⁹ While the GDPR is a laudable attempt to define data security as a fundamental human right, its consequences are still unknown. One frequent criticism is that large technology companies, like Facebook, have the resources – both financially and legally – to maneuver around the GDPR while smaller

¹⁰⁶ "Reforming the U.S. Approach to Data Protection and Privacy," Council on Foreign Relations, 2018. <https://www.cfr.org/report/reforming-us-approach-data-protection>

¹⁰⁷ Samuel Greengard, "Weighing the Impact of GDPR," Communications of the ACM, 2018.

¹⁰⁸ Trevor Butterworth, "Europe's tough new digital privacy law should be a model for US policymakers," Vox, 2018. <https://www.vox.com/the-big-idea/2018/3/26/17164022/gdpr-europe-privacy-rules-facebook-data-protection-eu-cambridge>

¹⁰⁹ Greengard, 2018.

companies will be rendered unprofitable and unsustainable. Under this line of reasoning, the GDPR inadvertently results in the further consolidation and uncompetitiveness of the technology markets. A preliminary study conducted by Urban et al. found that the GDPR had significantly reduced cookie syncing between third-parties, a promising sign.¹¹⁰ Yet, many big companies, including Facebook, are still not entirely compliant with the GDPR,¹¹¹ while the majority of small business are mostly clueless about the GDPR's regulations.¹¹² Nonetheless, what is clear is that the United States government must be modernized to reflect the problems of the digital age, and the creation of a Data Protection Agency would be an important step in securing personal data privacy. As Journalist Franklin Foer writes, privacy is just like the environment – “the market would destroy it if left to its own devices.”¹¹³

These are all legislative suggestions to counter the social costs imposed by Facebook and borne by the American populace, and their effectiveness and consequences are uncertain. Importantly, however, none of these proposals directly address Facebook's monopoly status.¹¹⁴ Instead, they attempt to remedy the downstream repercussions of Facebook's market dominance. Perhaps, legislation could

¹¹⁰ Urban, “The Unwanted Sharing Economy: An Analysis of Cookie Syncing and User Transparency under GDPR,” 2018. [https://arxiv.org/abs/1811.08660?](https://arxiv.org/abs/1811.08660)

¹¹¹ Alex Hern, “Privacy policies of tech giants ‘still not GDPR-compliant,’” Guardian, 2018. <https://www.theguardian.com/technology/2018/jul/05/privacy-policies-facebook-amazon-google-not-gdpr-compliant>

¹¹² Rob Knight, “GDPR: Small Business Owners Still ‘Clueless’ About Data Protection Rules,” Independent, 2018. <https://www.independent.co.uk/life-style/gadgets-and-tech/gdpr-data-protection-cyber-attack-security-small-businesses-aon-study-results-a8679261.html>

¹¹³ Franklin Foer, *World Without Mind*, 2018.

¹¹⁴ Modernizing the tax code and closing loopholes, may indirectly affect Facebook's monopoly status. This effect certainly will not be substantial, however. It may be more prominent in a market with competitors (i.e. Amazon's low tax burden significantly aided it in taking on retail giants).

be drafted to subsidize entrepreneurship and potential competition in the social network domain, but this seems both unlikely and ineffective. In equilibrium, digital markets – due to their aforementioned characteristics – tend to result in monopolies or at least oligopolies. Government subsidies to remove these inherent barriers to entry seems difficult if not impossible. In order to effectively confront Facebook’s market dominance and the consequent harm to innovation and to society, the United States government must reverse course and return to robust antitrust enforcement.

It is important to remember that antitrust enforcement is not an apparatus of big government, or an act of excessive government overreach. Just like the establishment of property rights, competitive markets are foundational to a capitalist economy, and must be ensured by the government’s legal codes. Antitrust enforcement is legal action on behalf of the government to ensure that markets operate efficiently and that a competitive equilibrium is achieved through the forces of supply and demand, not by the monopolist’s fiat.

Through the return to its strong antitrust tradition and to the protection of the integrity of markets and of consumer welfare, the United States can counter the anticompetitive effects and social costs of Facebook’s market dominance. To achieve this end, the United States must break up Facebook, undoing Facebook’s acquisitions of Instagram and WhatsApp. While a breakup may appear extreme, there is no legal reason for this presumption, especially considering that the “original practice favored dissolution as the default remedy.”¹¹⁵ Much of the resistance to breakups Wu attributes

¹¹⁵ Wu, 2018.

to the “legal fiction of corporate personhood,” while in reality firms consist of many sub-units.¹¹⁶ In fact, breaking up Facebook along the aforementioned lines should be significantly easier than with other companies, as both Instagram and WhatsApp remained independent after acquisition. Furthermore, it is unclear that there are any social efficiencies gained by the consolidation of these three firms. Breaking up Facebook would release an immediate competitor to its main business in Instagram and to Facebook Messenger in WhatsApp.

The nuances of this breakup must still be researched. Economist David Evans has done important work in redefining the consumer welfare theory for the digital age and social media platforms, arguing that the relevant metric for antitrust cases is user time instead of price.¹¹⁷ Wu has also supported this argument from a legal perspective.¹¹⁸ Many exemplary scholars, including Wu and Robert Reich, have written opinion editorials supporting a breakup. Yet, the argument is nascent, and thus the academic literature is still sparse. This is sure to change as society becomes increasingly aware of Facebook’s market dominance and the consequent political and economic repercussions. Nonetheless, the DOJ cases against AT&T, IBM, and Microsoft can provide important guidance to the potential beneficial outcomes of antitrust enforcement.

