



The Case for the Digital Platform Act: Market Structure and Regulation of Digital Platforms

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Foreword by Tom Wheeler

A late 1970's television commercial for stock brokerage firm E.F. Hutton closed with the tagline, "When E.F. Hutton talks, people listen." On technology-related policy matters in the 21st century, when Harold Feld talks, people listen.

We now have the advantage of Harold's speaking between two covers. The volume you hold in your hands is a tour de force of the issues raised by the digital economy and internet capitalism. Whether you agree or disagree with Harold, these thoughts will stretch your intellect and stimulate your thinking.

Digital platforms are a unique creation of the late 20th and early 21st centuries. The digital economy may have replaced the industrial economy, but the rules created to oversee the fair operation of the industrial economy have not kept pace with that evolution. This volume sets out numerous thoughts about the kinds of policy changes necessary to reflect the realities of our new era.

Thus far, the companies of the digital economy have been successful in keeping government oversight at bay. The growth of these companies happened to coincide with the era of deregulation. The companies seized that momentum to spin the story that somehow "digital is different" than traditional analog activities and thus needed to be left alone.

It has always been true in history that the pioneers made the rules ... until their activities infringed on the rights of individuals and the public interest. We have now reached that watershed. Just as rules were established for industrial capitalism, it is now time to think about guardrails to protect competition, consumers, and workers in the era of internet capitalism. In the process, such policies will also protect internet capitalism from its own incentives to excess while embracing its ability to stimulate new and innovative products and services.

Digital information—the basis of the new economy—is unlike any other asset in history. All other assets, such as oil or gold, are finite, both in supply and demand. Produced by the interconnection of microcomputers, digital information is inexhaustible. Every action on the network produces data that is used to create a new data product, which then creates additional data, which creates a new product. It is a digital perpetual motion machine.

It is this new reality of an inexhaustible and manipulatable asset that has reshaped our economy to create internet capitalism. There are at least four consequences of the digital economy that require oversight.

The first is the “digital alchemy” that turns personal information into a corporate asset and how this inexhaustible supply of data is harvested by a handful of companies for their commercial gain. The new information economy is based on the mining of this data to develop ever more granular insights into each of us that can be sold to marketers seeking to promote their product or idea to targeted audiences.

Once having collected this data, the companies create a bottleneck to its use in order to maximize its monetization. In Medieval times, information was hoarded by the powerful as a tool to control the masses. Over half a millennium later, the hoarding of information is now used for a new kind of control: to control markets. Controlling access to the collected data, for instance, allows the platform companies to cannibalize local businesses by knowing more about the neighbors than even the locals do.

Third, the hoarding of concentrated data is also used to keep new competitors from entering the market. A new company has the “cold start problem,” which is the challenge of beginning a new business without the data asset for which customers are willing to pay. Because innovators do not have the data assets of the incumbents, they are at a huge handicap entering new markets—a handicap that further reinforces the power of those who siphon personal information and turn it into a corporate asset.

Finally, such control of data also gives the digital companies the ability to control the future. As machine learning and artificial intelligence become the tools by which data is manipulated, those with the greatest storehouse of data thus have a leg up to control the development of ever-more intelligent algorithms—and ultimately, to control the future.

It is through this forest of challenges that Harold Feld charts a path. This volume is a thoughtful and creative effort to put forth new proposals for the oversight of those who control the networks and platforms that determine our economic and individual digital reality in the 21st century.

EXECUTIVE SUMMARY

Digital platforms play a central role in the economy and our everyday lives. Their rapid development since the birth of the public commercial internet over 20 years ago has produced many societal benefits and new opportunities for free expression and innovation. Each platform has distinct characteristics, but in recent years specific concerns have grown around their dominance in the marketplace and impact on key parts of daily life.

This book provides a framework for the ongoing debate on the regulation of digital platforms. It aims to unite ongoing debates on competition, content moderation, consumer protection, and public safety/law enforcement into a unified whole. Drawing on the lessons of the last 100+ years of telecommunications and media law, we see that digital platforms raise many of the same policy challenges that the rise of the telephone and radio broadcasting created in their day. Like today's digital platforms, the advent of electronic communication and electronic mass media raised similar questions as to what responsibilities the new broadcast networks owed to maintaining a democratic society, how to protect consumers from new opportunities for fraud or abuse through the technologies coming directly into their homes, and how to address the alarming tendencies of these businesses to gravitate to monopoly absent regulatory intervention. As with Silicon Valley, the rise of broadcasting and the telephone went through an initial stage of techno-euphoria to a subsequent "techlash" as the enormous economic, political, and social power of these increasingly concentrated industries became clear.

Specifically, I propose the following to comprise a federal "Digital Platform Act":

Definition of "Digital Platforms":

Sector-specific regulation requires a definition of the sector.

I define a digital platform as: (1) A service accessed via the internet; (2) the service is two-sided or multisided, with at least one side open to the public that allows the public to play multiple roles (e.g., content creator as well as content consumer); and (3) which therefore enjoys particular types of powerful network effects. As I explain in Chapter 1, these characteristics create a set of abilities and incentives unique to the defined sector.

While the debate around competition generally focuses on a handful of dominant players, concerns about consumer protection and content moderation extend to small companies as well. For example, the perpetrator of the mosque shooting in New Zealand uploaded his video of the shooting not only to massive platforms such as Facebook and YouTube, but to

numerous small platforms as well. This allowed the content to continue to spread and reappear on the larger platforms despite literally millions of takedowns over a period of 24 hours.

Cost of Exclusion, A New Measure of Platform Dominance

Behaviors that are harmless, or even positive, in competitive markets may become anticompetitive or anti-consumer when a market becomes concentrated. For that reason, sector-specific regulation often distinguishes between dominant firms and non-dominant firms. This is especially true when sector regulators are trying to affirmatively promote competition in a concentrated industry, or where the economics of the industry create an unusually strong tendency toward concentration. “Dominance,” however, is a tricky concept. Definitions of, and tests for, economic dominance vary enormously depending on the specific characteristics of the specific market.

Therefore, I propose a new measure of dominance: the “cost of exclusion” (CoE). This measures the cost to a business or individual of being excluded from a specific platform. If that cost is sufficiently high, then we should assume that the firm under scrutiny is a dominant firm and that the economic power and social impact of firms with high CoE requires targeted regulation to promote competition and protect consumers. I anticipate that many of the pro-competitive policies described in Chapter 4 will apply, if they apply at all, only to firms with a high CoE (i.e., dominant firms).

Adopt a Set of Specific Values to Govern Regulation of Platforms

We have long recognized that the object of regulation is to achieve particular social goals that express our values as a society, not to promote some abstract state of economic efficiency for its own sake. Indeed, it is the vital role of Congress to decide when to sacrifice “economic efficiency” for such social goals as ensuring access to vital services for all Americans, promoting democratic discourse, and protecting consumers from harm. I recommend that any regulation of digital platforms, particularly any regulation that hopes to address the wide scope of concerns in a comprehensive manner, must begin by embracing these fundamental and enduring values.

Sector-Specific Regulation: Policy Proposals

After outlining the aforementioned general principles, I propose the following specific policy changes for consideration by Congress and regulators.

Designate a federal agency to have ongoing and continuous oversight of the sector.

Sector-specific regulation requires oversight. Congress must either dramatically expand the

jurisdiction of an existing agency or create a new agency specifically charged to regulate digital platforms.

Utilize a regulatory toolkit for competition. Chapter 4 reviews various pro-competitive sector-specific regulations that have worked in electronic communications and discusses how they might be translated to the digital platform. These range from relatively modest proposals such as data portability, to the “nuclear option” of breaking up existing platforms in a variety of ways designed to promote competition. In all of these cases, I attempt to describe the pros and cons and point to additional information Congress or an enforcement agency would need to successfully develop and implement these measures. The list of regulatory tools for the toolkit are:

- Data portability, including the right to delete data from the “losing” platform;
- Open application programming interfaces (APIs) and interconnection;
- Mandatory fair and reasonable non-discriminatory (FRAND) licensing for essential intellectual property;
- Customer proprietary network information (CPNI) rules protecting the information of competitors that must operate on or interconnect with platforms to reach their customers;
- Limits on size and limits on vertical integration (including possible break ups of existing dominant platforms as a last resort if necessary);
- Product unbundling;
- Non-discrimination rules;
- “Privacy by Design”; and
- Due process rights for companies that are subject to regulation and for those seeking to exercise regulatory rights against dominant platforms.

While Congress should consider the entirety of this toolkit, it is important to stress that we are a long way from determining which tools Congress should adopt or how to implement them. In light of the recent interest in “breaking up” the largest digital platforms, I stress that such break ups are incredibly difficult to achieve as a practical matter, and even then require additional regulations to address the economic factors that drive the industry to consolidation. Congress should therefore begin with easier-to-implement behavioral regulation that is designed to encourage competition, while potentially authorizing the enforcing agency to take more extensive steps if necessary.

Develop content moderation that is consistent with the First Amendment and free expression. Contrary to popular belief, the First Amendment does not prevent any legislative

effort to protect either individuals or society as a whole from harassing content, fraudulent content, or content that seeks to undermine democracy and civic discourse. At the same time, both the First Amendment and general concerns for freedom of expression require exercising a good deal of caution. In particular, I argue that legislation that weighs evidence and balances interests is explicitly the job of Congress, not private companies. The current situation of pressuring companies to take “voluntary” action is seductively easy because it avoids forcing Congress to make the necessary hard choices. It also opens the door to soft censorship and the promotion of political propaganda in the name of “responsible” corporate governance. However difficult and controversial Congress may find it to develop content moderation requirements for digital platforms, perpetuating the current efforts to force platforms to develop “voluntary” codes is corrosive to democracy and undermines the rule of law.

At the same time, any workable system will need to have some cooperation from platforms and rely to some extent on platform discretion. In Chapter 5, I outline what Congress should consider in striking this proper balance.

Section 230: our enormously destructive distraction. Section 230 of the Communications Act was created to provide certainty to emerging digital platforms as to their responsibility with regard to third-party content. It is not, as some argue, a general immunity for digital platforms with regard to all economic activity (e.g., it does not confer on platforms immunity to laws prohibiting discrimination on the basis of race or gender). Nor does it protect platforms from criminal law. Nevertheless, it has generally been interpreted as providing platforms with broad immunity for liability for third party content or for failing to follow their own terms of service with regard to taking down offensive content.

In Chapter 5.C, I review why simple repeal of Section 230 would not achieve the imagined effects because “publishers” do not have liability for most of the things that people ask platforms to take down. For example, any news “publisher” could run the video of the New Zealand mosque shooting countless times without incurring any liability. Book publishers routinely publish books glorifying white supremacy. Such actions do not trigger any criminal or civil liability, even if they are alleged to inspire others to commit acts of violence. On the other hand, eliminating Section 230 would cause enormous confusion and uncertainty in the law, at least in the short term while the courts dealt with the invariable deluge of lawsuits and class actions.

Additionally, prior to Section 230, there were exactly two cases interpreting “publisher liability” in the context of interactive services. What little case law existed prior to Section 230

indicated that a declaration of “caveat emptor” and a refusal to have terms of service policing content would protect digital platforms from publisher liability.

Rather, as demonstrated by legislation such as the Digital Millennium Copyright Act (DMCA), Congress should decide what content regulation regime we need to balance the interests discussed above. Congress would then simply add at the beginning of the statute the following introductory words: “Without regard to Section 230 . . .”

In other words, I recommend that we stop arguing about Section 230 and figure out what sort of content moderation regime works. Once Congress resolves this issue, Section 230 will no longer pose a significant obstacle. In the meantime, however, Section 230 should remain in place to preserve certainty until a new regime is ready.

Promoting Robust Competition in the Marketplace of Ideas

In addition to concerns related to potential censorship of content in the effort to protect users from harmful or deceptive content, the evolution of online digital platforms that select content based on algorithms has raised concerns about “filter bubbles.” Filter bubbles occur when algorithms select answers to search queries and structure news feeds or recommend content based on algorithmic assessment of what a user likes or would find most relevant and engaging. Over time, this has a tendency to filter out dissenting views and can lead to a more polarized society.

Traditionally, one of the central purposes of media policy has been to promote exposure to diverse sources of news and ideas. A secondary purpose has been to encourage representation of all Americans in our mass media culture as a means of breaking down stereotypes and addressing the fundamental desire of all Americans to see themselves represented in our national culture rather than rendered invisible. While traditional media policy has relied in large part on aggressive ownership limits and other structural means to promote competition, law and policy have also used behavioral regulation to encourage both diversity of news sources and representational diversity. In Chapter 6, I discuss various steps platforms could take—either voluntarily or as a matter of regulatory policy—to promote these twin concepts of diversity.

Specific Recommendations for Content Moderation Policies

While recognizing that solutions for content moderation remain complex, and that we lack sufficient information or consensus to solve the problems, I make several specific recommendations for moderating harmful content in Chapter 5.D:

- Congress should employ a mixed model of direct prohibition on certain types of harmful content (such as harassment), reporting requirements (for “red flag” indicators of potential illegal activity), and private monitoring under government oversight (to ensure that platforms do not censor legitimate speech);
- Distinguish between the broadcast/many-to-many functions v. common carrier/one-to-one, distinguish between passive listening v. active participation, and limit penalties imposed for off-platform conduct. Potentially, it should be easier to restrict someone’s ability to post content viewable by everyone or to have harmful content surface in search or recommendations than it is to ban someone from using the platform entirely or eliminating controversial material even for those who actively seek it out. We should be most reluctant to intervene in electronic communications between willing parties that resemble traditional communications functions, such as messaging or voice;
- Regulations designed to moderate “bad” content should have clearly articulated goals, and the enforcing agency should collect information to determine the effectiveness of the measures adopted and monitor for unintended consequences;
- In recognizing that all content moderation regimes may be invoked maliciously or in an effort to suppress speech to gain political or economic advantage, create sufficient safeguards and ways to punish offenders.

In Chapter 6.B, I make several specific recommendations to combat the problem of filter bubbles and to address the problem of “fake news” undermining democratic discourse.

- Address the problem of filter bubbles by selecting recommendations through a “wobbly algorithm” that provides a wider range of possible results;
- Promote representational diversity by prohibiting algorithms from applying certain suspect classifications or actively reversing these categories at random. (*E.g.*, at random intervals, the algorithm should assume the user is female rather than male while holding all other factors the same.);
- Encourage the development of new tools to identify reliable sources of information; and
- Promote news and media literacy as components of basic education.

The Unique Challenges of Consumer Protection in the Digital Platform Space.

Consumer protection is a critical element of any comprehensive sector-specific regulation. In addition to protecting consumers from traditional dangers such as fraud or general issues

such as privacy, Congress must empower the sector regulator to identify and remedy new harms such as design for addiction.

Federal and State Enforcement

Finally, the book argues that state enforcement is complementary to federal enforcement. Additionally, federal laws of general applicability, such as antitrust and the FTC's general consumer protection authority, should continue to apply. Over a century of regulating interstate and global streams of commerce has shown that while federal preemption is sometimes necessary, the supposed increased cost or potential for contradictory regulation in multiple jurisdictions are extremely exaggerated. Telephone service, for example, has been jointly regulated at the state and federal level for 100 years, and our telephone network was the envy of the world—until 21st century deregulation weakened quality controls and oversight.

Conclusion

While past lessons drawn from the history of communications regulation are helpful and informative, we cannot simply apply them in cookie-cutter fashion. We also need to recognize that the final structures for regulating electronic communications—the Communications Act of 1934 and the creation of the Federal Communications Commission (FCC)—took decades of deliberation. The first federal law to license radio broadcast was in 1912. The first federal law regulating the telephone as a common carrier was in 1914. While even the platforms themselves have acknowledged a need for some form of regulation, not all platforms will need to have each recommendation applied to them. Rather, as is the case in nearly all regulated industries, the bulk of regulation designed to promote competition will apply only to dominant firms. Still, the enormous complexity of the digital platform sector, and its enormous importance to the very concept of informed democracy, requires that we act—with careful deliberation and on a full record.

