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**Breaking Up Is Hard to Do: The 2021 IDA
Debate on Breaking Up Big Tech**

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Executive Summary

On November 8, 2021, the IDA Cyberspace Operations Working Group sponsored a debate on breaking up big tech companies like Facebook, Amazon, Apple, Netflix, Google, and Microsoft, collectively referred to as FAANG-M. Two teams of IDA researchers—one anti-breakup and one pro-breakup—responded to four questions:

1. Do these large multi-national corporations (MNCs) pose national security and/or economic security problems?
2. Is there something about the current state of the world that exacerbates these problems and/or affects the decision about breaking them up and/or how to break them up?
3. Do the benefits of breaking these companies up outweigh the risks and does that answer depend upon the company?
4. Would a breakup actually achieve the desired results and is it the best approach?

The anti-breakup team argued that big tech companies are national and strategic assets. Tech companies partner with federal, state, and local governments to guard against and respond to cybersecurity vulnerabilities, disinformation, and other threats. Tech companies also provide valuable products and services that support government needs (e.g., Amazon Web Services). Breaking these companies into smaller components may affect the quality of the products and services provided and actually stifle innovation. A breakup also does not address the structural mechanisms that lead to the current tech monopoly. Existing antitrust laws enable companies to merge and grow, as long as they can justify that growth as beneficial for consumers. Since the 1970s, the Supreme Court has generally sided with companies facing antitrust suits; as such, there is no mechanism in place that would prevent companies from re-merging after a breakup.

The pro-breakup team argued that a breakup is a necessary step toward achieving better regulation and oversight. Big tech companies have enormous political, economic, and social influence and are simply too big to be held accountable for their actions or the effects of their platforms and products. Social media platforms are conduits for disinformation and extremism, used to broaden societal divisions and instigate violence. Though faced with massive fines, companies such as Meta (the parent of Facebook) have done little to improve their content moderation practices. Also, failures in the products big tech provides can lead to widespread damage to communications, commerce, finance, medicine, and government functions. These companies' power and ubiquity have reclassified them as essential utilities and infrastructure, and they should be regulated as such.

Since the debate, conversation about regulating big tech has continued. This paper captures each team's arguments and responses to the four questions and identifies actions taken after the debate occurred.

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1. Introduction

The arguments regarding the breakup of big tech firms parallel antitrust arguments for defense contracting firms: monopolies may stifle innovation by smaller firms, result in higher prices, and harm American competitiveness relative to geopolitical rivals. The confluence of technology, data privacy, multinational corporations (MNCs), and national security considerations has, however, grown more complex since the foundation of American antitrust laws, thereby complicating the cost-benefit analysis of a potential big tech breakup.

On November 8, 2021, the IDA Cyberspace Operations Working Group sponsored a debate on breaking up big tech companies like Facebook (now Meta), Amazon, Apple, Netflix, Google, and Microsoft (i.e., FAANG-M). Teams of IDA researchers took on the pro-breakup and anti-breakup sides of the debate. Each team prepared a set of arguments, taking whatever approach they thought most powerful. After five-minute opening remarks by each team, the researchers responded to a set of questions:

1. Do these large MNCs pose national security and/or economic security problems?
2. Is there something about the current state of the world that exacerbates these problems and/or affects the decision about breaking them up and/or how to break them up?
3. Do the benefits of breaking these companies up outweigh the risks and does that answer depend upon the company?
4. Would a breakup actually achieve the desired results and is it the best approach?

Responses were limited to four minutes, rebuttals were two minutes, and each team had five minutes for closing remarks. This paper captures each team's argument and answers to the four questions.

Since the debate, conversation about limiting the power and scope of big tech companies has continued. President Biden highlighted his desire to address big tech monopolies by improving protections for user data, reforming Section 230 of the Communications Decency Act,¹ and promoting competition.² The Biden administration also stocked key positions, including the Chair of the Federal Trade Commission (FTC) and the lead of the Department of Justice (DOJ) Antitrust

¹ Section 230 of the Communications Decency Act protects companies from liability for what users post on their online platforms (47 U.S.C. §230).

² Biden, J., "Republicans and Democrats, Unite Against Big Tech Abuses," *The Wall Street Journal*, January 11, 2023, https://www.wsj.com/articles/unite-against-big-tech-abuses-social-media-privacy-competition-antitrust-children-algorithm-11673439411?mod=hp_opin_pos_3#cxrecs_s.

Division, with personnel who have strong antitrust and anti-monopoly records. A proposed antitrust bill failed in Congress in 2022, but there have been a number of legal actions focused on breaking up monopolies or curtailing their reach.

A federal antitrust lawsuit targeting Google’s search results, filed in 2020, is scheduled to go to trial this year (2023). In January 2023, the DOJ and eight state attorneys general filed another suit against Google alleging that Google uses its position in the online advertising industry to hinder its competitors.³ In late March 2023, a bipartisan group of senators introduced a bill meant to siphon control of online advertising away from big companies—specifically Google, Facebook (Meta), Amazon, and Apple.⁴

In February 2023, the Supreme Court heard arguments for *Gonzalez v. Google LLC*, which challenged Section 230 protections for online platforms and social media companies.⁵ The plaintiff alleged that YouTube, which is owned by Google, was responsible for aiding and abetting an act of terrorism because its algorithms promoted videos posted by or related to ISIS. The court also heard *Twitter v. Taamneh*, which questioned whether Twitter aided an ISIS terrorist attack because it did not adequately block or remove content glorifying terrorism.⁶ On May 18, 2023, the Court ruled that the companies in both cases could not be held liable for content posted by users.⁷

The plaintiff for *Twitter v. Taamneh* claimed that Twitter, Facebook, and YouTube were liable for aiding and abetting ISIS under the Anti-Terrorism Act (ATA)⁸ and the Justice Against Sponsors of Terrorism Act (JASTA).⁹ However, the Supreme Court determined that the relationship between Twitter and ISIS was nothing more than a typical platform-user relationship and thus not sufficient to support a claim that Twitter aided and abetted ISIS’s attack. The fact that

³ Zakrzewski, C., Lerman, R., De Vynck, G. and Stein, P., “Justice Department sues Google over dominance in online advertising,” *The Washington Post*, January 24, 2023, <https://www.washingtonpost.com/technology/2023/01/24/doj-google-lawsuit-ads/>.

⁴ “Bipartisan US Lawmakers Introduce Bill Aimed at Google, Facebook Ad Clout,” *Reuters*, March 30, 2023, <https://www.reuters.com/world/us/bipartisan-us-lawmakers-introduce-bill-aimed-google-facebook-ad-clout-2023-03-30/>.

⁵ McCabe, D., “Supreme Court to Hear Case That Targets a Legal Shield of Tech Giants,” *The New York Times*, February 20, 2023, https://www.nytimes.com/2023/02/20/technology/supreme-court-tech-section230.html?utm_source=substack&utm_medium=email.

⁶ *ACLU, Twitter, Inc., v. Taamneh*, updated February 27, 2023, <https://www.aclu.org/cases/twitter-inc-v-taamneh>.

⁷ Liptak, Adam, “Supreme Court Won’t Hold Tech Companies Liable for User Posts,” *The New York Times*, May 18, 2023, <https://www.nytimes.com/2023/05/18/us/politics/supreme-court-google-twitter-230.html>.

⁸ The ATA gives U.S. citizens the right to take civil action and recover damages following injury from an act of international terrorism (18 U.S.C. § 2333).

⁹ The JASTA amended the ATA to extend liability to “any person who aids and abets” or “conspires with the person who committed” an act of international terrorism (Pub. L. No. 114-222, § 4(a), 130 Stat. 852, 854 (2016) [codified at 18 U.S.C. § 2333(d)]).

the platform exists—to paraphrase Justice Clarence Thomas’ opinion on the case—does not make the platform owner culpable.¹⁰

The Supreme Court decided that the claims brought in *Gonzalez v. Google* were the same as *Twitter v. Taamneh*. The *Gonzalez* claims failed in the wake of the court’s *Taamneh* decision, and the court sent *Gonzalez v. Google* back to the Ninth Circuit for reconsideration. This decision upholds Section 230 as it currently stands.¹¹ However, the Supreme Court’s avoidance of the issue has left it open for additional questions and potential legislative reform.

At the close of the IDA debate, the audience chose a winner, and the pro-breakup team emerged victorious. Only time will tell if the same follows for the debate still playing out in Washington.

¹⁰ Jovanovic, S., Shanes, A.J., and Sweeney, H., “The *Taamneh* and *Gonzalez* Rulings, Explained,” *Lawfare*, May 19, 2023, <https://www.lawfareblog.com/taamneh-and-gonzalez-rulings-explained>.

¹¹ *Ibid.*

2. Anti-Breakup of Big Tech Companies

A. Opening Remarks

Economics, innovation potential, and national security all align to demonstrate that high-performing American technology companies like Facebook (now Meta), Apple, Amazon, Netflix, Google (and parent company Alphabet), and Microsoft—collectively FAANG-M—are national assets. Breaking up these companies would hinder—not help—U.S. national security.

Size, while often demonized, is an advantage to tech companies and their users. As former Federal Trade Commissioner Maureen Ohlhausen said, “You can’t say big is bad, and small is good across the board. You have to look at why is it big? Is it innovating? Is it providing products that consumers [or the government] want at a good price point?”¹² Larger companies can take advantage of economies of scale, meaning lower per-unit costs for consumers. Larger companies can also draw on bigger capital stores and skilled labor pools. This access to financial, physical, and human capital allows companies to take on sizable challenges and share resources where efficient (e.g., between engineers and programmers in different subsidiaries of a parent company). Moreover, globalization means that U.S. companies now compete against those from other countries.¹³ Effective competition requires scale sufficient to manage global supply chains and varied customer bases.

Network effects also make FAANG-M companies more useful as their user bases grow. A 2017 study by the venture capital firm NFX found that 70% of tech companies’ value came from network effects.¹⁴ These tech firms and their network effects are pseudo-monopolies—or “moligopolies” as economist Nicolas Petit calls them—that exist as such because they provide users value.¹⁵ Petit also asserts that one cannot understand big tech companies based only on their output shares in a narrow market. Instead, one must recognize these firms are dominant in a narrow market segment but weaker across others. Petit’s favored example is Google, a firm dominant in search but a competitor to Apple in the mobile device market. It is also valuable to those looking to interface with a powerful tech company or platform to limit the number of firms with which

¹² MacCarthy, M., “The Benefits of Bigness: Consumers Can Gain from Large Tech Firms and Market Leaders.” February 20, 2018. *CIO*. Accessed December 6, 2021. <https://www.cio.com/article/3256052/the-benefits-of-bigness-consumers-can-gain-from-large-tech-firms-and-market-leaders.html>.