¹¹⁶ Wu, 2018.

¹¹⁷ David Evans, “The Economics of Attention Markets,” 2017. <http://dx.doi.org/10.2139/ssrn.3044858>

¹¹⁸ Tim Wu, “Blind Spot: The Attention Economy and the Law,” *Antitrust Law Journal*, 2018.

In 1974, Nixon’s DOJ decided to take on AT&T, which held six monopolies and was the largest firm on the planet at the time.¹¹⁹ Although the litigation lasted over a decade, there was never a court decision as AT&T settled with the Reagan administration instead. AT&T was allowed to retain its long-distance services, Bell Labs, and its equipment manufacturer while seven independent regional operating companies – the “Baby Bells” – were released. These companies were forced to accept connections from all long-distance companies and were explicitly restricted from entering new markets like online services and cable. Importantly, the dissolution brought “new types of industries ... from the carcass of AT&T.”¹²⁰ Innovation, no longer stifled by AT&T, soared, leading to the development of the answer machine and the modem. The invention of the modem allowed computers to interact with a network and facilitated online service providers like AOL, which then triggered the rise of internet service providers and ultimately, the Internet in its current inception. In a counterfactual world where AT&T was never broken up, it is very likely that these innovations would have been squashed instead, as they threatened AT&T’s monopoly dominance.

On the same day that the Reagan DOJ settled the AT&T case, it dropped its case against IBM. Thirteen years earlier, the United States began its suit against IBM for engaging in illegal, anticompetitive practices to maintain its monopoly status. At the time, IBM was bringing in billions of dollars in revenue and was once “the great

¹¹⁹ The firm controlled “local telephone service, long distance service, the physical telephones, all other attachments, business telephone services, and markets just coming into existence, like ‘online’ services.” Wu, 2018.

¹²⁰ Wu, 2018.

monopolist of computing with a terrifying reputation.”¹²¹ While the case consumed hundreds of millions of dollars and was decried as a farce and an abuse of governmental power, it had profound effects on the computing industry.¹²² First, it led IBM to drop its practice of bundling its software with its hardware, resulting in the birth of the independent software industry.¹²³ Secondly, the litigation altered IBM’s behavior, making them wary of engaging in any practice that could be construed as anticompetitive. Thus, when IBM developed one of the first personal computers, the IBM PC, they with an open design and did not attempt to acquire any of the firms on the production line, including Intel and Microsoft.¹²⁴ Hence, while the case itself proved immensely costly and was eventually dropped, it had a significant impact on IBM’s behavior, allowing for the rise of both the personal computing and software industry. If not for the DOJ case, IBM may have simply acquired its minor challengers, innovation would have slowed, and Apple nor Microsoft would ever attain a trillion-dollar market capitalization.

The final major antitrust case was against Microsoft in the late 1990s. At the time, Microsoft held monopolies on both computers and their operating systems; however, Bill Gates was (correctly) worried that the Internet would soon endanger their dominance. In response, Gates decided Microsoft must control the browser, releasing Explorer, their copy of Navigator, the leading browser at the time. Microsoft used its dominance to ensure that Explorer was everywhere, and Netscape, Navigator’s owner, soon went out

¹²¹ Wu, 2018.

¹²² Ibid.

¹²³ Ibid.

¹²⁴ Ibid.

of business. Microsoft now controlled three monopolies and had a market share in excess of 90 percent.¹²⁵ While the DOJ won the case in district court, the newly elected Bush administration settled the case.¹²⁶ The settlement required Microsoft to share its application programming interface (API) with third parties and appoint an independent panel for five years to ensure Microsoft was in compliance and not engaging in other anticompetitive practices. In addition, the antitrust case prevented Microsoft from controlling the emergent web economy. Without the case, Microsoft could have – and likely would have – leveraged its market power to favor Bing over Google, driving Google – now worth 750 billion dollars – into obscurity.

Without these big cases, the United States would look very different, and most likely less technologically developed. These antitrust cases allowed for the birth of huge industries and groundbreaking innovations that spurred tremendous growth. Had the DOJ not stepped in, it is unclear that Facebook would even exist – and very likely that Apple, Microsoft, and Google would not. The dissolution of Facebook into three companies – Facebook, Instagram, and WhatsApp – has the potential to harness competitive forces to promote innovations in social networking, data privacy, advertising, and countless tangential fields that are currently not apparent. This breakup would also redress the dangerous concentration of speech on Facebook’s platforms that has led to the manipulation of American voters and the attempted destabilization of American democracy. It would force Facebook and other technology companies to take user privacy concerns seriously, or risk losing their customers to competing platforms

¹²⁵ Wu, 2018.

¹²⁶ Crane, 2011.

that do. While the intricacies of such a breakup are currently uncertain, it is clear that Facebook's monopoly is no more legitimate than the companies that preceded it. Antitrust enforcement is imperative to lay the groundwork for further progress and to secure the great American experiment.