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INTRODUCTION

Ten years ago, Oren Bracha and Frank Pasquale asked if the time had come to create a “Federal Search Commission” (Bracha and Pasquale 2008). Today, we can expand that question beyond the monopoly that Bracha and Pasquale feared would dominate search to the broader world of digital platforms. As explained below, history demonstrates that an industry may over time become so important to the national economy that neither generic competition law nor generic consumer protection law can adequately address it. When that happens, Congress (usually in response to increasing social pressure, and after the failure of industry self-regulation and state regulation) ultimately passes a federal law and creates an agency capable of providing ongoing, industry-specific supervision (Cooper 2014, Cooper 2013). Whether or not we need an entirely new agency, or should simply expand the jurisdiction of an existing agency, the general rise to prominence in our economy and in our lives of “digital platforms” makes it necessary to impose sector-specific structural regulation to promote competition and further the broader public interest.

I have written this book explicitly to begin this conversation. I do not imagine that everyone will share my views. For one thing, I will frequently invoke the idea of the “public interest,” a concept roundly criticized by conservatives and neo-liberals as vague and unsuited to a time when we believe in “data-driven policy” and “cost-benefit analysis.” But these things describe tools, not the object of legislation and policy. Policy should certainly be driven by data, but that does not tell us where we want to go. Our ultimate aim flows not from the tools we use to analyze the world and devise necessary solutions. It must flow from our fundamental values as a society.

Unfortunately, for almost a generation, the elimination of government oversight of all aspects of the private sector has transformed from a reaction against the perceived over-regulation of the 1950s and 1960s to an end in itself. We have experienced a political and policy generation weaned on a single quote from Ronald Reagan, the 40th President of the United States: “[G]overnment is not the solution to our problem; government is the problem.” Few of those claiming to follow this tradition choose to remember that Reagan qualified that statement with the words “in the present crisis” (by which he referred to the “stagflation” of the 1980s).¹ Whether or not Reagan was right in his inaugural address in 1981 as to the specific crisis then facing the nation, his would-be disciples have chosen to see the unqualified version of his statement as a catechism to follow with ever increasing devotion. We have seen this quote transformed from general dictum to philosophy, and from philosophy to article of unshakable faith.

¹ Copy of address available at: <https://www.presidency.ucsb.edu/documents/inaugural-address-11>

Nothing better exemplifies this religious belief that the end-goal of policy should be the abolition of all government oversight of “the market” than President Trump’s Executive Order requiring federal agencies to eliminate two regulations for every new regulation adopted.² This approach is, of course, the exact opposite of “data-driven policy.” “Regulation” is neither a pernicious strangling weed to be eliminated, nor some form of chemotherapy for the body politic — a poison with literally nauseating side effects used only in desperate need. Law and policy are tools by which we simultaneously express the values of our society and the mechanism by which we seek to achieve real-world outcomes consistent with those values. Nearly everyone can quote the stirring line from the Declaration of Independence that all of us are “endowed by our Creator with certain rights.” Few recall that the very next sentence says that “to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed.” Likewise, the Constitution affirms that the express purpose of government is not merely “to establish justice, insure domestic tranquility, [and] provide for the common defence.” The Founders also regarded our more centralized form of government as necessary “to promote the general welfare, and secure the blessings of liberty to ourselves and our posterity.” This is not a nation founded on the principle that “government is not the solution, government is the problem.”

By the same token, of course, regulation for its own sake is as contrary to good policy as deregulation for its own sake. This returns us to the concept of the “public interest,” a phrase used often by no less a proponent of “free markets” than Adam Smith. Smith argued that an important role of government was to promote and regulate commerce to serve the public interest. Certainly, Smith famously argued that individuals acted for the most part in their own interest, with little awareness of their broader role in promoting the public interest, and that this state of affairs was more beneficial than the active effort by the state to dictate all economic activity. But Smith was also a strong proponent of analyzing when public regulation or public investment would better serve the public interest than the unregulated private sector (Smith [2003] Part III (discussing public works and institutions)).

I begin from this understanding of government as the means by which we secure our rights and promote the general welfare. But I do so mindful of the equally important lessons from history that no matter how well intentioned, regulation — like anything else — can cause considerable damage when applied wrongly or in excess. The scholarship around “agency capture” and “public choice theory” is not inherently wrong, but like so many other analytic approaches deployed with the single end of eliminating public oversight of the private sector it has been elevated from caution

² Executive Order 13771, 82 Fed. Reg. 9339 (February 3, 2017).

to dogma. Public choice theory may indeed be “politics without romance” (Buchanan and Tollison 1984). But to substitute empty cynicism in place of genuine analysis simply replaces an idealistic delusion with a more toxic and dystopian one.

The current misuse of public choice theory does not falsify the basic observation that public policy is conducted by human beings, and many factors influence human beings besides the desire to serve the public interest. We must therefore design any system of regulation with appropriate limits and appropriate safeguards. To reject the philosophy that government is **always** the problem does not mean embracing the binary opposite that government is always the solution. To recognize the importance of public oversight of critical sectors of the economy does not require embracing central planning.

Importantly, I recognize that we have only begun the debate on how to maximize the public interest and minimize the likelihood of public harms. We do not, at this point, even have agreement on how to define “platforms.” We have a broad, general feeling that, in the 30 years since the rise of the commercial internet, specific companies seem to concentrate a great deal of economic power and influence over our daily lives. For some, this state of affairs is intolerable and inconsistent with our basic principles of self-governance. As Sen. John Sherman (R-OH) famously stated: “If we will not endure a king as a political power, we should not endure a king over the production, transportation or sale over any the necessaries of life.” Those who share these views increasingly call for the use of antitrust law to break up the largest of these companies such as Amazon, Facebook, and Google.

Others do not go nearly as far, but find themselves feeling increasingly uneasy. Digital platforms, including the largest, provide many valuable services. Indeed, as I discuss below, these platforms have so integrated into the broader economy and broader society that their actions can cause widespread and dramatic public harm. This is precisely why we need sector-specific regulation. At the same time, we might achieve the same ill effects as “no regulation” through poorly designed regulation. The argument that regulation invariably protects incumbents and cements their power is surely false, but the argument that poorly designed regulation **can** serve the interests of incumbents rather than the public is surely true.

At the same time, uncertainty cannot freeze us into perpetual inaction. Refusal to act, and especially the refusal to even engage in serious discussion, is as much a poor choice as acting precipitously. The hoary clichés trotted out by acolytes of the gods of the marketplace to practice “regulatory humility” and “first do no harm” deserve the answer given by Jeremiah: “They cry

‘peace, peace,’ but there is no peace.”³ We will only determine the right course of action by finally recognizing the problem and developing a suitable policy response. The response to our current ignorance is to cure it with rigorous examination and debate. The response to our inability to predict possible unintended consequences is to develop a system with flexibility and self-correcting mechanisms.

To begin the conversation requires selecting some rational starting point. I have therefore begun with a historical analysis to place this current inflection point in its historic context. Specifically, the rise of digital platforms represents the latest evolution in electronic communication. As I discuss at length below, digital platforms share many of the same economic and social characteristics of electronic communications and electronic media. In particular, because communication is so central to the human experience, the power of electronic media to capture our attention, inform our impressions of the world around us, and work on our most basic emotions has long required regulation to preserve the robust “marketplace of ideas” on which democracy depends. As a result, the fundamental values that have guided government policy with regard to communications serve as a useful starting point for the values that should govern our policy on digital platforms.

I draw upon this history to propose a wide range of regulatory powers for the exercise of public oversight of digital platforms and urge that we either empower an existing agency or create a new agency to use these powers as necessary. It is highly unlikely that the laundry list of economic regulations I propose in Chapter IV will apply to every digital platform, or necessarily to most digital platforms. For this reason, I believe that Congress should empower an agency with a wide range of tools and reasonably broad discretion to use them. To mitigate the concerns over agency inaction or agency abuse, Congress should avoid preemption of other federal antitrust and consumer protection agencies, and should avoid preemption of state regulators. Additionally, although I have tried to provide sufficient specificity to inform intelligent discussion, I understand that nearly every recommendation will require further details on how to translate them into effective legislative language.

I do not expect that everyone will agree with me that this entire tool kit is necessary. I expect for each recommendation considerable argument with regard to both the necessity and the wisdom of entrusting such powers to an enforcement agency. Others will argue that if a federal agency has such comprehensive and sweeping powers, further regulation by the states will frustrate federal policy and impose needless costs. I have attempted to provide some preliminary answers to these

³ Jeremiah 6:14.

challenges. But I have also tried to make each recommendation sufficiently robust that it can stand on its own and achieve some good, even if other recommendations are rejected.

This is even more true for the recommendations in Chapter V on recommended content moderation policy. It is precisely because speech is so central to the human experience that it has such powerful potential for both harm and good. Regulation in this space is therefore at once critical and fraught with danger. Unlike in the economic space, where we have clear fundamental values of promoting competition and protecting consumers, any policy on content moderation must invariably balance the conflicting fundamental values of free speech and protecting the most vulnerable from threats of violence and harassment. My recommendations on speech should therefore be regarded as particularly tentative.

In short, while I am confident that the complete package of recommendations I make herein best serves the public interest and provides the best expression of our fundamental values, I am not so egotistical to believe that others will share this view. I expect that while some will see my discussion and recommendations as overwhelmingly broad and sweeping, others will find them wholly insufficient. Nevertheless, I hope that even those who reject my fundamental premises will find particular recommendations of value and points of common ground. I would further hope and expect that those who proceed from a different vision of the role of government, a different understanding of our fundamental values, or a differing opinion on what government may practically achieve, will offer their own solutions. For all the mess and dysfunction around politics and public policy, human beings have yet to find a superior means of reaching a livable consensus on how to maximize the likelihood of good results and minimize the likelihood of bad results. If this is indeed “politics with romance,” then I confess that I remain a hopeless romantic.

A. Why Sector-Specific Regulation Rather Than Antitrust Alone?

Most of the debate around the regulation of digital platforms so far has centered on antitrust, and with good reason. The problems with existing digital platforms manifest themselves most clearly with platforms that have experienced explosive growth, with no potential rival in sight. This has coincided with the rise of the new “Brandeis School,” a reaction to the dramatic about-face in antitrust jurisprudence that has occurred over the last 40-plus years. Calls for the breakup of giant digital platforms such as Amazon are now buttressed by the general demand for a more robust and expansive antitrust. This more expansive antitrust should, proponents argue, address social harms and protect the “marketplace of ideas” as well as narrowly consider negative impacts on consumer prices.

But the resort to antitrust instead of sector-specific regulation arises from a more pernicious policy problem. After all, Justice Louis Brandeis himself was a proponent of sector-specific regulation to enhance competition and protect consumers (Sallet 2018). It appears that the reluctance to consider sector-specific regulation flows in part from the misconception discussed above on the role of government in regulating the economy to advance the public interest. Two false premises undergird the current policy environment. First, that regulation should only occur after a clear display of “market failure.” Setting aside the important role of government in affirmatively preventing harms to consumers or harmful levels of concentration, the vague definition of “market failure” allows opponents of public oversight of private companies to argue that no set of circumstances meets the definition of market failure. Second, that even where regulation is appropriate, only “natural monopolies” or “public utilities” should have unique, sector-specific regulations. Anything else is “unfair” to the regulated industry, which — proponents argue — deserves a “level playing field.” Specific regulations in a competitive sector, they contend, “pick winners and losers” (Del Priore 2018).

As a consequence, a great deal of discussion presupposes that unless one can prove that a specific digital platform is a “public utility” or “natural monopoly” of some kind, we may only apply antitrust or laws of general applicability rather than targeted sector-specific regulation. For example, despite the clear connection between advertiser-supported digital platforms and the collection and abuse of massive amounts of personal data, and the relationship between data collection and platform market power, discussion has primarily centered on how to apply antitrust law to a handful of giant platforms, or on generally applicable privacy laws. Alternatively, others have spent considerable time and effort trying to shoehorn specific, individual companies into the definition of “natural monopoly” or “public utility.”

It is not my purpose here to explore either the logical fallacies or moral failings that make fairness to corporations more important than fairness to actual flesh and blood human beings. But because these twin concepts hold such a powerful grip in the current political environment, I must first explain why this understanding is wrong. The idea that only an absence of competition justifies regulation — or the converse idea that using antitrust to eliminate excess concentration in the market will automatically solve all consumer problems — has no grounding in law and runs contrary to all but the most recent history.

Contrary to popular belief, sector-specific regulation is neither grounded in the concept of “public utility” nor linked to “natural monopoly,” although these are often important elements in the decision to create regulatory agencies and shape the nature of the regulation imposed.⁴ Congress

⁴ For example, the Interstate Commerce Act of 1887 creating the Interstate Commerce Commission addressed, among other things, the ability of railroads to charge monopoly rates along routes devoid of competition. The

created the Federal Radio Commission (FRC) in 1927 in response to the growing power of radio as a means of mass communication and to ensure the distribution of radio licenses on a non-interfering basis in a manner that served “the public interest, convenience and necessity.”⁵ Congress created the Securities and Exchange Commission (SEC) to provide oversight over the trading of stock and otherwise regulate securities trading to protect investors and protect the economy from the practices that resulted in the market crash of 1929 and the subsequent Great Depression.⁶ Congress created the Food and Drug Administration in 1906 (and strengthened it further in 1938) in response to widespread concern about the purity and safety of food, drugs, and cosmetics.⁷ None of these agencies were created to oversee sectors of the economy that lacked for competition, or exclusively to promote competition. Rather, Congress created these (and other) sector-specific agencies because evidence showed that leaving these sectors of the economy without government supervision invited profoundly negative consequences that undermined the economy, undermined the institutions of democracy and self-governance, or undermined public health.

Digital platforms — a broad category that can cover everything from search to shopping — have clearly showed themselves as possessing the kind of economic power and centrality in our daily lives to require federal oversight well beyond what even modified general rules of antitrust and consumer protection can adequately address. In the last two years, we have seen increasing evidence that decisions made by digital platforms can bankrupt businesses, sway federal elections, and change the ways we think and feel about ourselves and others without our even realizing it (Duhigg 2018; Farrell and Schneier 2018; Alcott *et al.* 2019). These platforms show an alarming tendency to monopoly, and any sector-specific regulator should include regulation designed to promote competition and to protect consumers from traditional economic harms. The complexity of these platforms, their growing centrality in our daily lives, and their impact on society as a whole requires a diligent permanent regulator charged with making sure that the future growth and development of these platforms serves the public interest as well as private interests.

B. A General Summary of What I Intend to Discuss.

In Chapter I, I define “digital platforms” as a unique sector of the economy. I identify three specific criteria that separate digital platforms from other businesses: 1) They are accessed and used online; 2) They are two-sided or multi-sided platforms, at least one side of which must be open to the public, and where members of the public are capable of interacting with each other; and, 3)

Federal Power Act of 1920 and subsequent amendments created the Federal Power Commission (now the Federal Energy Regulatory Commission) to address first the hydropower industry, then ultimately all oil, gas, and electric production.

⁵ Radio Act of 1927, Pub. L. 69-632.

⁶ The Securities Act of 1933, Pub. L. 73-22.

⁷ Pure Food and Drug Act of 1906, Pub. L. 59-384; Food, Drug & Cosmetic Act of 1938, Pub. L. 75-717.