¹³ *Ibid.*

¹⁴ Currier, J., “70 Percent of Value in Tech is Driven by Network Effects.” *NFX* n.d. Accessed December 6, 2021. <https://www.nfx.com/post/70-percent-value-network-effects/>.

¹⁵ Pethokoukis, J., *Are Big Tech Firms Monopolies? My Long-Read Q&A With Nicolas Petit*. December 18, 2020. American Enterprise Institute. Accessed December 6, 2021. <https://www.aei.org/economics/are-big-tech-firms-monopolies-my-long-read-qa-with-nicolas-petit/>.

one's product (software, hardware, etc.) must integrate. That more limited integration scope also reduces complexity surrounding integration.

While companies may not have “promote national security” in their mission statements, they can still be strategic assets. For example, U.S. tech firms partner with federal, state, and local governments to guard against threats, whether threats of disinformation, as in past election seasons, or physical threats.¹⁶ There is no guarantee that firms resulting from a breakup would have the willingness or ability to provide sufficient quantity and quality of information to government partners to make a meaningful difference in individuals' security. U.S. tech firms also partner with the government to provide valuable capabilities and information—including zero-day vulnerabilities,¹⁷ artificial intelligence (AI) capabilities,¹⁸ and cloud tools¹⁹—that meet national defense and security needs.

The fact that the world's most prominent tech companies are American is a source of soft power that can be used to advance U.S. positions on information and cyber governance, and on liberal democratic norms and values more generally. An example of the former is the impact of Amazon Web Services as a global cloud provider on regulatory and security standards. An example of the latter is the Mutual Legal Assistance Treaty (MLAT),²⁰ which states that foreign entities must get permission from the DOJ to obtain data held by U.S. companies for use in prosecution. Companies may deny a request and reject foreign government initiatives to flout liberal democratic norms, which occurred when China requested Hong Kong protester data.

The strong innovation potential of American big tech companies is another reason to classify them as national assets. From 1990 to 2000, Organization for Economic Co-operation and Development (OECD) research and development (R&D) funding rose at a faster rate than U.S. R&D funding. The U.S. should value the ability of private innovation to fill this funding gap. This reliance on private innovation is exacerbated by government reliance on contractors to develop and maintain these innovations. Private-sector innovation is driven by a profit motive and

¹⁶ O'Brien, M. and Liedtke, M., *How Big Tech Created a Data “Treasure Trove” for Police*. June 22, 2021. AP News. Accessed December 6, 2021. <https://apnews.com/article/how-big-tech-created-data-treasure-trove-for-police-e8a664c7814cc6dd560ba0e0c435bf90>.

¹⁷ Healey, J., *The U.S. Government and Zero-Day Vulnerabilities: From Pre-Heartbleed to Shadow Brokers*. November 1, 2016. Columbia University Journal of International Affairs. Accessed December 6, 2021. https://jia.sipa.columbia.edu/online-articles/healey_vulnerability_equities_process.

¹⁸ Fritsch, C. and GovWin from Deltek, “Why the Government Market for Artificial Intelligence Technology Is Expanding.” September 28, 2021. *Federal Times*. Accessed December 6, 2021. <https://www.federaltimes.com/thought-leadership/2021/09/28/why-the-government-market-for-artificial-intelligence-technology-is-expanding/>.

¹⁹ Goldstein, P., *GSA to Roll Out New Federal Cloud Marketplace*. October 7, 2021. FedTech. Accessed December 6, 2021. <https://fedtechmagazine.com/article/2021/10/gsa-roll-out-new-federal-cloud-marketplace>.

²⁰ Bunyard, J., “American Soft Power and the Big Tech Breakup.” *Carnegie Mellon University Journal of Politics and Strategy*, Spring 2021, Vol. 5, No. 3. https://www.cmu.edu/ips/research/ips-journal/ips-journal-online/jps-issue-1_2_bunyardj.pdf.

generally moves faster than the government, which opens the door for it to do more, faster, better and still meet government need as a result of the shift to increased government reliance on outside talent. Government bureaucracies tend to adopt low-risk, historic approaches—even in the defense sector—rather than the high-risk, high-reward undertakings of the private sector.²¹

A breakup of American big tech companies will also not prevent the rise of future tech giants. Instead, such a breakup may pave the way for dominance by foreign firms, raising different security concerns.

B. Do These Large MNCs Pose National and/or Economic Security Problems?

Regarding geopolitical concerns, U.S. big tech companies operating internationally may subject American intellectual property, technology, and data to access by adversarial nations, especially the People’s Republic of China (PRC).²² Companies that choose to operate in China do so under the constant threat of intellectual property theft, technology transfer, and unpermitted Chinese Communist Party (CCP) access to user data. Breaking up big tech firms will not solve this problem. Instead, the U.S. government can address these concerns by strengthening issue-specific legislation. Technology and intellectual property theft, for example, already occurs within U.S. borders—it is not unique to MNCs with a presence abroad. The U.S. government recognizes these vulnerabilities and has launched efforts to protect technology exports and regulate foreign investments in American technologies. In 2018, the U.S. expanded the scope of the Committee on Foreign Investments in the United States (CFIUS) to include venture-capital and private-equity firms and passed the Foreign Investment Risk Review Modernization Act (FIRRMA) to provide oversight on foreign investments in U.S. companies.²³ This behavior is prevalent in other Western democracies as well: Germany, France, and Canada have all pursued policy solutions to technology transfer concerns.²⁴

Another geopolitical consideration is the soft power advantages that American technology MNCs abroad offer, such as spreading and protecting American ethics and cultural norms. According to the 2020 Mutual Legal Assistance Treaty (MLAT), negotiated by the DOJ and State Department, foreign governments seeking electronic evidence from U.S. companies to prosecute criminal cases must first request assistance from the DOJ, which then decides whether such

²¹ Gansler, J.S., *Democracy’s Arsenal: Creating a Twenty-First Century Defense Industry*. The MIT Press, 2011, p. 261.

²² Sitaraman, G., “Too Big to Prevail—The National Security Case for Breaking Up Big Tech,” *Foreign Affairs* (March/April 2020): 116-126.

²³ Aggarwal, V.K., and Reddie, A.W., “Regulators Join Tech Rivalry with National-Security Blocks on Cross-Border Investment,” *Global Asia* 14, no. 1 (March 2019). <https://basc.berkeley.edu/wp-content/uploads/2021/04/2019-Aggarwal-and-Reddie-Regulators-Join-Tech-Rivalry-Gobal-Asia-March.pdf>.

²⁴ *Ibid.*

evidence sharing is to be enforced.²⁵ The DOJ can reject requests in the interest of safeguarding civil liberties, due process, and human rights at home and abroad. For example, the DOJ has denied requests for electronic evidence related to the 2020 pro-democracy protests in Hong Kong,²⁶ thus demonstrating the significant role that MNCs have in U.S. diplomatic relations and upholding American values abroad.

While holding large amounts of data in one place may have security implications, a large firm is able to invest in more robust security than a smaller company could. A recent example of this vulnerability can be seen in the SolarWinds cyberattack that resulted in the breach of sensitive government data and backdoor access to larger companies due to the flawed security of this relatively small, U.S.-based company.²⁷ It is easier to coordinate cyber planning and allocate cybersecurity resources when data is concentrated among a smaller group of companies. Similarly, having fewer large social media companies can facilitate U.S. government efforts to address national security concerns rising from the spread of misinformation and online radicalization. Breaking up a social media platform has previously been shown to result in the migration of extremist rhetoric to more private and obscure platforms (e.g., Telegram) that are more difficult for law enforcement agencies to monitor.²⁸ Instead, regulating social media platform algorithms would get at the root of the problem of how false and/or hateful content is spread without suffering the unintended consequences of breaking up a big tech company, although such legislation incurs questions about First Amendment rights.²⁹ Another, less legally contested option would be to change the business model from ad-revenue-based to subscription-based.³⁰ Both of these approaches would provide long-lasting solutions to what is likely to be an enduring problem.

²⁵ U.S. Department of Justice. “276. Treaty Requests.” *Criminal Resources Manual*. Updated January 22, 2020. <https://www.justice.gov/archives/jm/criminal-resource-manual-276-treaty-requests>.

²⁶ Bunyard, J., “American Soft Power and the Big Tech Breakup,” *Journal of Politics and Strategy* (2021): 14-18. https://www.cmu.edu/ips/research/ips-journal/ips-journal-online/jps-issue-1_2_bunyardj.pdf.

²⁷ Blunt, R., “The SolarWinds Cyberattack,” January 29, 2021, <https://www.rpc.senate.gov/policy-papers/the-solarwinds-cyberattack>.

²⁸ Schechter, A., “Extremists Move to Secret Online Channels to Plan for Inauguration Day in D.C.,” *NBC News*, January 12, 2021, <https://www.nbcnews.com/politics/congress/extremists-move-secret-line-channels-plan-inauguration-day-d-c-n1253876>.

²⁹ Stern, J., “Social-Media Algorithms Rule How We See the World. Good Luck Trying to Stop Them,” *The Wall Street Journal*, January 17, 2021, <https://www.wsj.com/articles/social-media-algorithms-rule-how-we-see-the-world-good-luck-trying-to-stop-them-11610884800>; Oremus, W., “Lawmakers’ latest idea to fix Facebook: Regulate the algorithm,” *The Washington Post*, October 12, 2021, <https://www.washingtonpost.com/technology/2021/10/12/congress-regulate-facebook-algorithm/>.

³⁰ Frank, R., “The Economic Case for Regulating Social Media,” *The New York Times*, February 11, 2021, <https://www.nytimes.com/2021/02/11/business/social-media-facebook-regulation.html>.

C. Is There Something About the Current State of the World That Exacerbates These Problems and/or Affects the Decision About Breaking Them Up and/or How to Break Them Up?

The current state of antitrust laws has allowed for big tech companies to grow into monopolies. As such, a breakup absent policy change would not prevent the same outcome from recurring. In the 1970s, critical antitrust Supreme Court cases led to an emphasis on protecting consumer welfare. This, in turn, allowed companies to merge and grow as long as they could justify such growth as beneficial for consumers. These trends from the 1970s have reemerged over the past two decades, with a majority of antitrust cases brought before the Supreme Court resulting in the Court siding with the big tech firms. As such, neither laws nor regulations would prevent companies from re-merging with one another if a breakup were to occur.

A closer examination of the Sherman Act, a key antitrust law, reveals further misalignments between regulations and a big tech breakup. The Sherman Act was created in the late 1800s as railroads were spreading across the country. The Act intended to prevent big companies from merging, encourage laborers to organize, and ensure rail benefitted the public more than company profits.³¹ Courts interpreted the Sherman Act in a way that deemed labor unions monopolies, not companies—in essence, policing labor rather than capital.³² This interpretation was temporarily reversed around the time President Franklin D. Roosevelt’s New Deal increased labor protections. However, attacks on antitrust laws recommenced in the 1970s and have persisted ever since, creating an era strikingly similar to the Gilded Age.

Robert Bork, a legal scholar who rose to prominence in the 1970s, argued that Congress passed the Sherman Act to protect consumer welfare—not to check corporations’ economic or political power.³³ Bork argued mergers and trade restraints should be allowed so long as these benefitted consumers (e.g., lowered costs). While Bork also argued collusion among rivals should be prosecuted, Bork’s opposition to collusion did not depend on whether those rivals were laborers or firms. For example, Bork viewed pharmaceutical companies conspiring to inflate drug prices as analogous to public defenders banding together to push for higher wages. In the 1970s and 1980s, court cases increasingly adopted Bork’s logic to side with corporate defendants. For example, in the 1979 Supreme Court case *Reiter v. Sonotone Corp.*,³⁴ the Court stated that Congress created

³¹ Vaheesan, S., *How Robert Bork Fathered the New Gilded Age*, September 5, 2019. Chicago Booth Stigler Center for the Study of Economy and the State, ProMarket. Accessed December 6, 2021. <https://promarket.org/2019/09/05/how-robert-bork-fathered-the-new-gilded-age/>.

³² Vaheesan, S., *Accommodating Capital and Policing Labor: Antitrust in the Two Gilded Ages*, 2019. Maryland Law Review, Vol. 78, No. 4. Accessed December 6, 2021. <https://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=3832&context=mlr>.

³³ Vaheesan, S., *How Robert Bork Fathered the New Gilded Age*, September 5, 2019. Chicago Booth Stigler Center for the Study of Economy and the State, ProMarket. Accessed December 6, 2021. <https://promarket.org/2019/09/05/how-robert-bork-fathered-the-new-gilded-age/>.

³⁴ *Reiter v. Sonotone Corp.*, 442 U.S. 330. U.S. Supreme Court, 1979.

the Sherman Act to be a “consumer welfare prescription.”³⁵ This allowed existing antitrust laws to serve as legal justification for mergers and acquisitions, rather than against them. Since then, the U.S. government has rarely challenged mergers or monopolies. It even more rarely challenges vertical mergers, the last one having been litigated in 1979.³⁶ Examining antitrust cases in the decades after 1970, a study published in *Competition Policy International* shows the Supreme Court has increasingly sided with the defendant.³⁷ Almost all cases use economic analysis as justification, emphasizing the importance of consumer welfare and economic efficiency.

This reinterpretation of concentrated market power as benefiting consumer welfare has reduced limits on monopolies. While antitrust laws were not created for the Internet, the regulatory landscape has allowed tech firms to grow into monopolies. The Internet, which seemed to promise decentralization, has been bottlenecked by tech companies as a result of antitrust rather than in spite of it. The European Union (EU) has taken the opposite approach—heavily regulating Google and other tech MNCs since 2014 and levying heavy taxes on Apple. The current head of the DOJ’s antitrust division recognizes the enforcement gap between Europe and the U.S. The DOJ sees no issue with this, however, noting the U.S. big tech landscape poses no “demonstrable harm to competition and consumers.”³⁸ As such, the DOJ is reluctant to restrict digital platforms for fear of stifling innovation and hurting the consumer.

Geopolitical concerns further increase the risks of a potential breakup. Not only might a breakup harm consumers, it may harm the proliferation of platforms that support liberal democratic values. China has created its own social media ecosystem and maintains hostile policies toward U.S. tech companies. China is also bolstering its domestic tech companies through subsidies worth millions (e.g., Huawei). These Chinese companies are serious players on the global stage and have significant impact on global financial markets.³⁹ Chinese tech firms have been shown to block U.S. competitors—not to prevent negative mental health effects of social media or to protect user privacy, but to censor content and surveil users at will.⁴⁰ U.S. firms are the main competitors of

³⁵ Vaheesan, S., *How Robert Bork Fathered the New Gilded Age*, September 5, 2019. Chicago Booth Stigler Center for the Study of Economy and the State, ProMarket. Accessed December 6, 2021. <https://promarket.org/2019/09/05/how-robert-bork-fathered-the-new-gilded-age/>.

³⁶ Vaheesan, S., *Accommodating Capital and Policing Labor: Antitrust in the Two Gilded Ages*, 2019. Maryland Law Review, Vol. 78, No. 4. Accessed December 6, 2021. <https://digitalcommons.law.umaryland.edu/cgi/viewcontent.cgi?article=3832&context=mlr>.

³⁷ Brannon, L. and Ginsburg, D.H., *Antitrust Decisions of the U.S. Supreme Court, 1967 to 2007*, 2007. *Competition Policy International*, Vol. 3, No. 2, p. 3-23. Accessed December 6, 2021. <https://www.clearygartlieb.com/-/media/organize-archive/cgsh/files/publication-pdfs/antitrust-decisions-of-the-us-supreme-court.pdf>

³⁸ Stucke, M.E., “Here Are All the Reasons It’s a Bad Idea to Let a Few Tech Companies Monopolize Our Data.” *Harvard Business Review*, March 27, 2018, <https://hbr.org/2018/03/here-are-all-the-reasons-its-a-bad-idea-to-let-a-few-tech-companies-monopolize-our-data>.

³⁹ Dziawgo, T., “Big Tech Influence on China Financial Sector,” *European Research Studies Journal* 0, Special 1 (2021): 1107-1120.

⁴⁰ Cammers-Goodwin, S.I., “Tech:” *The Curse and The Cure: Why and How Silicon Valley Should Support Economic Security*, 9 U.C. Irvine L. Rev. 1063 (2019), <https://scholarship.law.uci.edu/ucilr/vol9/iss5/4>.

Chinese tech companies. U.S. big tech companies rely on pooling data, expanding aggregation, and continued growth to offer users value. Preventing these practices or breaking up firms all together create an opening for Chinese firms to capture users—placing them at the liberty of a government that has more interest in exploitation than expression.

D. Do the Benefits of Breaking These Companies Up Outweigh the Risks and Does That Answer Depend on the Company?

The promised benefits of a big tech breakup are ill-defined and mostly abstract. Many popular pro-breakup arguments focus on breakup as a punishment for social media companies specifically. Social media breakups are framed as accountability mechanisms for firms exacerbating social problems. Proponents of this argument focus on disinformation campaigns around elections and vaccines, as well as social media’s ability to fuel those with violent tendencies into carrying out acts of domestic terrorism. Breakups are also characterized as a remedy for alleged national security vulnerabilities and consumer harm resulting from the size of these big tech companies. Adherents to this perspective focus on the business dealings of Google, Apple, and Amazon in China. The Chinese government’s ability to use data from these firms to suppress human rights is often referenced as support for this concern, as is Amazon’s choice to allow the Chinese government to use its servers for domestic security purposes. Breakup proponents argue the size of these firms allows them to act independently of U.S. regulations while making business decisions that threaten the social and political stability of the U.S.

Though all of these concerns are valid, they fall outside of the scope of what a breakup could achieve. Anti-breakup proponents do not overlook any of these issues, nor do they oppose subjecting big tech companies to fines, more stringent regulations, or stronger accountability regimes when behavior merits those reactions. Forcing a breakup of big tech firms would not directly affect any of these issues positively.

Meta offers a useful example of how big tech breakup fails to address concerns and yields unintended negative consequences. Tech watchers have argued that Meta, which consists of Facebook, Instagram, WhatsApp, Oculus Virtual Reality (VR), and others, has grown too large and merits a breakup. The proposed breakup structure often involves splitting Facebook, Instagram, WhatsApp, and Oculus VR into their own separate companies—essentially splitting Meta up into business units (i.e., communications, virtual reality, others) and individual social media companies (i.e., Facebook and Instagram). This would preserve Facebook and Instagram, though it would not compel these social media platforms to address any disinformation or divisive content. Economist Richard Gilbert has argued specifically against separating Instagram from Facebook, positing that such a move would reduce competition. Cutting Instagram off from Facebook’s larger resource pool would pave the way for Facebook to incorporate Instagram’s

features and drive it out of the market.⁴¹ This course of action would reduce user options and jeopardize consumer welfare. Absent a pre-breakup investigation, Facebook and Instagram would also lack incentives to deviate from Meta’s strategy of acquiring other firms that expand its reach in the tech space. Such investigations in antitrust cases against large enterprises can take over half a decade to complete, as demonstrated by previous Bell Telephone and IBM cases.⁴² A breakup may also discourage other large tech firms from undertaking creative acquisitions for fear that they will one day be broken up. Gilbert raises this point as well, arguing that big tech breakups may create precedent or rules that limit the ability of firms to enter new markets, offer new services, experiment with new technologies, or seek out new lines of business.⁴³

A breakup would also cut off other members of the Meta ecosystem from resources used to drive innovation and provide services. Facebook is the main profit source on which other Meta entities rely. Meta has used its profits to create an innovation ecosystem specific to VR and AI research tools. Removing Facebook as a funding stream would reduce the R&D resources available to these less profitable ventures, including Oculus VR and Meta’s PyTorch AI framework. The latter would be a particular loss, as PyTorch both fuels Meta’s big data operations and is used in AI research globally. Meta’s offering of PyTorch to researchers may appear as an effort to cultivate goodwill, but the research findings that draw on PyTorch could help combat the social ills that breakup advocates cite as justification for big tech dissolution. Thus, Meta as a firm stands to generate more of a positive societal impact if left together than if broken apart.