They enjoy network effects, as distinct from economies of scale. Specifically, they should exhibit “Reed Network” or “Metcalfe Network” effects rather than simply “Sarnoff Network” effects. In a Sarnoff Network, named after radio pioneer David Sarnoff, the value of the network increases based on the number of participants. Every new member of the network makes the network more valuable by N . A Metcalfe Network, named for Ethernet inventor Robert Metcalfe, describes a network where adding individuals increases the value of the network by N^2 . A Reed Network, named for internet pioneer David Reed, describes a network where each additional person added to the network increases the value of the network by 2^N .⁸

This combination of factors produces a particular cost structure and set of incentives that differentiates digital platforms from traditional brick-and-mortar businesses (even if those businesses have an online presence), or from other online businesses that do not share all three criteria. Delivery over the internet dramatically reduces the cost of scaling the network as the most expensive component, the build-out of the physical network to reach customers, is already accomplished. Similarly, a two-sided or multi-sided digital market reduces traditional costs for things like inventory or market research. Finally, the presence of strong network effects rewards rapid and massive increase in scale — a strategy called *blitzscaling* — as a means of capturing enduring market power (O’Reilly 2019).

Because these platforms often cross multiple lines of businesses as understood by traditional antitrust analysis, and because digital platforms do not necessarily compete against each other, Chapter I also proposes a new metric for measuring digital-platform market power — the *Cost of Exclusion* (COE). Where the cost to a business or individual of exclusion from the platform is significant, that platform may be presumed to have market power. As demonstrated by Professors Rahul Tongia and Earnest J. Wilson III (Tongia and Wilson 2011), COE captures a far greater scope of harm than simply loss of the value of the network. This is particularly true where a growing portion of society as a whole is included on the platform, and therefore a shrinking number of individuals can be reached without access to the network. Additionally, the model advanced by Tongia and Wilson distinguishes between types of network, allowing regulators to weigh potential complementary effects.

In Chapter II, I review the general criteria which have historically supported sector-specific regulation. In *Munn v. Illinois*, the Supreme Court examined the application of the traditional common-law principles of common carriage and when a business becomes “affected with the public interest,” creating a need to create new duties and protections by statute. Tracing the evolution of regulation since *Munn*, indicia of the need for sector-specific regulation and the characteristics of

⁸The reasons for these different valuations are described by Tongia and Wilson. (Tongia and Wilson 2011)

public interest regulation become clear. In addition to purely economic criteria, the law also recognizes that where a new industry or technology potentially affects fundamental values such as free speech or self-governance the government has a responsibility to act to protect — and in some cases affirmatively promote — these values through regulation of private entities.⁹ Additionally, new technologies and the businesses that use them often create new consumer protection challenges not addressed (or not adequately addressed) by existing regulation. Finally, Chapter II examines the exceedingly rare case of the “public utility,” a service so critical that the government has an affirmative responsibility to ensure universal access (Feld 2017a; Rahman 2018). A comparison of these traditional criteria for sector-specific regulation with search platforms and social media platforms confirms that we have now reached the point in the evolution of these technologies that they require their own sector-specific regulator at the national level.

Chapter III examines the lessons that the history of regulation of communications and electronic mass media have to offer the regulation of digital platforms. Although digital platforms exhibit characteristics that make them different from traditional media of electronic communication, they have a significant number of similarities that make the lessons from this sector relevant to determining the appropriate regulatory regime. Both sectors are marked by rapid technological and economic change. Both involve unusual economic structures such as network effects, two-sided platform economics, potential bottleneck facilities and potentially high switching costs associated with lock-in.¹⁰ Information asymmetries allow providers to manipulate content or services without users necessarily being able to determine the fact of manipulation, never mind its source or scope, without some kind of enforceable disclosure. Finally, regulation and management of both industry sectors raises the question of how to preserve important fundamental values of free speech from both government control and private abuse.

Regulation of electronic communication has gone through cycles, veering between periods of close government supervision and periods of significant deregulation. The Telecommunications Act of 1996 represented a massive effort to restructure electronic communications and electronic

⁹ As some scholars have observed, we find an inherent tension between the underlying values inherent in the First Amendment and the plain language of the First Amendment as a limitation on government power (Wu 2017a). Nevertheless, as discussed throughout the paper, numerous cases support not merely restriction on federal censorship but carefully tailored, content-neutral laws designed to ensure a robust marketplace of ideas. In particular, the “Public Forum Doctrine” and specific cases arising from the regulation of electronic media by the Federal Communications Commission (FCC) make clear that viewpoint-neutral federal regulation designed to promote access to competing sources of news and a diversity of views and opinions is both a long-standing objective of sector-specific regulation where appropriate and permitted by the Constitution.

¹⁰ “Switching cost” involves more than the simple monetary expense of moving from one service to another, such as paying an early termination fee for cancelling a subscription or the need to buy new equipment. It includes any burden to a user trying to switch from one service to another, including the need to learn a new operating system, losing access to friends who remain on the prior platform, the difficulty in transferring any of the user’s own content from one platform to another, and other non-monetary hardships that make switching platforms that much harder than simply buying a different brand of cereal the next time one goes to the grocery store. These costs can create “lock-in,” the inability or unwillingness of users to switch platforms even in the face of significant price increases or other sources of dissatisfaction (Farrell and Klemperer 2006).

mass media to limit regulation primarily to physical infrastructure and rely on competition to produce the public-interest effects previously achieved via direct regulation. As time wore on, industry incumbents succeeded in significantly reducing the level of regulatory oversight even further — subject to the occasional backlash. Examining which mechanisms worked to foster competition and which mechanisms failed informs the analysis of which mechanisms are most likely to succeed in promoting competition in the digital platforms sector.

Chapters IV and V apply the lessons from Chapter III to digital platforms. Like telecommunications, digital platforms have become important to broad sectors of the economy, as demonstrated by the impacts of a change in algorithm on existing businesses. The existence of a multi-billion-dollar “search engine optimization industry”¹¹ designed solely to manipulate Google Search and dominant platforms such as Facebook and Amazon illustrates the need for sector-specific regulation. Additionally, the management of many digital platforms (especially social media platforms) raises similar concerns with regard to the creation and dissemination of news and the general impact on the “marketplace of ideas” traditionally raised by the electronic media. Finally, as demonstrated by the recent focus on “addiction by design” (Morgans 2017), the experiments in mood manipulation by Facebook (Goels 2014), and the ability to exploit the information-gathering capabilities of these services without subscriber knowledge or consent (Cresswell 2018), the rise of these industries creates unique consumer protection needs that justify both sector-specific regulation and the need for a dedicated expert agency to regulate the sector.

I next consider which specific regulations any effective regulatory regime will require. As explained in the relevant sections, not all of these recommendations will be applicable to all platforms. Some by their very nature (such as platform unbundling or horizontal and vertical limits) apply only to dominant platforms. Others, such as data portability, must apply to all platforms to achieve their goals. Still others, such as various non-discrimination requirements, are a grey area. Certain types of non-discrimination (such as discrimination based on race) should, of course, apply to all platforms as they do to all brick-and-mortar businesses (although enforcing these non-discrimination requirements may present novel challenges in the context of digital platforms). On the other hand, certain types of exclusive deals or forms of preferential treatment may be harmless, or even beneficial, when carried out by non-dominant firms, but anticompetitive and anti-consumer when engaged in by dominant firms.

First, drawing on fundamental values that have guided the evolution of communications technology since the founding of the Republic (Griffin and Feld 2013), and the more recent history of

¹¹ Estimates place the spending on SEO in the United States in 2016 at approximately \$65 *billion* dollars (DeMers 2016).

the Communications Act, I propose that the goals should be to encourage diversity of voices, protect the integrity of the democratic process, promote vigorous economic competition, protect consumers, and enhance public safety. Drawing in part on the recent work of Tim Wu (Wu 2017a; 2017b), I propose the following specific recommendations to enhance competition:

- Open-source and interoperable APIs as a substitute for traditional network interconnection. This must also address the problem of standard essential patents (SEP) hold-up and other means by which industry participants leverage intellectual property to gain and achieve dominance.¹²
- Non-discrimination/common-carriage obligations. Electronic communications rely on the traditional common-law idea of “common carriage” to facilitate competition between users of the service — including the service itself in cases of vertical integration. Common carriage requires the service to treat all similarly situated customers the same and prohibits any unjust or unreasonable discrimination among users. For some communications-like services, such as messaging, common carriage may be appropriate. But an important role of many platforms, such as search, is to help users sort information. This makes common carriage largely inapplicable to digital platforms. But other forms of non-discrimination, such as a prohibition on favoring affiliated services, are both feasible and in many cases appropriate.
- Clear lines of structural separation from the core function, with testable and observable mechanisms to prevent unreasonable discrimination.¹³
- Regulations along the lines of Customer Proprietary Network Information (CPNI). Section 222 of the Communications Act limits how a telecommunications provider can use information collected as a consequence of the carrier/customer relationship and requires a provider to honor a consumer request to provide relevant information to rivals to perform competing services. The same statute also requires that carriers respect the confidentiality of rival interconnecting carriers’ information, and of other providers offering rival (or potentially rival) services to a carrier’s subscribers over the network. Similar regulations would promote both competition and user privacy on digital platforms.

¹² I discuss below in the relevant section the role of the government in formulating standards versus “vetting” standards based on the history of the FCC.

¹³ “Reasonable” and “unreasonable” discrimination are terms of art borrowed from the history of common carriage generally and communications law specifically. As discussed below, a search engine must discriminate in order to function (Bracha and Pasquale 2008), as must any sort of recommendation function. Although some platforms, such as social media, can technically operate in a purely chronological fashion, the ability to search and organize content dramatically improves the utility of the service to members of the public as well as to advertisers.

- Sharp restrictions on vertical integration and horizontal cross ownership — particularly for existing incumbent services.
- A “content moderation” scheme that recognizes the differences in activities in which a user of a digital platform may engage (consumption versus sale and distribution, speaking versus receiving information), and distinguishes which decisions are properly referred to government for potential enforcement and which are properly handled by the platform.
- Ways to foster a robust marketplace of ideas essential to democratic self-governance and to counter the tendency of algorithms to create “filter bubbles.”
- Maintaining permanent regulatory oversight.

With regard to horizontal and vertical integration, it is important to recognize a critical difference between these networks and traditional antitrust considerations. Generally, lower switching costs between services diminish concerns with regard to horizontal consolidation. Especially where industry-specific regulation is designed to explicitly reduce switching cost, the temptation is to regard the danger of horizontal consolidation, or vertical control of adjacent markets, as reduced. Or, as Google has consistently insisted, if “competition is only a click away” there should be no need to fear horizontal or vertical consolidation (Edlin and Harris 2012).

This overlooks the difficulties in gaining entry and the long lead time necessary to establish a viable business as a competitor in light of the power of incumbent network effects. Given the enormous advantages that come from scale and network effects, the most likely source of competition comes from adjacent markets. Facebook’s strategy of buying nascent competitors in arguably adjacent markets (e.g., Instagram (photo sharing), WhatsApp (messaging)) demonstrates the enhanced need for vertical and horizontal ownership limits. Likewise, Google’s ability to leverage its dominance in one market (horizontal search) into other markets (e.g., mapping, vertical search) is enhanced by the reduced switching costs from formerly vibrant competitors such as Yelp and Mapquest (Hyunjin and Luca 2018).

Accordingly, given the goal not merely of *protecting* competition, but of affirmatively *promoting* competition, the reduced switching cost between services actually argues for more stringent horizontal and vertical ownership limits than for more relaxed limits. A digital platform that enjoys a sufficiently high cost of exclusion will attract users from rival platforms with greater ease where the cost of switching from one platform to the other is low. This network effect defeats the

usual value of low switching cost in facilitating entry. The larger network acts as a giant gravitational “black hole,” pulling customers away from rivals by sheer size. Only by preventing the absorption of the smaller rival can regulators preserve a hope of competition and prevent the larger platform from reaching an unbeatable size (O’Reilly 2019).

Alternatively, a platform in a vertically related line of business may grow large enough to overcome this gravitational effect, ultimately expanding into the dominant network’s line of business to offer new competition. This cannot happen if dominant platforms are allowed to absorb potential rivals in different lines of business because traditional antitrust analysis deems these mergers as having no impact on competition. Regulators should therefore be particularly wary of permitting platforms to acquire other platforms that could expand into the dominant platform’s line of business with comparatively little effort, since the low switching cost makes this vertical acquisition target a strong potential rival.

With regard to the First Amendment and other concerns, I urge regulators to reject the path of exclusively relying on platforms to act as police for bad speech, subject to virtually no oversight except public opinion. History shows that private censorship — especially when given government sanction — invariably serves to suppress important but controversial perspectives as both government and incumbents seek to preserve the status quo. While more direct public-interest regulation of speech raises First Amendment concerns (Wu 2017a), the relatively weak First Amendment interest of the platform in the exercise of this editorial discretion is balanced by the important government purposes of protecting individuals from threats and harassment, preserving our norms of civic engagement, and enhancing our ability to obtain trustworthy information necessary for self-governance.¹⁴

Finally, sector-specific regulation should address the novel potential harms inherent in the nature of the platforms. For example, former Facebook employees have raised concerns that social media platforms are designed to be “addictive,” raising social policy concerns (Morgans 2017). Additionally, while privacy is a broad concern throughout the online ecosystem, the longstanding unique relationship between digital platforms and the collection and manipulation of personal information gives rise to special concerns above and beyond those shared more broadly.

I conclude with a review of whether the proposed sector-specific regulation requires a new regulator, or whether Congress should simply expand the authority of an existing agency. Specifically, should Congress expand the jurisdiction of the Federal Trade Commission or of the Federal Communications Commission, or create a new “Digital Commerce Agency” to provide the

¹⁴ *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622 (1994) (“*Turner I*”); *Turner Broadcasting System, Inc. v. FCC*, 520 U.S. 180 (1997) (“*Turner II*”).

necessary implementation of the proposed Digital Platform Act and ongoing oversight? Each approach has certain advantages and disadvantages. Rather than rushing to answer the question, Congress should instead focus on drafting a suitable, comprehensive Digital Platform Act and then determine based on the content of the DPA which path to follow.

Whatever Congress decides with regard to an enforcement agency, Congress should preempt neither overlapping federal law nor complementary state law. No single federal agency, however well equipped, can possibly hope to monitor a sector as vast and important as digital platforms. History shows that permitting complementary enforcement maximizes consumer protection and consumer benefit, while the costs to industry are significantly over-exaggerated. This is not to say that all preemption is inherently bad, especially where Congress imposes a floor on protection rather than a ceiling. But preemption should never be the default assumption. To the contrary, those seeking to preempt either consistent generally applicable federal law, or consistent state law, should be required to show why preemption serves the public interest rather than simply the interests of incumbents.

CHAPTER I: DEFINING “DIGITAL PLATFORMS” AND WHAT CONSTITUTES A “DOMINANT DIGITAL PLATFORM.”

We live in a world rapidly devolving into a set of highly concentrated digital platforms around which major aspects of our economy and our lives revolve. As the CEO of Cloudflare, Matthew Prince, eloquently put it after terminating service to the Nazi organization/publication *Der Stormer*: “In a not-so-distant future, if we're not there already, it may be that if you're going to put content on the internet you'll need to use a company with a giant network like Cloudflare, Google, Microsoft, Facebook, Amazon, or Alibaba.”¹⁵ Or, somewhat more directly: “Literally, I woke up in a bad mood and decided someone shouldn't be allowed on the internet. No one should have that power.”¹⁶

Prince was talking specifically about policing speech, but the same is true about competition and consumer protection. No company should have the power to determine which business models are acceptable and which ones to block as potential competition. People should have confidence that protection of their privacy does not depend on the whims and best efforts of CEOs. Nor is this simply a question of size and market dominance. While the conversation until now has largely focused on the largest platforms, and while there are certainly concerns that apply only to dominant platforms, one of the critical aspects of sector-specific regulation is to identify when a public policy concern needs to apply to all providers regardless of size. For example, Reddit can in no way be considered “dominant,” since as measured by either subscribers or total social media traffic it does not even come close to Facebook's market share (Kallas 2018). But if we are trying to determine the right policy not merely for competition, but to protect consumers, then it doesn't matter whether we're talking about Facebook or Reddit or some fledgling service that doesn't yet exist.