This is further demonstrated through Meta’s WhatsApp, a messaging platform used by much of the world outside of the U.S. that Meta has struggled to monetize. Breaking up Meta would cut WhatsApp off from Meta funding streams, jeopardizing the financial viability of a free communication tool used by billions of users worldwide. WhatsApp investors would be compelled to find ways to monetize the platform. Consumer welfare would then become uncertain, as other app or messaging ecosystems could outcompete WhatsApp. Not only would this balkanize messaging standards further, it could also close another avenue of U.S. soft tech power. Historically, WhatsApp has taken a strong position on user privacy by refusing to provide data in response to government requests—roiling authoritarian regimes by preventing them from surveilling those under their rule.

Though consumer welfare guides most breakup cost-benefit analysis, there are also national security risks to breaking up tech firms. Fragmenting companies would give rise to cyber infrastructures that comply with different data use standards and cybersecurity requirements. This balkanization of back-end security architectures in response to differing standards would create

⁴¹ Gilbert, R.J., *Innovation Matters: Competition Policy for the High-Technology Economy*, MIT Press, 2020, p. 243.

⁴² Holsendolph, E., “U.S. Settles Phone Suit, Drops I.B.M. Case; A.T.&T. To Split Up, Transforming Industry,” *The New York Times*, January 9, 1982, <https://www.nytimes.com/1982/01/09/us/us-settles-phone-suit-drops-ibm-case-at-t-to-split-up-transforming-industry.html>.

⁴³ Gilbert, p. 243.

more ways for malicious cyber actors to target users. This increases the possibility that confidential user information could be exploited. Balkanizing systems would also make it more difficult for law enforcement to track down criminals on the same network, increasing the number of lawyers and cyber or information technology teams to consult. Further, there would be a larger attack surface for criminal, state, or state-sponsored actors to target.

Breakup threats to innovation would also weaken U.S. social media ecosystems abroad, thereby reducing American soft power. In many countries, Facebook is citizens' primary engagement with the Internet.⁴⁴ While Facebook does not directly spread pro-U.S. information, it controls the format and standards of interactions on social media. Innovation activities by U.S. firms may be muted after a government-directed breakup, inhibiting the ability of American companies to sponsor the next disruptor and retain their status as tech sector leaders. Instead, a breakup would open the opportunity for entities like TikTok to fill any gaps left after a U.S. tech breakup. There would also be defense-specific spillover effects if U.S. big tech were broken up and its innovation potential hamstrung. Augmented reality and VR markets would suffer, as funding streams from social media firms would no longer be available to direct toward R&D on defense-focused applications of these technologies.

Though Meta has been the touchstone for the arguments presented here, a breakup of big tech firms would yield similar effects for other U.S. big tech companies in other sectors. Breaking up Amazon would jeopardize consumer welfare in the markets in which Amazon subsidiaries participate. For example, splitting Amazon Basics from Amazon or requiring Amazon to no longer sell its own branded products would reduce price discipline on other product sellers.⁴⁵ Further, such a requirement raises questions for brick and mortar firms with house brand products. Amazon also has only made its marketplace profitable in recent years, and Amazon Prime Video operates at a loss. Both have been supported by the profit margins of Amazon Web Services (AWS). Separating AWS would have cascading effects on its digital marketplace and its streaming platform—again harming consumer welfare by removing Amazon as an optional supplier of goods and content.

Of course, anticompetitive practices, including those documented in the 2020 Senate Subcommittee on Antitrust, Commercial, and Administrative Law's report on digital markets,⁴⁶ should be reviewed and remedied. When considering anticompetitive practices, however, a breakup again is not the solution. If regulators broke up Amazon, they would be targeting an ecosystem of companies and innovation potential. Amazon Marketplace contributes to AI research using anonymized data, and Amazon Robotics drives AI and robotics research. This research spurs

⁴⁴ *The Social Dilemma*, Netflix, 2020.

⁴⁵ Gilbert, p. 243.

⁴⁶ *Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations*, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, United States Senate, 2020, https://judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf?utm_campaign=4493-519.

competitors in logistics and pushes industry standards further in both safety and sophistication. Given that AWS is a key U.S. government supplier, any potential anticompetition measures should keep in mind possible implications for Amazon’s future innovation potential—as the U.S. government eventually benefits from that innovation.

The same innovation considerations apply to Microsoft as a leading provider of DoD information technology (IT). Applying strict acquisition rules or market definitions on Microsoft’s operations would only hinder the progress of its current and future product offerings. Such acquisition rules or imposed market divisions could make it harder for other firms to break into the IT field in the future. IT firms rely on network effects to offer customers a valuable product. In particular, using a single source supplier for hardware and software ensures compatibility. If future acquisition rules or market definitions mandate the separation of hardware manufacturers from software suppliers, it would be more complex for all customers (including the DoD) to procure complementary hardware and software. Breaking up the Alphabet ecosystem, of which Google is a part, would be even more problematic. Alphabet entities develop Android phones, self-driving cars, and quantum computers. As discussed in the case of Meta, a loss of funding from profit-heavy Alphabet entities would leave less profitable initiatives unable to continue developing breakthrough technologies. For example, Alphabet is a global leader in applied AI research and is the home of TensorFlow, a free AI framework that competes with Meta’s PyTorch. These technologies have national security applications. Forcing the Alphabet ecosystem to adhere to stricter market rules would reduce its innovative potential and flexibility.

Unlike Meta, Amazon, and Alphabet, Apple is not a holding company, meaning it has no subordinate entities. The form its breakup would take is even more nebulous. A breakup, however, would not remedy the biggest controversy and national security concern facing the firm: offering the Chinese government backdoor access to Chinese user data. This same issue has limited Google’s operations in the Chinese market. A breakup of either company would not effectively mitigate these data privacy concerns. Rather, it further demonstrates how anticompetition measures are a separate regulatory issue with distinct policy solutions.

Overall, a breakup of the FAANG-M companies does little to address the concerns around social media’s problematic elements, limits funding available for new innovations, and harms consumer welfare of those companies that benefit from network effects and economies of scale. Of critical national security importance, such a breakup would decrease competitors driving innovation in markets of interest to the DoD, including AI and VR.

E. Would a Breakup Actually Achieve the Desired Results and Is It the Best Approach?

There is no comprehensive plan circulating in policy or legal circles for what a breakup would look like or how to address differences between companies in the breakup process. This is not to say big tech firms should continue as they are—regulation may be an approach that both maintains the benefits big tech derives from economies of scale, capital stores to fund innovation, and the

network effects that make big tech useful to users. Regulation can, however, exist without a breakup. For example, the U.S. could set new merger and acquisition thresholds tailored for today's environment. Opting for a breakup straight away over regulation is the regulatory equivalent of a nuclear option and does not allow for a period of observation to see how new constraints on big tech would impact its behavior, its innovation potential, and the quality of the services it provides to users.

Potential negative implications from a breakup include a lack of price discipline in certain markets (e.g., by increasing the existence of proprietary marketplaces where competition is limited) and the balkanization of different technology standards, which may increase trade and political tensions as major consumer regions battle for their preferred companies to use their preferred standards. If these negative effects are borne out, they mean a more expensive, lower quality, and/or less secure product for the customer.

While antitrust laws can sometimes serve national security interests, antitrust regulations of big tech firms require special considerations. One example is the blocked merger of defense firms Northrup Grumman and Lockheed Martin in the 1990s due to their innovation leadership. In contrast, preventing a merger of two big tech companies has different implications due to their reliance on network effects. Breaking up big tech companies like Facebook and Google for national security reasons—not price or consumer welfare considerations—could open the door for new standards of antitrust policy and new targets under such legal precedent.⁴⁷

Fragmenting tech companies into smaller firms or limiting what services they provide does not address the underlying structure and goals of big tech that allowed these companies to monopolize in the first place. The current antitrust laws would not prevent the same market concentration from reoccurring. Enforcing breakups or limitations on services does not adequately disincentivize big tech companies from pursuing monopoly power and reaping the benefits previously discussed (e.g., network effects, economies of scale, etc.).

History also casts doubt on the ability to break up big tech firms. In the period from 1960 through the 1990s, there were several attempts to break up tech companies through antitrust lawsuits brought forth by the U.S. government. Two prominent antitrust cases during this period were (1) the 1969 suit against IBM for alleged attempts to monopolize the digital computer system market,⁴⁸ and (2) the 1998 suit against Microsoft for allegedly monopolizing the personal computer market through illegal restrictions on competitors.⁴⁹ Both cases resulted in settlements outside of court. Both IBM and Microsoft continued to grow in subsequent decades, but other tech firms—

⁴⁷ Gilbert 2020

⁴⁸ U.S. v. International Business Machines Corp. Civil Action No. 72-344 (AGS). October 5, 1955.
<https://www.justice.gov/atr/case-document/united-states-memorandum-1969-case>.

⁴⁹ U.S. v. Microsoft Corporation. Civil Action No. 98-1232. May 18, 1998.
<https://www.justice.gov/atr/cases/fl700/1763>.

including Apple, which is within the FAANG-M group—have been able to compete successfully despite a crowded market.

F. Concluding Remarks

Breaking up tech companies does not address the current problems within the companies, will not be a sustainable change given the current legal landscape, and, most importantly, will present greater national and economic problems than it would fix. Breaking up tech companies does not address the structural mechanisms that led to this monopoly in the first place: Current antitrust laws do not address the national security concerns being raised. Before resorting to a breakup, government should challenge more mergers and monopolies and focus on restoring the competitiveness of small businesses and laborers as a way to boost innovation and competition. Since the 1970s Supreme Court case, the U.S. has significantly reduced its number of challenges against mergers and acquisitions, with the last case against a vertical merger occurring in 1979. Even if we were to break up these companies, there is currently no legislation in place that would stop the exact same situation from arising again. We have not been able to see how this landscape would look under regulations that are actually aligned with protecting innovation and supporting national security concerns.