That said, we need to recognize the challenges in figuring out what kind of regulation actually makes sense. Digital platforms combine issues we've dealt with in electronic media (and elsewhere) in novel ways that make applying traditional solutions tricky. As Jean Tirole, the economist who won the Nobel Prize for defining two-sided markets, has observed, unless you know what you're doing and are trying to accomplish, you can't really know if you're addressing your concerns (Schrager 2018). It is therefore necessary to define digital platforms — at least to define them sufficiently to discuss them meaningfully as a class rather than simply as Google, Facebook or other well-known names.

Next, we must recognize that traditional metrics of dominance have proven inadequate to protect competition and consumers (Kahn 2017), and that we need to propose new metrics.¹⁷ Below,

¹⁵ Prince 2017.

¹⁶ Conger 2017.

¹⁷ Others have proposed changing the focus of the antitrust inquiry from the current narrow conception of “consumer welfare” either by changing the antitrust standard to something entirely different (Steinbaum and

I describe how looking at the cost of exclusion (COE) can be used as a metric to determine the ability of digital platforms to exercise market power. This solves the difficult problem of creating precise market definitions when the true strength of digital platforms lies in their combination of versatility and customer size.

Whichever definitions of “digital platform” and “dominance” Congress ultimately adopts, settling this question is a matter of increasing urgency. As digital platforms have become increasingly important in our everyday lives, the need for some sort of regulatory oversight increases. When platforms have become so central to our lives that a change in algorithm can dramatically crash third-party businesses (Oremus 2018), when social media plays such an important role in our lives that entire businesses exist to pump up follower numbers (Confessore *et al.* 2018), and when a multi-billion dollar industry exists for the sole purpose of helping businesses game search engine rankings (DeMers 2016), lawmakers need to stop talking hopefully about self-regulation and “best practices.” The time has come to start putting in place enforceable rights to protect the public interest.

A. Developing Standards to Judge the Behavior of Digital Platforms Requires a Working Definition of Digital Platforms.

Generally, when people say they want increased antitrust scrutiny of, or consumer protection from, “digital platforms” or “edge providers” they have specific platforms in mind. The list usually includes the largest companies such as Google, Facebook, and Amazon, and sometimes smaller but equally well-known platforms such as Twitter. But what about “platforms” that provide infrastructure support invisible to consumers, such as Cloudflare? What about active social networks with a relatively small market share, such as Reddit? What about highly specialized online services that essentially mimic traditional services, such as Netflix? What about applications like the app that only said “Yo”?¹⁸ Did Yo change into a platform once it expanded to let you attach links? Why or why not? Does Walmart’s increasingly online business transform Walmart into a digital platform?

To further complicate the analysis, the mix of functions and markets potentially covered simultaneously by any single platform makes traditional tools inadequate for identifying either markets or unfair and deceptive behavior. When Sen. Lindsey Graham (R-SC) and Mark Zuckerberg sparred over whether or not Facebook had competitors (NBC 2018), each had a point. Zuckerberg argued that what Facebook does overlaps with many different companies, and therefore Facebook

Stucke 2018) or substantially broadening the inquiry to create a more robust concept of consumer welfare. Shapiro, for example, argues that the consumer welfare standard is the appropriate standard but that courts have failed to properly interpret it (Shapiro 2017). The applicability of COE does not depend on the outcome of this debate.

¹⁸ <http://www.justyo.co/>

exists in a “highly competitive environment.” But Graham pointed out that Facebook is unique in offering a service that combines many different functionalities, and unique in terms of its potential reach to billions of users globally.

This question of defining “digital platforms” is not simply important for market definitions in antitrust analysis. It also relates to what constitutes appropriate standards of conduct and consumer protection. Traditionally, we could neatly divide activities into lines of business and determine what sort of behaviors harmed consumers. For example, warnings and disclaimers considered adequate for a line of business where risk is obvious, such as sky diving, might be considered inadequate in other circumstances where the risk is less obvious but just as significant. While many businesses operate multiple vertical or non-related operations, digital platforms are unique in the way they potentially perform multiple diverse functions in diverse markets simultaneously. Comcast owns both Universal Studios the content company and the theme park, but consumers have no trouble distinguishing when they are renting movies from Comcast video on demand as opposed to riding a rollercoaster. By contrast, a middle school student might simultaneously use a combination of Google Docs, YouTube and Google Search to research a homework assignment that traditionally would have been done with a laptop for word processing, books for research and a librarian to help find relevant material.

B. Digital Platforms Are Online Multi-Sided Markets With At Least One Market Operating As a Mass Market Open to the General Public.

As Public Knowledge noted in a recent white paper (Bergmayer 2017), the term “platform” is ambiguous. People have used “platform” to mean a forum for speech, an operating system for development, or a set of components around which users organize their activities. Looking at commonalities of these uses and at the economics and business models of businesses commonly referred to as “digital platforms,” I propose the following definition for “digital platform”:

1. The service is accessed via the internet;
2. The service operates as a two-sided or multi-sided platform, at least one side of which is open to the public and allows members of the public to produce content, buy and sell goods or services, or otherwise interact in ways that enable them to be more than simply passive consumers of goods and services; and,
3. The service enjoys Reed- or Metcalf-type network effects, not merely economies of scale or even Sarnoff network effects.

These three factors combine to produce entities operating under broadly similar economic incentives and raise issues and concerns that are common to all such platforms (even if the services delivered are radically different). They also give rise to issues and concerns not wholly shared by other services. These three elements have also been identified by the House of Lords in two reports on digital platforms and the digital economy as central to the definition of digital platforms, although these reports simply refer to generalized network effects without specifying the type of network effect (House of Lords 2019, House of Lords 2016). As discussed below, however, the distinction in the power of the network effect is critical in understanding the difference between digital platforms and other online businesses that arguably fit the two-sided market paradigm (Rochette and Tirole 2003).

This definition will exclude some companies that many might expect to find, and group together some companies that others do not see as related. Importantly, this is not an attempt to define an antitrust product market. It is an effort to identify a definable sector of the economy. Target and Amazon both sell groceries and generally compete in the retail market, but the ways in which these businesses operate are radically different. Likewise, it may seem odd to treat YouTube and Amazon as digital platforms yet exclude Netflix. But Netflix is essentially an online version of HBO, creating or licensing content and then making it available to consumers. If simply reselling products defined a two-sided market, then any reseller is a “two-sided market.”

These definitions are not necessarily static. As businesses change models, businesses that were not platforms may become platforms, or may purchase or develop affiliates that are platforms. Alternatively, a business may change how it operates and no longer fit the definition of a digital platform. For example, Walmart is replicating Amazon’s reseller strategy through Walmart.com. It is entirely possible that Walmart, or at least its online business, may become a digital platform by deliberately copying those elements of Amazon’s business model that make it a digital platform while the bulk of Walmart’s business remains traditional brick-and-mortar shopping. Similarly, while Amazon may at some point sufficiently integrate Whole Foods to warrant regulating the supermarket as a digital platform, Whole Foods remains a traditional supermarket and should therefore continue to be regulated as such.

This is not unusual in sector-specific regulation. Google Fiber, for example, is clearly a video and broadband provider even though Google Search is neither of these things. Generally, sector-specific regulation applies only to the portion of the business that meets sector-specific criteria. Just as Walmart’s in-store pharmacy is regulated as a pharmacy while the remainder of the store is not, a

business that combines a bricks-and-mortar operation with a digital platform would only be regulated as a digital platform with regard to its digital-platform operations.¹⁹

Similarly, some will object to excluding broadband providers, operating systems, or other companies considered part of the internet infrastructure from the definition of “digital platform.” Again, what is important here are the actual costs of doing business and the ways in which the economic realities of digital platforms change their incentives. Whether one thinks it is “fair” to apply the same standards of antitrust or consumer protection to internet service providers (ISPs) and “edge providers” is a separate question from recognizing how digital platforms actually operate, and how this reality makes their behavior different from other providers (Del Priore 2018).

C. Why Do These Features Matter More Than Others?

Potentially low marginal cost, network effects (particularly the cost of exclusion), and the ability to scale rapidly to absorb millions of new customers make these platforms distinct from other types of businesses. The digital nature of the platform allows it to rapidly deploy new features and to integrate data across multiple apparently unrelated business lines or sources. These factors allow platforms to avoid many of the traditional costs associated with rapid expansion, both vertically and horizontally. These features distinguish platforms from other traditional two-sided markets and allow them to combine elements of traditional communications networks and mass media, as well as of traditional retail-market networks.

Of particular importance, the fact that the service is distributed through the internet allows the platform to enjoy network effects without the cost of building out the entire physical network. Especially, it eliminates the cost of building out the “last mile” to the consumer. This does not eliminate the costs associated with scalability any more than the building of public roads eliminates costs to UPS (or the availability of UPS and other delivery services eliminates costs to those shipping goods to homes and businesses), but it helps reduce cost significantly. Similarly, distribution via the internet to internet-compatible devices, such as home computers or smart phones the end user already owns, reduces the marginal cost to the digital platform and enhances value to the device owner/broadband subscriber — who values the additional functionality provided. Specialized “equipment” is usually in the form of downloadable software. Even this development cost can be minimized — especially in initial stages — by using readily available developer kits and widely available software platforms.

¹⁹ As discussed extensively below, sector-specific regulation might still govern the relationship between affiliates.

Two points bear emphasis. First, platforms will still incur considerable expense — especially as they strive to maintain a distinct and quality user experience while scaling rapidly.²⁰ The idea that reliance on the internet makes platforms somehow “parasitic” or “freeloading” is as absurd as saying that cable operators are “parasites” because they retransmit broadcast programming and cable network programming developed by others, or that catalog-based businesses are “freeloaders” because they rely on the existence of telephone networks and package-delivery networks such as UPS. By the same logic, internet providers, telephone networks, cable operators, and even mailmen are “parasitic freeloaders” charging subscribers based on the value created by the labor of platforms and users.²¹

The second point further underscores the fallacy of viewing as some sort of morality tale the economic description of digital platforms as relying on internet distribution. Dependence on the presence of ubiquitous outside networks is not unique to either digital platforms or the internet. Credit cards have long relied on the near universal availability of the international telephone network to function effectively. Mail order and telephone catalog businesses rely on the existence of numerous pre-existing networks to cut costs. But it is particularly relevant in the world of network effects, where developers of networks frequently must invest in building physical networks to achieve the same network effects.

As noted by Jean Tirole, today’s dominant platforms began as vendors in niche segments (Schrager 2018). Amazon, for example, began exclusively as an online bookstore. The features described above allowed it to expand relatively rapidly first from books into other products, then into streaming, and finally into manufacturing its own generic brands. Once a sufficiently large customer base began using Amazon for one purpose, it was much easier for Amazon to expand to other diverse products and services than it would have been for a traditional book chain such as Barnes and Noble or Borders.²² Its established distribution network (both the online access and the physical process of moving goods from one place to another) could be readily adapted for other goods, without any need to alter existing physical stores or decide which products to display on

²⁰ As Tim Wu notes, Facebook outpaced pre-existing social media networks Friendster and MySpace by virtue of maintaining a stable, reliable user experience (Wu 2016). This required tremendous expenditure on engineers, equipment, and other significant capital expenditures as Facebook “blitzscaled” past its rivals.

²¹ This argument, sometimes called the “value gap,” is frequently employed by businesses that imagine themselves the primary creators of value for general-purpose digital platforms. For example, traditional news media argue that they are entitled to revenue from Facebook because they imagine they contribute significantly to the value of the platform, when in fact only 4 percent of Facebook content is news from traditional media sources (van Zuylen-Wood 2019). It also ignores any reciprocal benefits received by the parties using the platform. This is not to say that platform practices (particularly practices of dominant platforms) cannot be harmful and unfairly capture value from others. Additionally, we might for reasons of policy wish to redistribute value from one part of the supply chain to another. But the idea that a platform unfairly benefits from bringing parties together for the exchange of goods, services, or information is as inaccurate and misguided as arguing that a retailer’s mark-up automatically represents a “value gap” between the retailer and the wholesaler.

²² This is not to minimize the enormous cash expense needed to expand into new markets. But the expenses associated with such expansion are significantly lower compared to traditional businesses and are especially reduced compared to more conventional physical networks that provide strong network effects.

scarce shelf space. The relationship, recommendation algorithms, and convenience of “one-click” shopping were all readily and seamlessly expandable in ways that would be impossible for comparable brick-and-mortar retailers. Perhaps most telling, cloud storage — one of Amazon’s most profitable offerings — essentially began life as an internal network for Amazon cloud storage (Miller 2016). Amazon transformed this into a product by developing secure interfaces and tapping into the existing internet to receive and send customer data.

As with any of the characteristics described above, other successful (or even dominant) businesses will replicate some of the features described. Walmart, for example, likewise expanded its retail services to include pharmaceuticals, groceries, and even pre-paid cell phone service. It is the combination of being online, multi-sided, and open so as to capture a giant audience that confers unique advantages, shapes incentives, and raises concerns of enduring (rather than merely transitory) market power. In particular, the fact that platform users potentially play multiple roles simultaneously distinguishes digital platforms from other two-sided platforms or internet businesses that have clear distinctions between providers and consumers.

D. A Multi-Role User in a Multi-Sided Market.

Unlike in traditional two-sided markets, a single user may simultaneously engage in multiple roles on a platform. A cable television subscriber is never a provider of programming. By contrast, a subscriber to YouTube is potentially both a producer and a consumer of content — and an input into YouTube’s overall data stockpile. A customer on Amazon may simultaneously be a reviewer, a buyer, and a publisher or retailer. This has several effects on the platform’s ability to extract value, avoid traditional costs, and maximize bargaining power over all platform users regardless of their comparative value or their role in the transaction.²³

Allowing users to play multiple roles simultaneously contributes to greater enhancement of the network effects experienced as part of the digital platform. For a standard network effect, the value of the network increases by N for each new user. (This is sometimes called a “Sarnoff” network, based on the idea that the total number of broadcast affiliates dictates audience reach and therefore the value of the network.)

But networks that allow users to organize themselves experience greater value than the simple increase in value N . For example, in networks that permit users to interact with one another, each new user facilitates an entirely new set of potential pairs with each pre-existing user. As a result, the value of each addition increases the value of the network overall by N^2 . For example, in a

²³ For more on competition within and between two-sided markets generally, see (Rysman 2009).

classic telephone network, any user can call any other user. Users are not limited to being either “call senders” or “call receivers.” As a result, the total number of combinations/possible users includes the value of each user as a sender **and** as a receiver, or N^2 . Where users can form groups of any size, not simply pairings, then the value of the network increases by 2^N (Tongia and Wilson 2011).

Additionally, this “multi-sided market” maximizes the “long tail” effect, as popularized by Chris Anderson in his book of the same name (Anderson 2008). The idea of the “long tail” is that the value of a platform is derived from aggregating large numbers of niche products (the “tail”) rather than focusing on a few very successful products (the “hits”).²⁴ This is distinct from the more traditional network effect (although platforms also experience network effects). It is also different from economies of scale, which allow businesses to reduce marginal cost per unit due to increased scale (again, sufficiently large platforms may enjoy these as well). Platforms do seek “hits” as well as the “long tail.” But by increasing the number of users in multiple roles, the platform enhances the generation of the long tail (and increases the likelihood of hits) by growing its seller/production base as it grows its buyer/customer base.

Consider, for example, a traditional cable package or an online streaming service such as Netflix. It is easy to divide the platform between subscribers/viewers and programmers. The value to the user derives chiefly from the availability of a suite of programming. If a major programmer withdraws its programming, the video provider may suffer as customers migrate to rival distributors. A package that lacks “must-have” programming (such as local live sports) will prove less able to attract subscribers than rivals who have it. By contrast, Amazon does not particularly worry about any specific streaming content because its streaming service is merely part of its overall bundle. Streaming is one more product, like batteries or self-published novels, that attracts some portion of consumers. It is part of the overall long tail of goods and services Amazon offers.