There are many ways that big tech currently benefits national and economic security: economies of scale, ability to invest in R&D, large security teams, and cooperation with the DOJ. Economies of scale not only applies to the cost to the consumer, but also to a greater aggregation and investment in talent and resources. Bigger companies yield lower costs and can draw on larger capital stores and large skilled labor pools. This allows the many skilled workers (e.g., engineers, programmers) to share basic resources and take on more and bigger challenges. Moreover, bigger companies are able to invest in their talent and make riskier research and technology investment decisions that smaller companies could not afford. The scale of a company also increases the network effect. Companies use network effects for those looking to interface with a powerful tech company or platform while limiting the number of firms with which one's product (software, hardware, etc.) must integrate with their products to be successful.

Smaller companies mean smaller security teams, fragmented information sharing about threats, and fewer resources within each company. For example, larger companies can better protect U.S. citizens' data and prevent it from use by foreign countries, whether to support threats of disinformation, as in past election seasons, or physical threats. Smaller companies will have a hard time detecting and countering influence campaigns and disinformation. Disaggregating companies creates more risk of personal information/cyber intrusion for espionage and ransomware or identity theft. Additionally, larger companies can better monitor attack vectors into federal, state, or local government networks—or privately owned critical infrastructure—that may be vulnerable. For example, U.S. tech firms partner with federal, state, and local governments to guard against threats. There is no guarantee that, if these companies were broken up, the resulting

firms would have the willingness or ability to provide sufficient quantity and quality of information to government partners to make a meaningful difference in individuals' security.

While these companies may not be created for national security, continued American dominance can be a strategic asset. Moreover, it is beneficial to the U.S. to be a leader in technology across the world. As the U.S. looks to become a leader in AI, breaking up companies leading these innovations would significantly reduce our global competitiveness. Only these tech MNCs have the capital to perform the R&D and make the risky investments that allow the United States to compete—and win—internationally.

Breaking up tech companies will hurt national security by fragmenting security teams, hurt innovation by hampering the ability to invest, and hinder the U.S.'s goal to be a leader in new technology, most notably in the race for AI. The solution is increased regulation and new antitrust policy. A breakup will hurt national security and reduce the benefits of big tech, whereas imposing regulations and antitrust policies that align with the interests of national and economic security can foster the positives of big tech in the U.S. and address the unchecked power that has been able to thrive under the current precedent of antitrust cases.

3. Pro-Breakup of Big Tech Companies

A. Opening Remarks

In May 2020, a member of the U.S. Air Force wrote phrases associated with the extremist movement Boogaloo Boys in blood on a car after killing two members of law enforcement near his base in Arizona. He was in possession of a firearm and a bomb. When asked, he said that he was radicalized “through friends in the Air Force and on the internet.”⁵⁰ This Airman is not alone. In October 2020, 13 men associated with Boogaloo and other extremist groups were arrested for plotting to kidnap and murder Michigan’s governor. Their leader was an active-duty U.S. Marine. One of his co-conspirators was a recent Marine veteran. The group met and recruited members via Facebook.⁵¹

Extremism in the ranks has become such a concern that the U.S. DoD conducted a one-day stand-down during the spring of 2021 to allow leadership to assess the issue.⁵² Part of this problem is the rampant use of digital technologies for the purpose of radicalization. The resulting harm to force readiness and safety is one of many threats posed by the unchecked expansion of big tech companies and why we argue that breaking them up is good for national security.

Breaking up companies like Facebook, Amazon, Apple, Google, and Microsoft is a necessary piece of a broader set of solutions to the challenges created by the digital revolution. A breakup is not a panacea, but rather a first step toward achieving better regulation, oversight, and safety. The risks of continuing the status quo are many. Today, big tech companies act as nation-states. They control more data and revenue than many countries, giving them outsized influence in our politics, our markets, and our personal and national security. Their size and sway allow them to rebuff political processes that review, reprimand, or regulate. Because of this, big tech has achieved and retained almost exclusive power over the services they provide, the data they collect, and the market more generally. But these companies have not wielded this power responsibly. Several have repeatedly demonstrated an inability or unwillingness to forgo profit over concerns for human or national security. These companies are simply too big to be held accountable.

⁵⁰ de Acha, G.P., Hurd, K., and Lightfoot, E., “‘I Felt Hate More Than Anything’: How an Active Duty Airman Tried to Start a Civil War,” PBS Frontline, April 13, 2021, <https://www.pbs.org/wgbh/frontline/article/steven-carrillo-boogaloo-bois-active-duty-airman-incite-civil-war/>.

⁵¹ Seck, H.H., “2 Marine Corps Vets Among Those Arrested in Michigan Governor Kidnapping Plot,” Military.com, October 10, 2020, <https://www.military.com/daily-news/2020/10/10/2-marine-corps-vets-among-those-arrested-michigan-governor-kidnapping-plot.html>.

⁵² “DOD Stand-Down to Address Extremism in the Ranks,” U.S. Department of Defense, Press Release, February 5, 2021, <https://www.defense.gov/News/Releases/Release/Article/2495924/dod-stand-down-to-address-extremism-in-the-ranks/>.

Despite internal and external research highlighting risks, they design social media platforms to maximize engagement. They harness user data to both keep the users scrolling and to feed other segments of their business. YouTube and Facebook have knowingly optimized to increase use time at the expense of users' privacy and mental health, social cohesion, and national security. In the U.S., big tech companies have deployed lobbies to buy political support for their continued self-governance, despite the manifest evidence that they have too many competing interests to adequately or ethically address the harm created by their business model, products, and services.

Foreign adversaries are exploiting this lack of governance to sow discord in the U.S. and elsewhere, as evidenced by Russia's manipulation of social media platforms, which has degraded public confidence in elections and increased vaccine hesitancy, even among members of the U.S. military and national security apparatus.^{53,54} China, on the other hand, exploits its giant market to bend U.S. big tech companies to its demands on data centers and censorship. It's clear that these companies act in their own interests, rather than in the national interest.

Additionally, many big tech companies function like essential utilities and infrastructure and should be regulated as such. 99% of the world's smart phones operate using software from Apple or Google.⁵⁵ Governments and businesses alike rely on Amazon and Microsoft for cloud computing and digital operations. As the October 2021 outage at Facebook demonstrated, the temporary pause of some of the services these companies offer affect tens of millions;⁵⁶ a collapse could pose a grave risk to several key sectors in the U.S., including healthcare, government, and commerce, with both direct and follow-on effects across national security.

To effectively restore market balance and impose regulation, the tech giants must be broken up. The companies will still be big—Instagram, for example, would be sizable. But segmenting out companies by business entity, service, or even region will disentangle conflicts of interest and enable oversight for concerns that vary widely across businesses. Breaking up big tech contributes to risk reduction across these various areas, but it also offers additional benefits. It would encourage more competitors to enter the market, which would make existing products and services cheaper. Freeing up competition also promotes innovation, which the DoD and Intelligence Community (IC) have long championed and benefited from. When companies must work to maintain contracts in a competitive environment, they have a stronger incentive to improve their

⁵³ Barnes, J.E., "Russian Disinformation Targets Vaccines and the Biden Administration," *The New York Times*, August 5, 2021, <https://www.nytimes.com/2021/08/05/us/politics/covid-vaccines-russian-disinformation.html>.

⁵⁴ Moulton, S. and Schultz, T., "One-Third of U.S. Troops Opted Out of the COVID-19 Vaccine. Here's Why That is Dangerous for National Security," *TIME*, April 5, 2021, <https://time.com/5952558/military-covid-19-vaccine-misinformation/>.

⁵⁵ Vincent, J., "99.6 Percent of New Smartphones Run Android or iOS," *The Verge*, February 16, 2017, <https://www.theverge.com/2017/2/16/14634656/android-ios-market-share-blackberry-2016>.

⁵⁶ Sharma, A., "Facebook's Outage Likely Cost the Company over \$60 Million," *Ars Technica*, October 5, 2021, <https://arstechnica.com/information-technology/2021/10/facebook-outage-likely-caused-60m-loss-impacted-small-businesses/>.

products and performance, shifting more power away from a select and small group of vendors and toward consumers and clients, including the U.S. government.

The U.S. stands to gain from a big tech break up. While breaking these companies up is not the only solution, it is likely a necessary one to enable the adoption of more and better oversight and regulation, to open up the market to competition and innovation, and to begin unraveling the tangled web that Amazon, Apple, Facebook, Google, and Microsoft have spun at the expense of our national security.

B. Do These Large MNCs Pose National Security and/or Economic Security Problems?

Big tech companies influence user behavior and thought patterns through their platforms and may be too large to be held accountable for the risks created by their business models. They have also repeatedly demonstrated themselves to be unwilling or unable to curb the spread of content that creates violence at home and abroad, degrades U.S. force readiness, and politicizes the national security sector.

Social media platforms amplify messages that would otherwise have remained marginalized and obscure. This has normalized extremist content and made the U.S. vulnerable to homegrown extremists who have been radicalized online and then acted offline. In addition to the direct risk of increased radicalization and violence, misinformation and disinformation on social media degrades U.S. force readiness by promoting mistrust in the government, sowing skepticism for typical protocol (such as vaccine adoption), and politicizing the military, as shown through the participation of active and former military personnel in the January 6, 2021, attack on the Capitol.⁵⁷ These messages are often promoted through algorithms used to increase user engagement. The algorithms employ huge amounts of data collected on users to target small, specific groups with content meant to elicit an emotional response, which increases user engagement, as well as the company's subsequent monetization of that engagement.

Foreign adversaries are well aware of this, and they have deployed misinformation and disinformation designed to exploit existing socio-political divisions. Russia, for example, ran influence operations campaigns on Facebook prior to the 2016 and 2020 U.S. elections. Russia has also conducted extensive information operations abroad aimed at undermining the influence and ability of the U.S. and its allies to engage with partner nations on counterterrorism and other

⁵⁷ Dreisbach, T. and Anderson, M., "Nearly 1 in 5 Defendants in Capitol Riot Cases Served In The Military," *NPR*, January 21, 2021, <https://www.npr.org/2021/01/21/958915267/nearly-one-in-five-defendants-in-capitol-riot-cases-served-in-the-military>.

pressing security matters.⁵⁸ During the COVID-19 pandemic, both Russia and China deployed disinformation meant to bolster anti-vax narratives and sow distrust of Western-made vaccines.⁵⁹

Internal solutions, namely content review and moderation, have repeatedly fallen short despite attempts at congressional and legal oversight. Section 230 of the Communications Decency Act exempts tech companies from liability for what users post on their platforms and gives them the ability to set terms of use and remove content (in “good faith”) that violates those terms. Content moderation, however, is lacking, and big tech companies have resisted efforts to bolster their moderation practices. For example, Mark Zuckerberg, Meta’s CEO, has suggested that regulation frameworks do not apply to Facebook and Instagram. In 2020, he stated that Facebook and other private companies “shouldn’t be the arbiter of truth of everything that people say online.”⁶⁰ While this speaks to the exemption from liability for user posts, it also ignores the good faith rule of moderation.

These companies’ power, both in terms of market share and product pervasiveness and reach, gives them enormous influence economically and politically; in essence, they act more like nation-states than corporations. Though they have insisted that remaining unified is critical to U.S. national security interests,⁶¹ they have repeatedly proven resistant to U.S. oversight and susceptible to influence from foreign countries, especially when profits are on the line.

Apple, for example, has capitulated to China’s demands regarding encryption—iPhones in China do not use encryption—and the government’s access to data.⁶² Apple and Google bowed to political pressures in Russia when they banned applications associated with political and oppositional activists at the request of Russian President Vladimir Putin’s government.⁶³ Facebook and other companies have also cooperated with government censorship in foreign nations offering

⁵⁸ Roday, M. and Daly, S., “Information Operations: An Understudied Facet of Russian Influence in Africa,” Institute for Defense Analyses, D-22824-NS, September 10, 2021.

⁵⁹ Emmot, R., “Russia, China Sow Disinformation to Undermine Trust in Western Vaccines: EU,” *Reuters*, April 28, 2021, <https://www.reuters.com/world/china/russia-china-sow-disinformation-undermine-trust-western-vaccines-eu-report-says-2021-04-28/>.

⁶⁰ Klar, R., “Zuckerburg: ‘Facebook Shouldn’t be the Arbiter of Truth of Everything that People Say Online,’” *The Hill*, May 27, 2020, <https://thehill.com/policy/technology/499852-zuckerberg-facebook-shouldnt-be-the-arbiter-of-truth-of-everything-that>.

⁶¹ National Security Letter on Antitrust, September 15, 2021, <https://www.documentcloud.org/documents/21062393-national-security-letter-on-antitrust?responsive=1&title=1>.

⁶² Nicas, J., Zhong, R., and Wakabayashi, D., “Censorship, Surveillance and Profits: A Hard Bargain for Apple in China,” *The New York Times*, May 17, 2021, <https://www.nytimes.com/2021/05/17/technology/apple-china-censorship-data.html>.

⁶³ Liedtke, M. and Ortutay, B., “Apple, Google Raise New Concerns by Yanking Russian App,” AP News, September 22, 2021, <https://apnews.com/article/technology-europe-business-russia-vladimir-putin-b811d32132c41840e1eb32c024235452>.

large markets, drawing into question their protestations that they are unable to limit or moderate content in other regions of the world, including the U.S.

Despite all this, these companies' services and products have become ubiquitous in everyday life. Historically, the U.S. has treated goods that were "indispensable to public life" as essential utilities or infrastructure and regulated them "in the public interest."⁶⁴ This includes developments in transportation and communication, such as railroads, telecommunications, and cellular networks. Regulating essential services and utilities protects consumer privacy and interests, applies common law, and ensures competition to disperse power. For example, mail carriers cannot open letters, and telecommunications companies cannot listen in on phone calls to harvest the content and data therein. In the financial sector, failure deemed capable to "threaten the stability of the financial system of the United States" would trigger Dodd-Frank.^{65,66} Big tech companies pose a similar risk, as their failure could have a cascade effect that could collapse numerous essential sectors, including communications, computing, and all dependent industry (including security and healthcare). Such large companies are more likely to resist regulation, which leaves them and the products and services they provide vulnerable and at an increased risk of failure.

Big tech companies function like essential utilities and infrastructure in a number of ways. 99% of the world's smartphones operate using software from Apple or Google.⁶⁷ More than two billion people use WhatsApp, and many users rely on the Facebook messaging service (not to be confused with Facebook's Messenger) as their primary text messaging application.⁶⁸ Businesses rely on Facebook and Amazon for advertising, exposure, or remote operations.⁶⁹ Microsoft, Amazon, and Google dominate the cloud computing services space and digital communication and working platforms, which the pandemic has made more important than ever. Governments rely on

⁶⁴ Teachout, Z., "The Government Needs to Find Big Tech a New Business Model," *The Atlantic*, February 22, 2021, <https://www.theatlantic.com/ideas/archive/2021/02/government-needs-find-big-tech-new-business-model/618099/>.

⁶⁵ McCarthy, M., "The Tech Industry Needs Regulation for Its Systemically Important Companies," Brookings, December 8, 2020, <https://www.brookings.edu/blog/techtank/2020/12/08/the-tech-industry-needs-regulation-for-its-systemically-important-companies/>.

⁶⁶ The Dodd-Frank Wall Street Reform and Consumer Protection Act was passed in 2010 as a response to the recession caused by the 2007–2008 financial crisis. Among other reforms, Dodd-Frank established the Consumer Financial Protection Bureau and the Securities and Exchange Commission (SEC) Office of Credit Ratings ("Brief Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act," https://www.dpc.senate.gov/pdf/wall_street_reform_summary.pdf).

⁶⁷ Griffin, R., "Is the COVID-19 Pandemic a Victory for Big Tech?" SciencesPo, August 13, 2020, <https://www.sciencespo.fr/public/chaire-numerique/en/2020/08/13/is-the-covid-19-pandemic-a-victory-for-big-tech/>.

⁶⁸ Talmazan, Y., "Facebook, WhatsApp Outage an Annoyance in U.S., but a Big Deal in Rest of the World," NBC News, October 5, 2021, <https://www.nbcnews.com/news/world/facebook-whatsapp-outage-annoyance-u-s-big-deal-rest-world-n1280785>.

⁶⁹ Dwoskin, E., "Tech Giants Are Profiting—and Getting More Powerful—Even as the Global Economy Tanks," *The Washington Post*, April 27, 2020, <https://www.washingtonpost.com/technology/2020/04/27/big-tech-coronavirus-winners/>.

these same companies for contracts in a variety of tech and communication spaces. When Facebook went down for several hours in October 2021, the outage had wide-ranging impacts, including disrupting healthcare in India and making internal work at Facebook nearly impossible.⁷⁰

But the over-reliance on such a small number of companies for so much, and such a variety of, key infrastructure undermines states' digital sovereignty.⁷¹ The EU, in particular, has expressed concern over regulating companies that are able to exert significant political influence and that the EU depends on for essential products and services. The lack of competition has allowed digital behemoths to make their own rules—for their customers, the market, and themselves—and to become “governments unto themselves.”⁷² Where there are virtual or true monopolies, there is a “duty to deal” that entails a special responsibility to ensure impartial access and care for misuse and negligence.

Breaking down big tech companies into their component services and products disentangles the contradicting interests between the special responsibility of essential services and the desire to profit from user activity, engagement, and data. Companies like Facebook and Google function as essential infrastructure, publishers, and advertisers, but they have so far evaded attempts to be regulated as such. To regulate them appropriately, they should be separated into relevant sectors.

C. Is There Something About the Current State of the World That Exacerbates These Problems and/or Affects the Decision About Breaking Them Up and/or How to Break Them Up?

The current state of the world, most notably the COVID-19 pandemic, has highlighted the need to break up big tech companies. COVID-19 accelerated the digitization of daily life. Not only is commerce conducted online, but so is school, business, medicine, and everything else. While other sectors and economies have contracted due to the pandemic, the digital economy has grown. Arguments about the risks of big tech companies' size and influence that pre-date 2020 are even more applicable now, as big tech has grown in absolute and relative influence over the pandemic.

The time is right to pursue breakups because there has never been more attention to the risks posed by such unlimitedly large tech companies. For years, lawmakers, journalists, academics, and other stakeholders have expressed concern over the impacts of technology companies and digital platforms. The so-called “techlash” that began in 2019 later resurged in 2021 despite (and likely

⁷⁰ Lawler, R. and Heath, A., “Facebook is Back Online after a Massive Outage that Also Took Down Instagram, WhatsApp, Messenger, and Oculus,” *The Verge*, October 5, 2021, <https://www.theverge.com/2021/10/4/22708989/instagram-facebook-outage-messenger-whatsapp-error>.

⁷¹ Griffin, R., “Is the COVID-19 Pandemic a Victory for Big Tech?” SciencesPo, August 13, 2020, <https://www.sciencespo.fr/public/chaire-numerique/en/2020/08/13/is-the-covid-19-pandemic-a-victory-for-big-tech/>.

⁷² Wheeler, T., Verveer, P., and Kimmelman, G., “New Digital Realities; New Oversight Solutions,” Harvard Kennedy School’s Shorenstein Center, August 20, 2020, <https://shorensteincenter.org/new-digital-realities-tom-wheeler-phil-verveer-gene-kimmelman/>.

due to) disruptions to governance.⁷³ Recent news related to whistleblowers and leaks has amplified calls for breakup and regulation.⁷⁴ Among the key concerns is the use and impact of digital platforms on the well-being of individual users and society writ large.

So far, years of congressional hearings, academic research, and journalistic exposés have not resulted in sufficient solutions regarding the companies and the platforms they operate. The current business models of companies like Meta and Google are too profitable to change, and the companies are too large for effective regulation. This is not to suggest that additional regulation aimed at specific needs and specific areas, and applied to other platforms as well (i.e., Twitter, Reddit, Discord, and TikTok) is unnecessary. It is absolutely necessary. But levelling the playing field to allow for targeted, realistic, and implementable guidelines and regulation will facilitate the changes needed to greatly reduce the profiteering possible from spreading misinformation and disinformation.