Alternatively, consider Google and YouTube. There is no single content that attracts all of YouTube’s customers. Even the most popular YouTube channel accounts for a tiny fraction of total

²⁴ Of course, platforms also seek to have “hits” and not just “long-tail” products and services. But while useful to deepening engagement and attracting more revenue, hits are not a critical or even necessarily a significant part of the platform’s revenue. *House of Cards* transformed Netflix, and its subsequent independent video creations give people a reason to subscribe (especially as other content creators such as Disney increasingly pull their content from Netflix to provide programming for their own streaming services). By contrast, *The Marvelous Mrs. Maisel* and *Transparent* boost Prime’s value proposition and deepen engagement with Amazon users, but are not primary drivers of income or even necessarily primary drivers of Prime subscriptions. It is the combination of goods and services accessed via Prime that attracts and holds subscribers, which reflects the multiple roles (shopper, streamer, reviewer) that any user may take on at any time in their engagement with Amazon. This combined value raises the COE to users, which helps to maintain market share, which raises the COE to the other side of the platform. The key (and a reason COE better captures the power of a platform than traditional market analysis) is that these contributions to value are synergistic.

YouTube views. As a result, no single programmer, or even group of programmers, can effectively negotiate with YouTube. Similarly, any website can withdraw its content from Google’s search index. Doing so, however, will have little impact on the value of Google to users and will therefore have *de minimis* impact on Google’s revenue — which derives from targeted ads. It would require some huge portion of the internet to “go dark” to Google Search (but remain accessible to a rival search engine) to significantly affect the value of Google Search to customers — and therefore to advertisers. This is simply not realistic to expect.

Accordingly, digital platforms may begin with much greater marketing power vis-à-vis parties that use the platform to market or otherwise distribute goods and services. This was dramatically illustrated during Amazon’s dispute with Hachette in 2014 (Kellogg 2014). Amazon was able to sustain a months-long negotiating dispute with the fourth-largest book publisher in the United States. As reported by *The New York Times*, “Supporters of Amazon publicly questioned the need for Hachette, the fourth largest publisher, to exist in an era when authors can publish themselves” (Streitfield 2014). Amazon’s enormous revenue from multiple sources and its ability to replace Hachette’s authors with enough independent authors to mitigate the loss of popular Hachette titles gave Amazon enormous power to set terms.²⁵

E. Why These Factors Potentially Create Enduring Market Power in Ways That Challenge Modern Antitrust Analysis.

These features of platforms are not intrinsically anticompetitive in and of themselves. To the contrary, platforms empower consumers and producers to play multiple roles simultaneously, which creates many important benefits. Services like Patreon and Twitter make it easy for anyone to disintermediate traditional gatekeepers and leverage that platform to find other interested parties and engage in whatever joint, community-related activities the platform supports. For example, “Black Twitter” describes how traditionally fragmented and marginalized African American activists and communities can bypass traditional bottlenecks to disseminate news, organize, and otherwise create a distinct cultural identity using the open Twitter platform (Freelon *et al.* 2018). Teachers organizing for higher pay in West Virginia and elsewhere credit Facebook with providing them the tools to communicate and organize (O’Donovan 2018). Millions of people use platforms such as eBay or Etsy to supplement their income or create entirely new businesses without the need to negotiate individually with the platforms. The ability to create content and distribute it through platforms such as YouTube, Amazon, or Facebook gives individuals and organizations freedom to

²⁵ Amazon did not achieve a total victory. But business negotiations are not all or nothing. The point here is simply to illustrate how Amazon’s ability to allow any customer to be an independent author, combined with its vast inventory of products, gave it far greater power than would have been expected.

distribute their work whether or not they can prove to a traditional publisher or retailer that it will be a commercial success.

At the same time, however, both experience and economics demonstrate that digital platforms have a strong, perhaps overwhelming, tendency to concentration. The freedom of distribution created by platforms can be undermined by the harms that flow from concentration. For example, Twitter and Facebook may allow African Americans and others traditionally marginalized by mass media to both communicate within their respective communities and publish their stories in a way accessible to the general public, but it also places control of this ability in the hands of a few corporate gatekeepers where African Americans and other people of color, women, and others are under-represented. Left unchecked, as we have already seen, decisions by platform operators often have disparate impacts on these communities, differences that become particularly important and dramatic as important events unfold (Tufekci 2014; Holcomb 2014). Similarly, whether or not YouTube intends to act in an anticompetitive fashion, changes to its algorithms can have a negative impact on tens of thousands of businesses that rely on YouTube to monetize their content (Alexander 2018).

In short, regulation of digital platforms (and sector-specific regulation generally) is not predicated on the moral character or trustworthiness of individual companies. Government has a responsibility to regulate commerce in a manner that protects and promotes the public interest. This includes prophylactic action to preclude concentrations of power inimical to the marketplace in goods and services or the marketplace of ideas. To borrow an analogy from a lecture by Professor Walter Effross,²⁶ health inspectors come to restaurants prior to their opening to make sure the food is safe and no one gets sick. Critics wait several months before reviewing a restaurant, however, in order to see if the restaurant is worth reviewing and to give it time to work out any problems with the menu or service. Congress and federal regulators need to think of themselves as health inspectors, not restaurant critics.

1. The “Attention Marketplace,” While a Useful Concept in Many Ways, Is Not a Useful Concept for Competition Policy.

The ability of platforms to put all this together creates a combination of user “stickiness” and a flexibility of revenue stream that, once enormous market share is achieved, is likely to become enduring. It creates a common set of incentives among platforms to engage in a strategy of taking long-term losses and cross-subsidizing services in order to defeat new entrants and maintain sufficient dominance across sufficient markets to hold monopsony power across a wide swath of

²⁶ Heard by the author, no written citation.

related industries. It drives innovative startups to seek acquisition by dominant platforms rather than invest in competing services, and it drives dominant platforms to acquire potential competitors not merely because the acquisition of the potential competitor increases this depth of services, but because it neutralizes a potential rival.

This protean “market definition” challenges existing antitrust jurisprudence in several ways, particularly in light of the increasingly procrustean manner in which antitrust requires fitting goods and services into precise market definitions. For example, ease of entry and low switching cost — features associated with platforms because of their digital nature and accessibility online — are usually mitigating factors against a finding of market power under traditional antitrust analysis. This is particularly true where the service does not directly compete in a traditional sense. But in the realm of digital platforms, this may eliminate a potential competitor.

Let us consider two specific examples that illustrate this point. Many advocates argue that Facebook should not have been allowed to acquire Instagram or WhatsApp. But at the time Facebook acquired Instagram, Facebook was a “microblogging” site whereas Instagram was a “photo sharing” application. While the case against allowing Facebook to acquire WhatsApp was stronger, regulators still struggled to place both companies in the same market as traditional competitors given their different business models (microblogging versus messaging). That Instagram or WhatsApp were potential competitors to Facebook was not something regulators found easy to embrace. An even more dramatic example is Google’s acquisition of YouTube. On their face, these businesses are entirely different. But their combination gave Google an enormous advantage in the online advertising market.

By acquiring platforms that are experiencing high growth, even where they do not directly compete in a traditional sense, dominant platforms can dramatically delay or even prevent the emergence of future competitors. The digital and online nature of the dominant platform and the acquired platform reduce the cost of integration and increase the depth of service offered by the dominant platform, making it more difficult for firms to compete.

Finally, the multiple roles and service depth of platforms also stymie traditional antitrust analysis because there is no single, easily definable market. Facebook is not merely a “social network” competing with LinkedIn, Twitter, Reddit, and LiveJournal. Facebook is a unique combination of services that includes a massive network of businesses, political speakers, and other social networks like WhatsApp and Instagram. This goes beyond traditional product and market differentiation, because the value to users on both sides of the platform is in part derived from the *combination of services*, not *competition among services*.

Again, we can find some analogies in other markets. For example, cable operators argued for decades that individual broadcast television stations, movies, and home-video recordings were all competitors for “eyeballs” and thus part of the same market. Regulators rejected this argument because while each of these replicated some piece of what a cable subscription provided, the unique combination of multiple sources of programming distinguished cable (and, later, other “multichannel video programming distributors,” or MVPDs) from these other providers of video. No matter how many times a given customer might go to the video store rather than pay for a video on demand from the cable operator, the same customer also found value in the additional programming networks and continued to subscribe to the cable operator. Similarly, no matter how much time the cable subscriber spent on broadcast television, the subscriber still paid the same subscription fee on a monthly basis to the cable provider to receive the additional programming services (or superior reception, or both). As a result, the supposed competition for “eyeballs” was meaningless. To get access to all the services a subscriber wanted at any given moment, the subscriber paid the same monthly fee. By contrast, cable operators do compete directly with other MVPDs, because a subscriber to a direct broadcast satellite service does not usually also subscribe to a cable service. MVPDs generally have the same types of programming networks (a mix of live programming, video on demand, and other services) and require a monthly subscription fee.

The effort by some to define multiple platforms into a single “attention economy” and concomitant “attention marketplace” falls short of the way in which this multifaceted combination creates value to the platform (and, to be fair, to users as well) and plays havoc with traditional market definitions.²⁷ Because switching costs are extremely low, and because the applications through which users access these services are generally non-rivalrous, the platform can continue quite nicely as users cycle from low engagement to high engagement. Certainly, the platform’s incentive is to maximize engagement. But market power by dominant platforms proves more enduring than predicted because, in contrast to other markets where consumers buy either one product or another, I can happily continue to consume several competing products with virtually no effort. The ability of these platforms to form joint promotional partnerships further enhances the endurance of market power once established.

Thus, although Twitch and YouTube are competitors in the video streaming market using classic antitrust analysis, my momentary shift in attention from one platform to the other has not deprived either platform of a customer. Each platform still derives value by tracking my personal information, and when my attention shifts back to whichever platform previously lost my attention,

²⁷ Again, the general idea of the “attention market,” like its predecessor “competition for eyeballs,” is an important concept and important to understanding the business model of many platforms. But the concept should not be asked to bear more than it can support by attempting to use it as an antitrust market like grocery stores or office supplies.

that platform will still serve me targeted advertising. A platform may lose me permanently over time, but the competition among platforms in the “attention marketplace” is much more like the competition between cable operators and video rental stores in the 1990s “market for eyeballs” than competition between an incumbent cable operator and a rival MVPD. On any given night I may rent a video and not watch any cable programming, but I am still paying for the entire month and cable has lost none of its attractiveness/importance because I took a night off. Similarly, I am unlikely to completely abandon a platform in the long term simply because my short-term attention turns elsewhere.

2. The Two-Sided Platform Structure Creates Perfect Information Asymmetry.

The combination of features that defines digital platforms puts the platform in a unique position with regard to platform users and control of information. The platform enjoys essentially perfect information with regard to the activities of users on the platform. Importantly, this includes not simply information about consumers, but also information about content producers, advertisers, or anyone else using the platform for any purpose. By contrast, the user will have access only to the information that the platform enables the user to collect. Additionally, the platform can make different levels of information available to different users on an individualized basis — although sophisticated users may also find ways to reverse-engineer data and exploit the platform in potentially harmful or even dangerous ways.

This perfect asymmetry has implications well beyond privacy and surveillance (although these are obviously enormous concerns). It has significant implications for regulating platforms to promote competition and protect consumers. For example, Amazon reportedly uses information about sales by third-party vendors through its platform as market research to develop its own line of competing products, and has been accused of favoring its own products in its recommendations (Cresswell 2018; Ip 2018). Google has been accused of manipulating search results to favor its own products (Luca *et al.* 2015; Duhigg 2018). Facebook has admitted to conducting secret experiments on its users to influence their moods (Goel 2014). Advocates have raised concerns that the ability to understand users and their behavior to an unprecedented degree facilitates “design for addiction” (O’Brien 2018). Even when the platform itself does not manipulate the results, individuals or commercial rivals may discover ways to manipulate the system so as to deceive unwitting consumers or deceive the platform itself into acting against a rival (Nadler, Crane and Donovan 2018; Dzieza 2018; Stevens and Emont 2018).

In particular, the opaque algorithms that platforms use to make recommendations and order the presentation of products, news, or services can create concerns that even the platforms cannot anticipate. Their ability to analyze user behavior and to combine information about specific

individuals with knowledge of how similar users behave to make increasingly accurate predictions, drives the recommendations of Google’s search algorithms, Facebook’s news feeds, and Amazon’s product recommendations. But a user — whether a consumer or a content producer — cannot easily determine the factors driving the recommendations. Even advertisers who specify user attributes for targeted placement have tremendous difficulty confirming independently that their advertisements are being placed appropriately.

To repeat a now familiar caveat, a platform’s ability to control information flow is not, in itself, a good or bad thing. It is a feature of the platform’s digital nature, combined with the integration of the component parts via the internet. Consumers enjoy enormous benefits from recommendations tailored to their needs or tastes. Search tools and tools for organizing the proliferating deluge of information depend on absorbing and processing vast amounts of information, and a platform’s ability to limit dissemination of that information helps protect user privacy. These benefits depend on companies’ ability to prevent third parties from manipulating these algorithms for their own purposes; this strengthens the need to keep secret the information used and how the algorithm operates.

Nevertheless, the fact that near-perfect control of information is both a natural artifact of the platform and in some cases a necessary (or socially desirable) feature of the service does not eliminate concerns. To the contrary, it highlights the need for regulators to analyze carefully both the dangers and the benefits of this naturally occurring information asymmetry, and to arrive at a reasonable trade-off between enabling the positive and mitigating the risk of the negative.

F. Defining “Dominant” Is Generally Tricky, and It’s Especially Difficult in the World of Digital Platforms.

Regulation does not apply solely in cases of dominance. That said, the question of what constitutes “dominance” or “market power” remains relevant to sector-specific regulation. The same actions that may be pro-consumer or pro-competitive when taken by non-dominant firms may be anti-consumer or anticompetitive when taken by a dominant firm. Restrictive contractual terms allowing non-dominant players to serve niche markets, for example, may be abusive when employed by dominant firms to limit consumer choice or avoid liability for negligent conduct.

There is no generally accepted definition of what “dominance” means (Bergmayer 2017). Just as regulators struggled with “how big is too big to fail” after the financial crisis 10 years ago, regulators and antitrust enforcers have repeatedly struggled with the question of what makes a firm “dominant” or “non-dominant.” In the past, regulators and antitrust enforcers have looked to factors like “market share,” “incumbency,” being a “critical buyer,” or some other indicia of the ability to

exert control over the behavior of others contrary to how we might otherwise expect them to behave in a competitive market. Sometimes, as with too-big-to-fail, regulators look to balance the cost of regulation against the potential risk to the sector or economy as a whole.

Even if we could settle on a specific metric, what constitutes “dominant” is subject to considerable debate. At one time, antitrust law established a presumption that any entity with 30 percent market share would be considered “dominant.” (Woodcock 2017) This presumption, called the *Philadelphia National Bank* presumption,²⁸ is still generally used in Europe for creating a rebuttable presumption of market power. However, the 30 percent benchmark is inconsistently applied in the U.S. The Federal Communications Commission declared AT&T a non-dominant long-distance carrier despite a nearly 60 percent market share (FCC 1995). On the other hand, in *FTC v. Toys “R” Us*,²⁹ a federal court affirmed the FTC’s finding that Toys “R” Us had sufficient market power at approximately 20 percent market share to support an antitrust enforcement action. As these limited examples show, what constitutes dominance varies depending on multiple factors.

For reasons discussed above, traditional economic measures of dominance and market power are particularly difficult to apply to digital platforms. It is a characteristic of these firms that they achieve dominance by a breadth and depth of services that make it challenging to use traditional market definition and to identify actual or potential competitors. In addition, because digital platforms have varied and novel business models, economic analysts have struggled to use traditional tools to identify an appropriate approach to digital platforms, let alone create consensus around how to define market power or dominance among online platforms.

1. Cost of Exclusion from the Platform (COE) Is a Useful Proxy for Determining the Ability to Exercise Market Power — Especially When Traditional Market Definition Is Extremely Difficult or Impossible to Determine.

A key element of the “network effect” is that the network becomes more valuable to everyone on it when more people use it. The inverse is equally true. The larger the network, the greater the cost of exclusion from the network, either as a direct cost or as lost-opportunity cost if access to the platform would otherwise confer a significant advantage.

Consider the traditional evolution of unregulated interconnection regimes from the telecommunications and internet transit worlds. Initially, no network is dominant, and so carriers have an incentive to exchange traffic for free. Everyone needs everyone else and derives roughly equal value from interconnection. As some firms grow faster than others, the larger networks

²⁸ See *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963).

²⁹ 221 F.3d 928 (7th Cir. 2000).

become much more valuable. Smaller carriers suffer more from their inability to interconnect with larger carriers than larger carriers suffer from the inability to interconnect with smaller carriers. Larger carriers are therefore able to demand payment from smaller networks for reaching customers on their larger networks. If the cycle continues and the size disparity increases, it becomes increasingly easier for the larger network to offer value to customers without the smaller network, and harder for the smaller network to offer value to customers without the larger network. In an extreme case, such as AT&T's control over the "long lines" (national long-distance lines) at the beginning of the 20th Century, this network dynamic can create a monopoly (Wu 2010).

Tongia and Wilson argue that the advantage of a new network grows exponentially until approximately 50 percent of the applicable population adopts it. At that point, a phase shift occurs and the cost of exclusion becomes far more significant than the advantage of inclusion (Tongia and Wilson 2011). As a general rule, Tongia and Wilson propose that the cost of exclusion increases exponentially at the 50 percent mark. This does not mean that dominance is limited to cases where a network includes 50 percent of the applicable population. As Tongia and Wilson also observe, "Inclusion Framing" (the advantage to the individual conferred by being part of the network) can be as potent as "Exclusion Framing" (the cost to the individual of being excluded from the network), depending on the circumstances. For analyzing potential market power (or other impacts on the individual³⁰), denial of the "Inclusion Value" may be as potent as the direct cost of "Exclusion Value."

2. How to Compute COE.

As Tongia and Wilson explain, network effects have two components. The first is the direct value of the network, its *autarkic* or *intrinsic* value. This measures the direct advantage created by the network. For example, a telephone provides the ability for me to communicate with everyone else on the telephone network in a way that traditional mail and telegraph do not. The second component is the *complementary* value. This describes the increasing value of goods and services associated with the network. For example, fax machines, which create a new use for the telephone network, become more valuable the more people subscribe to the telephone network. At the same time, fax machines also make the network more valuable to each individual connected, since they can now communicate by voice or by transmitting documents to each other.

Tongia and Wilson argue that the cost of exclusion should include the loss of value of the total network value, both exclusion from the intrinsic value and exclusion from the complementary

³⁰ As an example of a non-market value where exclusion or inclusion is potentially highly significant, consider public safety alerts. A user excluded from a network has a diminished likelihood of receiving information (or sending information), even if a public safety authority transmits alerts on multiple networks. Exclusion from Twitter or Facebook may mean a failure to receive vital information not included in a text message alert.

value. This is determined by taking the total network value (as determined by any network law) and dividing it by the total number of excluded participants. This latter value is determined by taking the total potential number of subscribers/network users (what Tongia and Wilson describe as the “applicable population”) less the number of actual users. To express this mathematically: $COE = \frac{\text{Total Network Value Determined by Relevant Network Law}}{\text{Total Number of Excluded Individuals } (=N - n \text{ where } N \text{ is the total applicable population and } n \text{ is the total number of actual users})}$.

In applying these concepts to online platforms, we must keep several caveats in mind. First, to determine COE we must determine the “applicable population.” Factors that may limit this include the nature of the product offered by the platform, the language in which these services are provided, and the general geographic area targeted by the platform. A platform may potentially reach all broadband subscribers, but the applicable population may be far smaller. For example, if the platform offers services in English, only provides service in the United States, and requires reliable broadband speeds of 25 mbps download and 3 mbps upload, then the applicable population is significantly reduced. The applicable population may be further reduced by the limited service offered by the platform. For example, an online auction platform may be open to the public, but the applicable population is limited to those looking to buy or sell products at auction, not the total universe of broadband subscribers.

Tongia and Wilson also note that use of COE does not make the “inclusion framework,” the direct value of the network, irrelevant to considering cost of exclusion. Being excluded from a potentially valuable tool can be quite significant in both competitive terms and overall social-welfare concerns. Accordingly, a network might be considered dominant (that is, able to exert some measure of market power, or some measure of significant social harm on an individual) with less than 50 percent share of the total applicable population. To translate this into a regulatory presumption, a platform can (theoretically, at least) be dominant at any level of penetration if it conveys a sufficiently large advantage. But such a determination requires case-by-case determination. As discussed below, a network that provides unique access to government officials, reporters, or some other particularly valuable population, might be considered dominant for certain purposes despite a comparatively low share of the total applicable population. But once a platform’s share of the applicable population reaches 50 percent, a phase shift occurs so that the cost of exclusion rises exponentially for each individual who remains excluded. At this point, a platform should be *presumed* dominant for all regulatory purposes.

3. COE Is Extremely Flexible and Focuses on the Central Reason Why We Care About Dominance.

An advantage of using COE is that it encompasses a wide range of potential costs and potential actors, while avoiding the arbitrary definitions that have plagued traditional efforts to determine market dominance. For example, it is clear that COE includes the loss of a substantial market for producers of goods and services, or loss of an important distribution network. At the same time, however, it takes into account the loss to consumers from being excluded from a specific platform. For example, whether or not we consider Twitter “dominant” in a traditional economic sense, it is clear that a business excluded from Twitter experiences some cost from its inability to communicate with Twitter subscribers. These costs include more than those associated with traditional advertising or direct sales: Companies use Twitter to respond to real-time events such as a blackout during the Super Bowl (Huffington Post 2013) or a tweet from a celebrity (Phillips 2018), and companies monitor social media to address concerns and respond to criticism. These benefits won’t necessarily make or break a business, but loss of access to the platform would certainly carry the significant cost of losing a valuable channel of communication with the public.

We can equally apply this analysis to Twitter subscribers. In a case involving President Trump blocking critics from his Twitter feed, the district court observed that blocking the individuals in question deprived them of the ability to interact directly with the President’s statements, denying them the ability to engage in important and timely political discourse (Cole 2018). Greg Norcie and L. Jean Camp have written an analysis examining the costs of abstaining from social media generally (Norcie and Camp 2015). As they demonstrate, exclusion from social media platforms can impose significant costs on the individual that traditional metrics for measuring dominance do not address.

As an additional benefit, using COE directly addresses the reason we want to distinguish dominant platforms from non-dominant platforms in this context. Where the cost of exclusion is small, we are unlikely to have any particular concern about the practices of the platform distinct from whatever general concerns we may have about platforms more broadly.

COE does not prescribe which regulation to use, but rather what to regulate. Once COE shows us that a firm is dominant, that may indicate a need for some kind of action that only addresses this dominance indirectly. For example, if we determine that a platform such as Google is dominant and that the key to that dominance is high market share in search, the remedy might involve actions to stimulate competition rather than directly regulating how Google manages its search engine. By contrast, if the primary harm in being excluded from Twitter is the more limited harm of losing one of several important conduits for reaching customers, the necessary regulation may be limited to an explanation and right to challenge arbitrary exclusion. Again, context matters

enormously.

While COE measures dominance, it does not mean that exclusion is the only harm. Rather, COE works as a measure of dominance in this context because if the platform imposes some new rule or cost on a take-it-or-leave-it basis, the platform participant must decide whether the cost of acceptance outweighs the cost of abandoning the platform. This is roughly the digital-platform equivalent of the standard test in American antitrust for determining the existence of market power, the “small but significant and non-transitory increase in price” (SSNIP) test. SSNIP operates on the theory that a firm with market power can raise prices above the existing, more competitive rate and therefore increase its profits over the competitive rate. At the same time, even a monopolist cannot raise prices without limit. As the price goes up, customers demand decreases. Even life-saving medications can be priced so high that people who desperately want them cannot afford them.

SSNIP attempts to predict whether a company can raise prices a small but noticeable amount long enough for customers to notice and potentially find alternatives if those alternatives are readily available, without losing so many customers that the price increase actually results in lower rather than higher profits. If the company can impose such a “small but significant and non-transitory increase” in price above the competitive price, then the customers required to bear such a price increase constitute the relevant market of the hypothetical monopolist. COE provides a means of measuring a similar effect in the absence of clear evidence with regard to prices or output (which are largely inapplicable measures when consumers receive the service for free and/or generate the bulk of the content). If a platform can alter the rules of engagement in a way that makes the platform less attractive or can impose new costs on users without any compensatory advantages and without significant loss of customers, the platform clearly has market power.³¹

Finally, simply because exclusion may impose costs — perhaps substantial costs — does not mean that exclusion is *per se* anticompetitive or anti-consumer. Indeed, in some cases it may even be warranted. Even public utilities, services so essential that we consider it the responsibility of government to make them accessible to everyone, may terminate service under certain circumstances. For example, although public utilities generally must provide customers with significant grace periods for late payments and may have lengthy procedures to prevent consumers from being cut off, a utility may ultimately refuse to serve a customer who does not pay. The telephone network is a common carrier network, but it may refuse to allow a customer to connect a device that will do damage to the network.

³¹ To be clear, COE is an additional measure that serves as a proxy for market power — especially in situations that do not meet traditional market definitions, such as the “marketplace of ideas” or direct access to government officials. It is not intended as the sole measure of market power for digital platforms.

Similarly, there may well be circumstances in which dominant platforms or platforms with high cost of exclusion can (or arguably even should) exclude certain kinds of speech or certain types of businesses or products. Again, the point of using COE to measure dominance is not to ensure that users of platforms never experience costs. The point of using COE as a proxy for dominance/market power is to determine when the (potential) behavior of a digital platform might threaten the public interest. Determining what regulation, if any, is needed is an entirely separate exercise.

Now that we have determined what sort of entities we are talking about, and the circumstances under which regulation may be appropriate, we are finally prepared to explore what about these platforms we may need to address to protect the public interest.

CHAPTER II: WHEN IS SECTOR-SPECIFIC REGULATION NECESSARY?

Calls for regulation of search and social media platforms, from both the left and the right, have argued that comprehensive regulation is needed either because of the monopoly power of these companies, or because they constitute “public utilities” and should therefore be regulated like public utilities (Feld 2017; Kahn 2017). Alternatively, opponents of regulation argue that these platforms built their businesses on a set of regulatory presumptions, and this forecloses Congress from imposing comprehensive new regulation that dramatically alters the regulatory environment. Accordingly, I begin with a brief review of the traditional legal justification for sector-specific regulation. I explain how traditional common-law principles of common carriage, not theories of natural monopoly or public utility, provide the basis for application of pro-competitive, sector-specific regulation (Noam 1993, Wu 2017b). Additionally, modern First Amendment doctrine and consumer protection law provide further justification for sector-specific regulation generally and apply to digital platforms specifically.

A. The Difference Between Antitrust and Sector-Specific Regulation.

The antitrust laws are laws of general applicability to address the overall problem of corporate concentration. Even accepting the modern critique of antitrust law as too narrowly focused on direct consumer impact (and even more narrowly construed as a rise in prices to consumers), the chief concerns of the antitrust laws are size and the damage such a concentration of economic power can cause. By its nature as a law of general applicability, antitrust law does not focus specifically on any one industry. Even at its most aggressive, it is reactive rather than proactive, generally operating via enforcement action (Wu 2017a).

By contrast, sector-specific regulation seeks to address specific concerns that arise from the unique nature of the regulated industry. Even predating the first antitrust statute, the common law imposed special regulatory obligations on businesses operating in the “public interest” or for the “public convenience and necessity.” As a general rule, these regulations centered around necessary infrastructure for commerce and daily life such as toll roads, inns, and teamsters and generally involved aspects of “common carriage.” (Candeub 2004) Importantly, this did not require either monopoly or the even more stringent test for public utility. Rather, common-law common carriage responsibility arose from a combination of several factors. First and most important, the “public-facing” nature of the business, i.e., did the business as a general matter of course offer service indiscriminately to all members of the public, in contrast to specialized trades where tradesmen routinely negotiated terms with customers on an individualized basis.³²

³² As the D.C. Circuit explained in one of the most significant modern cases on common carrier obligation, the fact that a business reserves the right to refuse service or negotiate terms on an individual basis does not

Second, common carriage typically applied when the overall impact of exclusion significantly affected someone’s daily life or livelihood. Again, the question was not exclusion merely from a specific business or establishment. Rather, a business was presumed to be “affected with the public interest” when access to a provider of the relevant service was considered necessary for commerce or the routine conduct of one’s daily life (Cherry 2006, Noam 1994). As Professor Barbara Cherry has explained, “Distinctive legal principles evolved in response to differing relationships of access recipients — as end user customer, competitor, speaker, or audience member — relative to the access provider. These legal principles, in turn, created differing rights — economic, welfare, or free speech — for access recipients according to the nature of the relationship with the access provider.” (Cherry 2006)

Indeed, at a time when the Supreme Court expressed general hostility to industry regulation, the legal tradition of common carrier regulation of businesses “affected with a public interest” provided a justification for sector-specific regulation (Candeub 2004). In *Munn v. People of the State of Illinois*,³³ the Supreme Court affirmed the right of the State of Illinois to regulate grain elevators by requiring them to offer service on a non-discriminatory basis at rates fixed by the legislature. In analyzing the case, the Court pointed to several important factors in considering whether a business was “affected with the public interest” and subject to regulation. Because many of the arguments addressed and rejected in *Munn* are often repeated whenever new sector-specific regulation is proposed, it is worth reviewing the arguments in *Munn* in detail.

First, the Court dismissed the argument that regulating the manner in which grain elevators must do business constituted a “taking” under the Fifth Amendment. To the contrary, the Court found that regulating the nature by which people and businesses conduct themselves “so as to not unnecessarily injure another” and “when such regulation becomes necessary for the public good” was consistent with the role and purpose of government. Regulation to prevent conduct injurious to the public good (or to require conduct consistent with the public good) therefore cannot be a taking. Turning to what circumstances would make regulation “necessary for the public good,” the Court opined:

Property does become clothed with a public interest when used in a manner to make it of public consequence, and affect the community at large. When, therefore, one devotes his property to a use in which the public has an interest,

defeat the common carrier designation. Rather, courts and regulators look to the actual conduct of the business in the way in which it generally offers its services to the public. *National Association of Regulatory Utility Commissioners v. FCC*, 533 F.2d 601 (1976) (“*NARUC I*”).

³³ 94 U.S. 113 (1876)

he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created. He may withdraw his grant by discontinuing the use; but, so long as he maintains the use, he must submit to the control.

Turning to the specifics of the case, the Court found that the grain elevators in question were critical structures for the sale and distribution of grain “by the inhabitants of seven or eight of the Great States of the West with four or five of the States lying on the seashore.” These grain elevators were “massive structures” that were not easily replicated (or, as we might say today, there existed significant barriers to entry). Further, although there were nine competing firms, they routinely agreed together on prices, constituting a “virtual monopoly.” Therefore, despite the fact that the grain elevators were private businesses built entirely by private capital, with no direct grant of any monopoly or franchise of the government, the grain elevators were “clothed with a public interest . . . not by the operation of the Constitution of Illinois or this statute, but it is by its facts.”

Critically, and what made the case of particular significance, the Court rejected the argument that because grain elevators were a new industry and a new technology, without precedent in the common law, the traditional principle of common carriage could not apply. Rather than limiting the principle of common carriage regulation to its traditional confines, common carriage obligations would apply to any new form of business which met the (admittedly somewhat vague) criteria as being affected with the public interest. Even where the “public” character of the business did not become clear until decades into the development and maturation of the business, the state could then “recognize” the essential public character of the business and apply common carrier regulation.