The stakes are high. Insufficiently moderated content and algorithms built to exacerbate and extend socio-political polarization lead to violent conflict. Foreign terrorist groups, notably ISIS, rely on social media for recruitment and public relations and on WhatsApp for battle organization.^{75,76} Domestic terrorist groups also use social media to recruit and radicalize. The unchecked promotion of misinformation and disinformation has had deadly consequences: fomenting civil war and genocide in Myanmar and Ethiopia and enabling violence by mass shooters and vigilante militias in the U.S.^{77,78,79} And, as the recent release of the “Facebook Papers” has indicated, social media fuels myriad other problems, including depression, eating disorders, and low self-esteem.⁸⁰

⁷³ “Techlash 2.0: The Next-Gen TECHLASH is Bigger, Stronger & Faster,” *TechDirt*, November 19, 2021, <https://www.techdirt.com/articles/20211118/16382947969/techlash-20-next-gen-techlash-is-bigger-stronger-faster.shtml>.

⁷⁴ Chappel, B., “The Facebook Papers: What You Need to Know about the Trove of Insider Documents,” NPR, October 25, 2021, <https://www.npr.org/2021/10/25/1049015366/the-facebook-papers-what-you-need-to-know>.

⁷⁵ Taylor, M., “ISIS Recruitment of Youth via Social Media,” *Global Affairs Review*, February 2, 2020, https://wp.nyu.edu/schoolofprofessionalstudies-ga_review/isis-recruitment-of-youth-via-social-media/.

⁷⁶ Verini, J., “How the Battle of Mosul was Waged on WhatsApp,” *The Guardian*, September 28, 2019, <https://www.theguardian.com/world/2019/sep/28/battle-of-mosul-waged-on-whatsapp-james-verini>.

⁷⁷ Robins-Early, N., “How Facebook is Stoking a Civil War in Ethiopia,” *VICE World News*, November 8, 2021, <https://www.vice.com/en/article/qjbpd7/how-facebook-is-stoking-a-civil-war-in-ethiopia>.
<https://www.elon.edu/u/academics/communications/journal/wp-content/uploads/sites/153/2018/12/03-Lee.pdf>

⁷⁸ Mozur, P., “A Genocide Incited on Facebook, with Posts from Myanmar’s Military,” *The New York Times*, October 15, 2018, <https://www.nytimes.com/2018/10/15/technology/myanmar-facebook-genocide.html>.

⁷⁹ Lee, K.J., “Mass Shootings and Media Contagion Theory: Social Media’s Influence on Frequency of Incidents,” *Elon Journal of Undergraduate Research in Communications* 9, no. 2 (Fall 2018).

⁸⁰ Wells, G., Horwitz, J. and Seetharaman, D., “Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show,” *The Wall Street Journal*, September 14, 2021, https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739?mod=article_inline.

The most recent legislation that relates to these issues is the Communications Decency Act of 1996. Section 230 of the Communications Decency Act protects online platforms from being held accountable for content posted by third parties and encourages platforms to screen for offensive material by removing liability for actions taken “in good faith” to restrict material considered “obscene, lewd, lascivious, filthy, excessively violent, or otherwise objectionable.”⁸¹ House leaders have recently proposed to lift protections established in the Communications Decency Act from tech platforms that “knowingly or recklessly use algorithms to recommend content to users that causes physical or severe emotional injury.”⁸² The proposed legislation, known as the Justice Against Malicious Algorithms Act, would hold platforms accountable for the content promoted by their algorithms if that content caused or contributed to a user’s physical or emotional injury. The bill would apply to platforms with more than five million users and includes exceptions for web-hosting sites.⁸³

The coalescence of so much bad press and the knowledge of the damage caused by unregulated companies have led to a renewed interest in antitrust legislation and legal action. These companies provide products and services to the U.S. government. The promotion of ethical and competitive practices will only further strengthen our national position by opening up the market for innovation. These issues are front and center in U.S. politics today, and they underscore the relevance of a breakup to our current estimate of best practices.

In October 2020, the DOJ filed an antitrust suit against Alphabet, Inc., alleging that Google used money earned from advertisements on its search engine to pay mobile-phone manufacturers and carriers to keep Google as their default search engine.⁸⁴ A second lawsuit may be forthcoming, as the DOJ has been investigating whether Google pursued anticompetitive practices related to digital advertising, particularly whether Google and Facebook have entered into an illegal agreement to manipulate online advertising auctions.⁸⁵

In the summer of 2021, the House Judiciary Committee introduced the Ending Platform Monopolies Act to “promote competition and eliminate the conflicts of interest.”⁸⁶ The House is

⁸¹ Communications Decency Act, 47 U.S.C. § 230, <https://www.law.cornell.edu/uscode/text/47/230>.

⁸² “E&C Leaders Announce Legislation to Reform Section 230,” House Committee on Energy and Commerce Press Release, October 14, 2021, <https://energycommerce.house.gov/newsroom/press-releases/ec-leaders-announce-legislation-to-reform-section-230>.

⁸³ Rodrigo, C.M., “House Democrats announce bill to rein in tech algorithms,” *The Hill*, October 14, 2021, <https://thehill.com/policy/cybersecurity/576729-house-democrats-announce-bill-to-rein-in-tech-algorithms?rl=1>.

⁸⁴ Kendall, B. and Copeland, R., “Justice Department Hits Google With Antitrust Lawsuit,” *The Wall Street Journal*, October 20, 2020, https://www.wsj.com/articles/justice-department-to-file-long-awaited-antitrust-suit-against-google-11603195203?mod=article_inline.

⁸⁵ Kang, C., “Justice Dept. Is Said to Accelerate Google Advertising Inquiry,” *The New York Times*, September 1, 2021, <https://www.nytimes.com/2021/09/01/technology/google-antitrust-advertising-doj.html>.

⁸⁶ Mattioli, D. and Tracy, R., “House Bills Seek to Break Up Amazon and Other Big Tech Companies,” *The Wall Street Journal*, June 11, 2021, https://www.wsj.com/articles/amazon-other-tech-giants-could-be-forced-to-shed-assets-under-house-bill-11623423248?mod=article_inline.

also currently reviewing three other resolutions aimed at data operability among platforms, restricting mergers and acquisitions, and prohibiting companies from pursuing different lines of business when the combination creates a conflict of interest.⁸⁷

In August 2021, the FTC filed a complaint against Facebook regarding its predatory practices of buying or crushing rival companies. As part of its argued remedy, the FTC asked the judiciary to compel Facebook to sell Instagram and WhatsApp. This October, Senators began work on legislation to stop Internet companies from engaging in preferential and non-competitive behaviors on their commercial platforms.⁸⁸

Attention to this issue has, it seems, finally reached a tipping point. Though private interests continue to lobby against a breakup and antitrust legislation, big tech companies have had the better part of a decade to change course, and they have proven unwilling or unable to adequately address the issues arising from their business models and practices. The pandemic amplified and exacerbated many of the concerns emanating from this issue, making this the right time to engage in more aggressive regulatory and oversight activity. Breaking up big tech companies will allow regulators and legislators to design better oversight and accountability mechanisms that support the responsible development and use of digital platforms.

D. Do the Benefits of Breaking These Companies Up Outweigh the Risks and Does That Answer Depend on the Company?

Breaking up these companies would primarily involve unwinding the major mergers and acquisitions that formed the companies in the first place, such as spinning off Instagram, WhatsApp, and Oculus from Facebook. It would also involve splitting up major divisions within the parent companies, such as separating Amazon's retail business from Amazon Web Services and Amazon Prime's streaming service. There may also be cause for further interdivisional breakup, but that would best be determined on a case-by-case basis.

Breaking up big tech companies into their major divisions would have a number of benefits. It would reduce these companies' monopoly power and increase competition within each sector and business area. It would also dilute the nearly unlimited lobbying power these companies currently enjoy, making it more difficult for them to fight new regulation. Furthermore, the smaller companies that result from a breakup would neither be able to pick which rules and regulations to follow nor break them with impunity as these large companies do today, knowing that they are too big to truly be held accountable.

⁸⁷ Edgerton, A., "Antitrust Bills Risk National Security, Tech-Funded Study Says," *Bloomberg*, September 13, 2021, <https://www.bloomberg.com/news/articles/2021-09-13/antitrust-bills-risk-national-security-tech-funded-study-says>.

⁸⁸ McKinnon, J.D., "Effort to Bar Tech Companies from 'Self-Preferencing' Gains Traction," *The Wall Street Journal*, October 15, 2021, https://www.wsj.com/articles/effort-to-bar-tech-companies-from-self-preferencing-gains-traction-11634202000?mod=tech_lead_pos2.

A breakup of the big tech companies is not without its downsides, and there are a number of areas where this action may not benefit U.S. national or economic security. On the whole, however, these risks do not outweigh the benefits of pursuing a thorough breakup of these companies.

One of the largest risks is that broken-up companies will no longer be able to moderate and screen their platforms for extremism, misinformation, and disinformation. However, smaller companies may actually find it easier to moderate because the volume of content for any given platform will be greatly reduced, requiring fewer resources to manage. Smaller platforms severely limit the reach of these narratives. Furthermore, smaller companies may have more incentive to moderate their platforms than today's big tech companies, which are generally unable and unwilling to invest the necessary time and resources. Facebook, for example, does not screen for disinformation in Burmese because the market in Myanmar is so small, but Facebook was a major platform for radicalization against the minority Rohingya people.^{89,90} To a smaller company, there are no insignificant markets.

Broken-up companies may limit research and innovation in fields such as AI and cloud computing, but a breakup could also expand innovation across the market. In economics, it is well established that innovation accompanies increased competition, a paradigm that would certainly apply here.⁹¹ The sheer size of big tech companies in particular has created an unprecedented chilling effect on innovation, which is most visible through startup creation and funding.⁹² Venture capitalists have reported that they are much less likely to fund startups attempting to challenge big tech products and services—even when the startup's product is equal to or better than what currently exists—because big tech companies have the size and power to push smaller companies out of the market.⁹³ Overall funding for tech-related startups has dropped by nearly 75% since its high in 2014, and a 2019 study by the University of Chicago concluded this chilling effect was the culprit.⁹⁴

Big tech is the only industry with companies large enough to resemble nation-states. These companies have access to financial and other resources on the scale of nations, allowing them to pick and choose which rules to follow. The smaller companies resulting from a breakup would be

⁸⁹ *BBC News*, November 6, 2018, "Facebook Admits It was Used to 'Incite Offline Violence' in Myanmar," <https://www.bbc.com/news/world-asia-46105934>.

⁹⁰ Stevenson, A., "Facebook Admits It Was Used to Incite Violence in Myanmar," *The New York Times*, November 6, 2018, <https://www.nytimes.com/2018/11/06/technology/myanmar-facebook.html>.

⁹¹ Katz, M.L., "Big Tech Mergers: Innovation, Competition for the Market, and the Acquisition of Emerging Competitors," *Information Economics and Policy*, Volume 54, March 2021, <https://www.sciencedirect.com/science/article/pii/S016762452030127X#!>.

⁹² Kamepalli, S.K., Rajan, R. and Zingales, L., Kill Zone, https://faculty.chicagobooth.edu/~media/faculty/raghuram-rajan/research/papers/kill-zone_nov.pdf?la=en&hash=B96EE67FF5ABBF1D6935C4774180187AE26DF63D.

⁹³ *Ibid.*

⁹⁴ *Ibid.*

more receptive to government regulation. There is a real danger that this would result in empowering malicious nations to influence these companies, but malicious actors already wield outsized influence on big tech. Apple and Google, for example, have been heavily censoring their app stores to comply with demands from China and Russia.^{95,96} At the same time, these companies have also racked up billions of dollars in fines from the U.S. and EU for violating privacy and data protection laws and antitrust statutes without meaningfully changing their behavior.^{97,98,99}

Smaller companies may mean fewer resources overall devoted to platform cybersecurity. But smaller companies would be able to devote the resources they have to more specific threats. Also, a more diverse base of smaller companies will limit the effect of a cyberattack, which could dissuade potential malicious actors.

E. Would a Breakup Actually Achieve the Desired Results and Is It the Best Approach?

Breaking up Facebook, Alphabet, Amazon, and even Microsoft is not a panacea; it will be necessary to facilitate follow-on solutions related to regulation and oversight. As addressed in the previous section, just as the motivations for breaking up a company will vary from company to company, so too should the mode and manner of restructuring be tailored to facilitate solutions for security, privacy, competition, and content moderation. Breaking up the big tech companies is a necessary, but not always sufficient, step toward increasing the resilience of our digital infrastructure and economy against internal and external threats to national security.

Rather than ranking “break up” within a list of other remedies, it should be considered an integral tool among other equally important tools to address specific concerns. It is not an issue of whether it is the “best” approach, but a question of when it is a necessary step. For example, if we want to more closely monitor how companies collect, use, and store data, breaking companies down into their relevant components can facilitate greater parity between government actors and the tech companies themselves. They are currently so large that they can afford to resist oversight,

⁹⁵ Nicas, J., Zhong, R. and Wakabayashi, D., “Censorship, Surveillance and Profits: A Hard Bargain for Apple in China,” *The New York Times*, May 17, 2021, <https://www.nytimes.com/2021/05/17/technology/apple-china-censorship-data.html>.

⁹⁶ Timberg, C., Dixon, R., De Vynck, G. and Albergotti, R., “Human Rights Advocates Decry Apple, Google Decision to Pull Navalny App as Russia Voting Begins,” *The Washington Post*, September 17, 2021, <https://www.washingtonpost.com/business/2021/09/17/navalny-google-apple-app-russia/>.

⁹⁷ Fair, L., “FTC’s \$5 Billion Facebook Settlement: Record-breaking and History-making,” *Federal Trade Commission Business Blog*, July 24, 2019, <https://www.ftc.gov/business-guidance/blog/2019/07/ftcs-5-billion-facebook-settlement-record-breaking-and-history-making>.

⁹⁸ Elias, J. and Feiner, L., “YouTube Will Pay \$170 Million to Settle Claims It Violated Child Privacy Laws,” *CNBC*, September 4, 2019, <https://www.cncb.com/2019/09/04/youtube-to-pay-170-million-in-ftc-child-privacy-settlement.html>.

⁹⁹ European Commission, “Antitrust: Google Fined €1.49 Billion for Online Advertising Abuse,” March 20, 2019, https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1770.

fight legal review, and aggregate large amounts of consumer and customer data across vastly different platforms. There are still means and methods for the companies themselves to collaborate through data sharing, but those contracts would be more subject to stakeholder input regarding data practices and protections. Does a breakup solve the issue of data protection and privacy? No. Is it a necessary step toward the implementation of better practices, oversight, and regulation? Yes.

We can look at historical examples to understand the positive impact of breaking up a near-monopoly on companies critical to the national security apparatus. In the 1970s, the U.S. government began antitrust investigations that eventually led to the breakup of Bell and AT&T in 1984. At the time, AT&T fomented support against the breakup by appealing to the intelligence and defense communities, claiming that they needed to preserve their monopoly to continue operating and innovating for the national security sector. This was ultimately false.¹⁰⁰ Following the breakup, no such downgrade in telecommunications innovation or operations occurred. In fact, the breaking up of AT&T allowed for other competitors to enter the market, innovate, and continue to revolutionize how we communicate and operate business. Tom Wheeler, former chairman of the Federal Communications Commission (FCC), observed that breaking up Bell and AT&T fed innovation and brought patents for transistors and modems into the public domain.¹⁰¹

Big tech companies protect their size, power, and influence not because it benefits U.S. national security, but because it is profitable. They already attempt to dictate the terms of their relationship with consumers and customers, including national governments. If breakups are not to be pursued, what is the endgame? Can these companies continue to grow in size, revenue, and influence in perpetuity? If we want to ensure the sovereignty of the U.S. government and restore the efficacy of the judicial and legislative bodies to protect consumers and customers—directly and indirectly through future development—we need to seriously consider breaking up and (to borrow from Kara Swisher) “breaking open” the tech giants as we know them today.¹⁰² Breaking up the companies will help redistribute the wealth, power, and influence of the tech sector to create a climate conducive to innovation and competition and favorable to the U.S.’s wide-ranging national security needs and interests.

F. Concluding Remarks

Today, big tech companies have great political, economic, and social influence. As our lives have continued to migrate online, their influence has only continued to grow, particularly over the last year and a half during the COVID-19 pandemic. The prevailing idea of these companies is to

¹⁰⁰ Falcon, E., “No, Tech Monopolies Don’t Serve National Security,” *EFF*, September 16, 2021, <https://www.eff.org/deeplinks/2021/09/no-tech-monopolies-dont-serve-national-security>.

¹⁰¹ Wheeler, T., Verveer, P. and Kimmelman, G., “The Need for Regulation of Big Tech Beyond Antitrust,” *Brookings*, September 23, 2020, <https://www.brookings.edu/blog/techtank/2020/09/23/the-need-for-regulation-of-big-tech-beyond-antitrust/>.

¹⁰² Brookings Event: Breaking Up Big Tech: Should Congress Do It? August 4, 2020, <https://www.brookings.edu/events/breaking-up-big-tech/>.

shift to the metaverse and continue to encourage us to live virtually, best exemplified by Facebook’s rebranding as Meta. The boundaries between online and offline spaces are becoming increasingly blurred, which exemplifies the effects big tech companies have within their platforms and products and beyond.

This influence has had a range of detrimental effects on both an individual and societal level. Social media use has been linked with a host of mental issues, including feelings of inadequacy, low self-esteem, and eating disorders. Misinformation and disinformation spread through social media platforms have promoted social, religious, and political division; pushed narratives meant to wreak havoc on public health; and fomented radicalization and violence. Our digital footprints—data collected based on not only what we choose to post online but also what we watch, read, and buy—form the basis of an immensely lucrative online business model that provides the information needed to target specific audiences, a model unconcerned with whether this data is used for advertising purposes or for influence operations.

These companies have also retained great power over the markets for the products and services they provide. Attempts to improve content moderation have largely gone unheeded, leaving harmful and misleading information available for consumption, or, worse, for dissemination by uncaring algorithms. Facebook’s XCheck list, for example, exempts millions of accounts from content moderation practices because Facebook considers these VIPs to be too newsworthy, influential, or simply risky from a PR perspective to moderate.¹⁰³

The power and ubiquity of these companies and their products have transformed them from mere major corporations into essential utilities and infrastructure. Failures in their infrastructure can cause widespread damage to communications, commerce, finance, medicine, and government functions, exemplified by the 2021 Facebook outage that left tens of millions without access to these essential services. Since these companies have become essential, they need to be regulated as such. A major breakup of these companies is a necessary, though not sufficient, step toward that.

The current state of the world has highlighted this need. There has never been more attention paid to the risks posed by big tech companies, both in the public eye and in government. Recent news related to whistleblowers and leaks has only amplified calls for breakup and regulation. In addition to considering the actions discussed in previous sections, House leaders are planning to introduce legislation to lift the protections created by Section 230 of the Communications Decency Act of 1996 from tech platforms when a platform “knowingly or recklessly uses an algorithm to

¹⁰³ Horwitz, J., “Facebook Says Its Rules Apply to All. Company Documents Reveal a Secret Elite That’s Exempt.” *The Wall Street Journal*, September 13, 2021, https://www.wsj.com/articles/facebook-files-xcheck-zuckerberg-elite-rules-11631541353?mod=article_inline.

recommend content to users based on their personal data history, and the content materially contributes to the users’ physical or severe emotional injury.”¹⁰⁴

Breaking up these companies would involve separating major mergers and acquisitions and cleaving apart a company’s major divisions. This action would not be without risk to innovation, cybersecurity, and ability to moderate content, but we believe that the improvements in these fields from increased regulatory oversight, product diversity, and competition would be a net gain for our society and national security.

Breaking up big tech is not a panacea. Instead, it is part of a suite of solutions to address specific concerns. These companies are too big to truly be held accountable—they have resisted oversight, fought legal review, and shrugged off multibillion-dollar fines for malfeasance as simply the cost of doing business. These companies protect their size, power, and influence because it is profitable to do so and despite their loud and repeated claims to the contrary, they act only in their own best interest.

Breaking up big tech companies will help redistribute the wealth, power, and influence of the tech sector to create a climate that is conducive to innovation and competition and is favorable to the U.S.’s wide ranging national security needs and interests.

¹⁰⁴ McKinnon, J.D., “Effort to Bar Tech Companies From ‘Self-Preferencing’ Gains Traction,” *The Wall Street Journal*, October 15, 2021, https://www.wsj.com/articles/effort-to-bar-tech-companies-from-self-preferencing-gains-traction-11634202000?mod=tech_lead_pos2.

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