Over time, Congress and the Supreme Court began to recognize additional grounds for finding a business “affected with the public interest.” For example, in 1906, Congress passed the Pure Food and Drug Act, recognizing public health and safety as additional grounds to regulate commerce. The financial panic of 1907 led first to the Aldrich-Vreeland Act of 1908 and ultimately to the Federal Reserve Act of 1913. Following the election of Roosevelt and the shift in the Supreme Court that permitted greater regulation of commercial activity,³⁴ Congress identified an ever-increasing number of reasons why it served the broader public interest to impose sector-specific regulation — including the need to enhance competition.

³⁴ *West Coast Hotel v. Parish*, 300 U.S. 379 (1937). This case is widely viewed as ending the Supreme Court’s declaring most forms of economic regulation a violation of due process — the so called *Lochner* era — that began in 1905 with *Lochner v. New York*, 198 U.S. 45 (1905).

In addition to commercial considerations, the common law tradition and the evolution of this tradition in the industrial age have focused on sector-specific regulation to protect consumers from specific harms unique to a specific sector. Food purity laws are an example going back to the Middle Ages. The Pure Food and Drug Act of 1906 was a direct response to the industrialization of food production and the inability of consumers to determine the contents or basic safety of staple foodstuffs without federal oversight. Of particular relevance to the regulation of search and social media platforms, common carrier regulation also traditionally imposed a duty of privacy (Candeub 2018). Although the United States has no general privacy law, Congress has enacted numerous sector-specific privacy laws where the unique aspects of the sector have given rise to specific privacy concerns (Feld, *et al.* 2016).

B. Regulation to Protect the First Amendment and Democracy.

Likewise, where regulation has been necessary to enhance democratic discourse and preserve access to the fundamental right to communicate, both the common law and modern legislative law recognize a responsibility of the government to act (Leanza 2007, Cherry 2006). Although the First Amendment primarily addresses itself to restraining government efforts to censor speech, the Supreme Court has also found the First Amendment to act as a limit on private power, and to permit state action to protect and enhance civic discourse. For example, the First Amendment imposes a significantly higher burden to prove libel against a newspaper engaged in reporting on newsworthy events than on ordinary citizens,³⁵ or against satire of public figures.³⁶ The government has the responsibility to shield unpopular speakers from harassment to prevent a “heckler’s veto” over civic discourse (Leanza 2007).

Two particular strains of First Amendment jurisprudence come into play when the government regulates a private entity for the purpose of enhancing civic discourse. The first is the “Public Forum Doctrine.” Under this doctrine, certain traditional gathering places — such as parks and the public streets — have been places for individuals seeking to address the public on issues of public concern. The doctrine protects the “speaker on a soap box” seeking to address, or harangue, the passing members of the public (Lidsky 2011). Traditionally, as with most other First Amendment jurisprudence, this has been interpreted as a restriction on the government’s ability to foreclose speakers from the public forum, prohibiting the government from imposing limits beyond those setting a “reasonable time and place” to maintain public order (and cover any associated expenses, such as security for unpopular speakers) (Lidsky 2011). But the Supreme Court has also found that the state may take steps to preserve the public character of a traditional public forum, even when

³⁵ *New York Times v. Sullivan*, 376 U.S. 254 (1964).

³⁶ *Keeton v. Hustler Magazine*, 465 U.S. 770 (1984).

privately owned. Thus, in *Pruneyard Shopping Center v. Robins*,³⁷ the Court upheld a California law prohibiting private shopping-mall owners from banning all soliciting on their property so as to maintain the traditional public character of the town square.

More significantly, in *Packingham v. North Carolina*,³⁸ the Supreme Court expressly applied the public forum doctrine to social media. That case involved a state law prohibiting anyone on the state’s convicted sex offender registry from accessing any social media service. In striking down the statute as an overly broad infringement on the First Amendment, the majority opinion explicitly invoked public forum doctrine and applied it to social media. “While in the past there may have been difficulty in identifying the most important places (in a spatial sense) for the exchange of views, today the answer is clear. It is cyberspace—the ‘vast democratic forums of the Internet’ in general, and social media in particular.” Whether *Packingham* in fact applied the public forum doctrine in its entirety to social media — and if so what consequences follow for regulating social media platforms so as to preserve their ‘public’ character — remains wildly unsettled.³⁹ Even in the short time since the *Packingham* decision, scholars have split over whether application of the public forum doctrine would appropriately apply to privately owned social media services (Harvard Law Review 2017), or whether requiring social media to remain “public” in character would prohibit any effort to address online harassment or “fake news,” rendering the application of the public forum doctrine “a cure worse than the disease” (Hassen 2017). It is sufficient for our purposes here (and discussed in greater detail in Chapters V and VI below) to note that the public forum doctrine provides one possible avenue of addressing the inevitable First Amendment claims that social media platforms and internet search engines are likely to raise against future regulation (Wu 2017a).

The second relevant line of First Amendment jurisprudence centers on what Cass Sunstein has called the “Madisonian” view of the First Amendment. Under this view, democracy and self-governance depend on exposing individuals to views and perspectives they would not necessarily seek out on their own (Sunstein 1995). This view reached its apex in the Supreme Court in *Red Lion Broadcasting Co. v. FCC*,⁴⁰ where the Supreme Court affirmed the FCC’s authority to require broadcasters to air opposing and diverse views as part of the “Fairness Doctrine.” While the Court subsequently narrowed *Red Lion* to broadcasting based on the “unique physical limitations of the broadcast medium” which require the government to limit broadcasting to a handful of licensees,⁴¹ this does not foreclose regulation designed to promote exposure to diversity of perspectives. In

³⁷ 447 U.S. 74 (1980).

³⁸ 528 U.S. ___ (2017).

³⁹ Justices Samuel Alito and Clarence Thomas, joined by Chief Justice John Roberts, concurred in judgment but dissented from the “undisciplined dicta” of the majority opinion, expressly warning against importing the public forum doctrine into social media.

⁴⁰ 395 U.S. 367 (1969).

⁴¹ This concept, called the “Scarcity Doctrine” because the number of licenses is artificially limited and therefore “scarce,” is discussed at greater length in Chapter III below.

Turner I,⁴² the Court upheld the “must carry” regulation of cable systems (requiring them to carry broadcast channels) as a necessary infringement of the cable operator’s First Amendment right to choose what programming to carry because it served the important government purpose of promoting “the widespread dissemination of information from a multiplicity of sources.” While I will discuss these two cases and the First Amendment implications of common carriage in greater detail below, it is sufficient for this section to observe both that the government may clearly engage in sector-specific regulation to promote democratic discourse, and that it may — under appropriate circumstances — regulate private speakers to achieve these ends.

C. Regulation to Address Recurring Issues and Ensure Consistency.

Even when a distinct sector of the economy is not “clothed in the public interest,” sector-specific regulation can be useful to address recurring or endemic problems, promote desired consistency, and generally make the market function more efficiently. For example, the passage of “Lemon Laws” in the 1970s giving purchasers of used cars the right to return a defective car (a “lemon” in the industry jargon) addressed the recurring problem of consumers lacking a remedy if they discovered they had purchased a “lemon” rather than a “cream puff” (industry slang for a good used car) (Akerlof 1970). Definitions by regulators as to what constitutes “whole milk,” “lowfat milk” or “skim milk” assist consumers in making informed decisions without needing to investigate the unique definition for each brand, requiring every competitive retailer to advertise precisely what she means by “lowfat,” or meeting the need to reassure the public that anything sold as “milk” means pasteurized cow’s milk whereas milk from other animals requires specific labelling. Laws requiring cab drivers to prominently display their license promote accountability, while laws requiring all taxi cabs to accept credit cards permit consumers to hail cabs without worrying whether the cab requires cash (or, worse, discovering this fact after the cab driver starts the meter).

In some cases, of course, the private sector can reach its own set of standards without the need for outside regulation, but not always. Lemon laws, for example, were adopted precisely because the economist George Akerlof demonstrated that it was impossible for the market to develop a solution on its own. Additionally, as I discuss in Chapter VII on consumer protection, sectors may produce unique consumer protection problems that require sector-specific regulation to address. For example, robocalls and junk faxes are nuisances that general law does not address. They happen only as a result of having a telephone or a fax machine, and therefore require sector-specific regulation to address. In the realm of online services, including digital platforms, advocates refer to practices designed to trick consumers (such as disguising a box that gives consent to share data as if it were a box to exit the application) as “dark patterns.” These “dark patterns” are only

⁴² *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622 (1994).

possible because users have been trained to expect certain types of interfaces, which the platform designer subtly changes to trick the user.

In short, the trigger for sector-specific regulation need not hinge on whether the industry is sufficiently important so as to be “clothed in the public interest” or to protect constitutional interests. It can be as simple a thing as being able to buy a used car with reasonable confidence that the car will work, knowing that you do not need to carry \$100 to get a taxi cab from your home to the airport, or owning a fax machine without being flooded with unwanted faxes. What matters is that the problem is unique to an identifiable type of business, and the problem is not easily addressed by existing generally applicable law.

D. The Doctrine of Public Utility.

Finally, because the principle of “public utility” is often invoked as grounds for the regulation of digital platforms (particularly social media and search), I will briefly discuss the distinction between the two as generally used in modern regulatory practice. At the beginning of the 20th century, the terms “public utility” and “affected with the public interest” were used somewhat imprecisely, sometimes interchangeably (Burdick 1911a, 1911b, 1911c). As one scholar lamented, “so far as the courts were concerned, especially the United States Supreme Court, a public utility was *de gustibus non est disputandum* to the particular judge or majority writing the opinion” (Geffs 1937). Over the course of the 20th century however, with the rise of vastly expansive critical infrastructure necessary to meet the needs of modern society, the distinction between a “public utility” and a business “affected with the public interest” (and thus potentially subject to common carrier or other sector-specific regulation) began to change. Professor Barbara Cherry argues that “public utility” is a legal status that arises from a “grant of governmental privilege to provide service of public importance and necessity.” By contrast, common carriage is an economic status derived from the common law based on the public or quasi-public character of the service (Cherry 2016; Cherry and Pierce 2014).

I have argued that the modern U.S. concept of “public utility” roughly corresponds with the positive human rights framework more generally employed internationally (Feld 2015). Relying on Cherry, Noam and the legislative history of important federal statutes designating various sector-specific regulation as either “affected with the public interest” or “public utility,” I use the term “public utility” to mean a relatively small class of services considered so essential that it is the responsibility of government to ensure that everyone has access (Feld 2017). This small class includes things such as clean water and power. Critically, while all public utilities are common carriers, not all (or even most) common carriers are public utilities.

We therefore need not concern ourselves with whether specific digital platforms, or certain services such as search and social media, are “public utilities.” Despite 15 years of argument over the status of broadband and net neutrality thoroughly confusing the matter (Cherry 2014, Cherry 2006), sector-specific regulation — including common carriage — does not need a finding that the service is a “public utility.” It is enough to observe that digital platforms have clearly reached a level of prominence in our economy and in our lives to constitute a business “affected with the public interest.” Taxi cabs are regulated as common carriers not because they are monopolies or public utilities, but because of their public character and the fact that once one has stepped into a cab and the doors are locked the ability to argue with the driver about the fare in the face of new and sudden demands is profoundly limited.

By the same token, digital platforms have become integral to our economy, with some becoming impossible to avoid in any realistic way. Such a huge percentage of internet traffic flows through Amazon’s cloud networks that a person who blocks all traffic that originates or goes to an Amazon-owned IP address sees entire portions of the World Wide Web go dark (Hill 2019a). Cutting off traffic that flows to or from Google causes web traffic to your device to slow to a veritable crawl as applications and services constantly try to report their location and operation to the “Google mother ship.” (Hill 2019c) Businesses in the United States spent over \$65 *billion* dollars in 2016 on “search engine optimization” (SEO), which they deemed essential for trying to land at the top of Google’s search results. Approximately 68 percent of Americans reported getting some news from social media sources in 2018 (Pew Research Center 2018), with more Americans reporting getting news from social media than from traditional newspapers (Shearer 2018).

By any criteria one uses to measure importance in our lives, digital platforms clearly meet them as a sector in need of oversight. No other sector of the economy, with the possible exception of the physical infrastructure through which digital platforms reach their users, has so much power to affect us in so many ways, yet remains subject to such little public oversight. If we are to remain a democratic society where citizens genuinely govern themselves, this needs to change. As was the case of the grain elevators in *Munn v. Illinois*, we have no difficulty concluding that digital platforms are “clothed in the public interest” and that sector-specific regulation is required to protect consumers, promote competition and generally serve the public interest, convenience, and necessity.

CHAPTER III: LESSONS FROM THE HISTORY OF COMMUNICATIONS REGULATION.

Human beings generally, and lawyers in particular, prefer to regulate based on analogy and precedent. This derives in part from the fact that few things are wholly novel, and in part from the general reluctance of regulators to engage in bold experiments. But whether from prudence or undue caution, we find many useful lessons from the history of regulation of modern electronic telecommunications — and modern electronic media — when considering the proper framework for regulating search and social media.

A. Digital Platforms Share Many Important Economic and Social Commonalities with Electronic Media and Electronic Communication.

Digital platforms are in essence the next evolution in communication, just as radio and television broadcasting represented an evolution in mass media, and broadband an evolution in communication over the telephone (Whitt 2018). This is not to say they are identical in all respects. To the contrary, as I will explain below, they differ in critical ways that make it impossible simply to copy provisions from the Communications Act or regulations from the FCC and apply them mechanically to digital platforms. Nevertheless, the similarities are enough to make the lessons, and especially the overall public-interest concerns, relevant when considering the appropriate regulatory framework.

Economically, digital platforms, mass media and telecommunications are all two-sided platforms that enjoy significant (albeit different) network effects. They provide the critical service of bringing together willing buyers and willing sellers. They also do far more. Because human beings are essentially communicating creatures, services involving transmission of information permeate all aspects of our society. Thanks to the benefits of network effects, the more people who use any specific platform the more valuable that platform becomes, and the higher the cost of exclusion from the platform. Additionally, each platform exhibits the classic property of network effects of extremely low marginal cost per new user, allowing a platform to scale up rapidly and achieve dominance. They therefore raise similar competition concerns.

Additionally, each industry raises the same broad public interest concerns with regard to representation, news, and exposure to diverse perspectives. Platforms rely on algorithms that help users find content and recommend to users related content. Even when these platforms employ “neutral” criteria, in the sense that they do not favor affiliates or favor paid content but instead generate purely organic search results, the selection criteria allow sophisticated parties to manipulate these results, with profound implications for our democracy as a whole (Martinez 2018). Indeed, just as broadcast and cable networks must employ some form of ranking and selection in

the presentation of their programming, search engines (broadly defined to mean any system of ranking and recommendation) cannot be truly neutral (Bracha and Pasquale 2008; Tufecki 2016). Just like electronic media, therefore, even when there is no explicit political agenda, the same concerns about excessive commercialism driving out potentially important but controversial content and the concern that individuals will simply screen out any information or perspective that disturbs their existing worldview remain just as relevant (if not more so) to the world of digital platforms (Sunstein 2018; Pariser 2011).

It therefore seems logical to draw on the experience with telecommunications and electronic media for basic inspiration as to which policies are most likely to work. In doing so, however, we must not fall into the trap of mechanically applying solutions from the telecommunications or mass media world to digital platforms. While digital platforms share many attributes of both telecommunications and mass media, they combine them in new ways. They have new capabilities. The manner in which users interact with these platforms, while in many ways similar to how users interacted with traditional media, is also wholly different. In some ways, a person sitting in her home watching a Twitch channel on her smartphone may appear indistinguishable from a second person watching a cable television network on television. But everything, from how the programming originates, to the business models of the programmer and the platform, to the manner in which the audience selects and interacts with the programming, is wildly different. Those who learn the wrong lessons from history are often worse off than those who fail to learn any lesson at all.

More importantly, we must view the challenge of digital platforms and the need to find a suitable regulatory structure that promotes the public interest as part of an ongoing response to the evolution of new technologies that upend previous economic and social expectations built on older means of communications. Human beings are a communicating species. Our laws are simply words communicating rules to each other. Commerce exists solely because of our ability to record commercial transactions. Our culture exists in the form of literature, art and the archives of electronic media. Small wonder that changes in the technology of communication — from the invention of the written word to the printing press to the telegraph to the internet — have the capacity to fundamentally reshape our society.

The radical changes created by these technological evolutions take time to emerge. The telegraph was commercialized beginning in 1837 by Samuel B. Morse, but its power to revolutionize presidential elections, military strategy and news reporting did not become clear until the Civil War (Wheeler 2008; Wheeler 2019). The invention of the telegraph and its global deployment created, for the first time, the capacity for instantaneous global communications (Standage 1998). The telephone brought the reality of two-way instantaneous global communication directly into people's

homes, while the radio (and then television) enabled millions of people to participate in the same event for the first time in human history.

Technology is neither intrinsically good nor intrinsically evil. It concentrates the power of human beings to do both good and harm. In 1872, Walt Whitman would celebrate the telegraph in his poem “A Passage to India” as an instrument of divine will to bring about universal peace and harmony.

Lo soul, seest thou not God’s purpose from the first?
The Earth to be spann’d, connected by network,
The races, neighbors, to marry and be given in marriage,
The Oceans to be crossed, the distant brought near,
The lands to be welded together.

Four years later, the owners of Western Union would use their control over the telegraph to manipulate the election of 1876, ensuring (after considerable contention) the election of Rutherford B. Hayes (Lasar 2011). It became increasingly clear over time that while the telegraph potentially enabled new sources of news, created new opportunities for commerce, and vastly influenced the course of world events, control of the telegraph created an information gatekeeper capable of manipulating the news, manipulating commerce, and manipulating world events. By deciding which messages received priority over others, or simply by blocking messages or access to the telegraph altogether, control of the telegraph conveyed outsized and unprecedented power. Such unregulated power in private hands was ultimately deemed incompatible with the needs of society, and by the beginning of the 20th century the telegraph was being regulated as a common carrier.⁴³

Those who have followed the development of the internet and the rise of digital platforms over the last 30 years will recognize the pattern. We recoil in horror at the ability of governments and malicious actors to use social media to organize genocide, orchestrate riots, and foment racial and political violence (BSR 2018). We see around us the ability of both governments and individuals to undermine confidence in our institutions of democracy through cheaply manufactured and distributed fake news (Farrell and Schneier 2018). But we forget that 80 years ago the Nazi regime used a combination of the radio and telephone to organize and perpetrate Kristallnacht. The revival of the Ku Klux Klan, the formation of new racist hate groups, and the rise of lynchings of African Americans in the 1920s were a direct response to movies such as *The Birth of a Nation* and radio broadcasts from hate-mongers such as Father Charles Coughlin.

⁴³ See *Western Union Tel. Co. v. Call Publishing Co.*, 181 U.S. 92 (1901).

Again, this is not to say that digital platforms are indistinguishable from these previous innovations in communications and mass media, or that we should mechanically apply the old solutions to today’s digital technology. Anyone using the internet today understands that digital platforms are as different from the telephone or cable television as those technologies were from the telegraph. But these differences should not obscure the important lessons the last century and more of regulation of electronic media have to teach us. Accordingly, a brief overview of the lessons of the last 100-plus years of regulation of electronic media will inform the regulatory framework for digital platforms.

B. Two Streams of the Communications Act — Telecommunications and Media.

The successes and failures of nearly 100 years of regulation of electronic communications and mass media provide valuable insight into how to regulate digital platforms to promote the public interest. I shall draw on these directly in Chapter IV, and provide here a brief overview by way of introduction.

1. *Enduring Fundamental Values Drive Communications Regulation.*

The history of communications in the United States began long before the advent of modern electronic communications. The Constitution explicitly granted Congress the power to “establish post offices and postal roads.” James Madison, writing in the *Federalist Papers*, found this power so obviously good that he spent little time defending it. “The power of establishing postal roads . . . may, by judicious management, become productive of great public convenience. Nothing which tends to facilitate the intercourse between the States can be deemed unworthy of the public care.”⁴⁴

For the last 240 years, Congress has followed an explicit policy of promoting widespread and affordable access to the means of communications. In the 18th and 19th centuries, this meant the establishment of a national postal service with regulated rates. As the telegraph and the telephone became increasingly important means of communications, Congress explicitly adopted the goal of making these means of communications universally available and affordable. FDR called on Congress to create the Federal Communications Commission to provide a single point of federal regulation for the “utility” of communications (Paglin 1989). Section 1 of the Communications Act of 1934 (codified today at 47 U.S.C. §151) clearly states what Congress intended the new agency to accomplish:

⁴⁴ *The Federalist Papers* No. 42.

[T]o make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service, with adequate facilities at reasonable charges, for the purpose of the national defense, [and] for the purpose of promoting safety of life and property.

This statement provides us with three of the four fundamental values inherent in our national communications policy: service to all Americans; consumer protection (adequate facilities and reasonable charges); and public safety/national defense. Further examination of the provisions of the Act and the legislative history of the 1934 Act identify a fourth principle: enhancing competition to prevent bottlenecks in communication.

Given the regulation of telephone service as a “natural monopoly,” many will find it surprising that fostering competition in communications is a fundamental value. Nevertheless, regulation as a monopoly service was always considered a second-best option to direct competition. At the beginning of the 20th century, the Department of Justice launched an antitrust challenge to American Telephone & Telegraph’s increasing monopoly over long-distance telephone lines and its practice of using its control over long distance to crush local service rivals. This culminated in the 1911 “Kingsbury Commitment,” which, among other remedies, sought to overcome what we would now call the problem of how network economics creates bottleneck facilities. Under the Kingsbury Commitment, which was subsequently adopted by the Interstate Commerce Commission when Congress expanded the jurisdiction of the ICC to telephone and telegraph service, any existing local service could interconnect with AT&T’s long-distance network in order to compete with AT&T (Wu 2010).

This effort to foster competition in local telephone service ultimately proved too little, too late, though Congress continued to try to promote competition where possible. The legislative history of the Communications Act of 1934 reflects Congressmembers’ hope that progress in “radio telephony” and telegraphy would provide competition to AT&T’s national long distance monopoly and provide for competition at the local level (Paglin 1989). Congress also prohibited any combination of “direct or indirect” common control of a communications facility and a radio license if “the purpose is and/or the effect thereof may be to substantially lessen competition or to restrain commerce.”⁴⁵

⁴⁵ Communications Act of 1934 Section 314 (codified at 47 U.S.C. §314).

Congress applied these fundamental values to broadcasting as well as telecommunications. The Federal Radio Act of 1927 (FRA), incorporated into the Communications Act of 1934, reflected similar values in its provisions. For example, the Radio Act required the commission to distribute radio licenses so “as to provide a fair, efficient, and equitable distribution of radio service to each” of the “several states and communities.” As broadcasting was free, concern over rates and practices was not an issue. But the Radio Act (and subsequently the Communications Act) repeatedly required that the FCC grant licenses only where grant of the license would serve “the public interest, convenience and necessity.” Congress sought to limit the power of network effects in broadcasting as well, authorizing the commission to regulate the practices of “chain broadcasting” (the term at the time for broadcast network programming and station-affiliation practices). In the period following the adoption of the FRA, and even more so after passage of the Communications Act of 1934, the newly formed FCC fleshed out the meaning of serving the “public interest” and established rules based on the same fundamental values of universal service for all Americans, competition, consumer protection, and public safety.

In addition, because of broadcasting’s power to capture public attention and shape broad public opinion, its regulation (and regulation of subsequent electronic mass media) would acquire an additional value: protecting democracy by requiring coverage of local and national news, promoting diverse sources of news reporting, and prohibiting licensees from favoring specific political candidates. Through its power of license renewal, the FCC also acted to curb the use of broadcasting for promoting violence (particularly on the basis of race or religion), or as a tool for personal harassment (Columbia L. Rev. 1939).

In the electronic broadcast media, therefore, regulators focused on a specific list of public-interest goals that depended on the exclusive broadcast licensee to serve as a “trustee” of the license for the good of the local community.⁴⁶ The FCC adopted a mix of structural and conduct regulations to encourage the production of local and national news coverage and development of local and national programming from diverse perspectives. The objective of these regulations was less to promote economic competition than to reflect what communication lawyers short-handed as concern for “localism” (meaning production of local programming that reflected the interests and concerns of the local community) and “diversity” (meaning representation of diverse viewpoints from

⁴⁶ Congress and the FCC initially imposed these obligations as a consequence of the “unique physical properties” of radio, *i.e.*, that the technological limitations at the time made it impossible for more than a few broadcasters to operate in any geographic area at any specific time. This “scarcity rationale” justified regulation of speech in a manner usually considered inconsistent with the First Amendment. With the advent of cable television, however, regulation of electronic mass media moved beyond the scarcity rationale. I explore this and other First Amendment details in the section on content moderation in Chapter V.

a variety of sources and, following *Office of Communications of the United Church of Christ v. FCC*, efforts to encourage racial diversity in programming).⁴⁷

By contrast, the FCC regulated wireline (and later wireless) communication under a “natural monopoly” theory designed to keep rates just and reasonable, promote universal access, and maintain overall quality and stability of the network. Following a series of antitrust lawsuits in the 1950s and 1960s, the FCC began a lengthy series of proceedings designed to open the phone network to competition at various levels of the network — such as long distance, network equipment, and “enhanced services” such as data processing (Wu 2010).

2. The Telecommunications Act of 1996 — The Great Experiment in Regulating Through Competition and Convergence.

Congress passed the Telecommunications Act of 1996 in an effort to eliminate the remaining “natural monopoly” regulation of local telecommunications service and broadly encourage competition in traditional electronic media, voice telephony, and data services (Kearney and Merrill 1998). This effort to replace regulation with competition met with mixed success (Kimmelman and Cooper 2017; Cooper 2015; Cooper 2014; Benkler 2010).

On paper, the 1996 act’s underlying plan was straightforward. Congress generally modeled the statute on successful efforts by the FCC to open various segments of the voice and nascent data market to competition.⁴⁸ The act required incumbent local monopoly telephone networks (called “incumbent local exchange carriers,” or “ILECs”) to open parts of their physical network on a regulated, wholesale basis to competitors (a process called “unbundled network elements” or UNEs). All telecommunications providers were required to interconnect with each other, at rates at least initially monitored by the FCC and state authorities to ensure they remained “just and reasonable.” By shifting regulation to the network level and limiting that regulation to providing access for would-be rivals, Congress intended that competitors would quickly emerge even in segments of the market that had previously been considered a “natural monopoly.” To increase competition further, the 1996 act removed limits on vertical integration and encouraged existing incumbents in different lines of business (particularly incumbent cable operators and ILECs) to compete with each other through “convergence” of voice, data and video services.

⁴⁷ 359 F.2d 994 (D.C. Cir. 1966) (“*UCC I*”). See also *Office of Communication of United Church of Christ v. FCC*, 425 F.2d 543 (D.C. Cir. 1969) (“*UCC II*”). It is not my purpose in this article to revisit the long debate over the merits of the “public trustee” model and the structural regulation of the broadcast system. Rather, I will attempt to limit discussion to the observable effects of the regulation in terms of the industry structure created and the changes in the industry structure when the FCC and Congress began substantial deregulation in the mid-1980s.

⁴⁸ I describe those mechanisms that offer a direct model for platform competition in greater detail in Chapter IV.

Certain services, such as voice, did see intense competition, with resulting benefits to consumers. However, the enormous complexity of the regulatory scheme, combined with a political environment increasingly hostile to regulation, ultimately defeated the broader efforts to introduce broad-based competition. Industry lobbyists, with a healthy boost from an activist conservative judiciary, worked hard to make “deregulation” synonymous with “competition.”⁴⁹ For example, in *Fox Television Stations, Inc. v. FCC*,⁵⁰ a panel of the D.C. Circuit reversed the FCC’s determination during the Clinton administration to leave media ownership rules intact; the ruling vacated broadcast/cable cross-ownership limits as impossible to justify and remanded all other rules for further consideration. The court stated the mandate of the 1996 act “might better be likened to Farragut’s order at the battle of Mobile Bay (“Damn the torpedoes! Full speed ahead.”) than to the wait-and-see attitude of the Commission.”⁵¹

Following the election of George W. Bush, the FCC explicitly embraced deregulation as the means to facilitate competition. Michael Powell, President George Bush’s first FCC chairman, explained the FCC’s new philosophy at his first official press conference:

I do not believe deregulation is like a dessert that you serve after people have fed on their vegetables and is a reward for the creation of competition. I believe that deregulation is instead a critical ingredient to facilitating competition, not something to be handed out after there is a substantial number of players in the market.⁵²

For the next decade, the FCC followed this recipe of steady deregulation and permitting ever-increasing concentration in just about every market under its jurisdiction. Efforts to stimulate competition by introducing potential new services such as broadband over powerlines failed to flourish. As the FCC eliminated unbundling obligations and deregulated interconnection rates, incumbents squeezed out rivals. Ultimately, two ILECs, Southwestern Bell and Verizon, acquired the largest competing national providers, AT&T and WorldCom respectively⁵³ (Kimmelman and Cooper 2017). In most markets in the United States, consumers have a choice between two vertically integrated wireline providers of broadband, subscription video, and voice. Many Americans lack

⁴⁹ The role of an activist judiciary bent on imposing a specific economic philosophy on all regulatory activity regardless of congressional intent is generally underappreciated. Advocates and historians generally ignore the impact of constant judicial reverses on agency action generally. As an advocate of 20 years’ experience, I can state that the primary question concerning the FCC’s Office of General Counsel was rarely, “What did Congress intend,” but rather, “What will the D.C. Circuit permit?”

⁵⁰ 280 F.3d 1027 (2002).

⁵¹ *Id.* at 1044.

⁵² See Stephen Labaton, “New FCC Chief Would Curb Agency Reach,” *New York Times* (February 7, 2001). Available at: <https://www.nytimes.com/2001/02/07/business/new-fcc-chief-would-curb-agency-reach.html>

⁵³ Southwestern Bell would rename itself AT&T.

even this choice (Bode 2018). Deregulation led not to the promised land of competition, but to a national oligopoly and regional duopolies.

Just as deregulation produced consolidation rather than competition, it also compromised consumer privacy. Deregulation undermined network reliability, to the detriment of public safety. In rural areas of the United States, access to traditional telephone services has actually regressed from where they were prior to passage of the 1996 Act (MN PUC 2019). Nor were these voice services replaced by broadband or advanced mobile services. As of this writing, rural America continues to languish on the wrong side of the digital divide. Mobile service in many sparsely populated areas is unreliable or non-existent. Where rural broadband is available, it is generally slower, less reliable, and more expensive than in more densely populated areas (Smith 2018). Redlining, the practice of not investing in communities of color or low-income communities, has returned. In cities such as Detroit and Cleveland, suburban and expensive urban neighborhoods enjoy high-speed access or even fiber-to-the-home. By contrast, residents in poorer, predominantly African-American neighborhoods, make do with aging DSL (NDIA 2017).

The relaxation of media ownership rules, both in the 1996 Telecommunications Act (which eased existing limits on broadcast ownership and cross-ownership) and subsequently by the FCC (through explicit deregulation and waivers to permit mergers and acquisitions), had a similar deleterious effect. The anticipated competition the FCC said justified these steps never emerged. Instead, deregulation of the electronic mass media created a massive consolidation wave, with adverse impacts on the production of local news and media diversity generally (Feld 2018a).

Nowhere has the confusion between deregulated markets and competitive markets caused greater harm than in the cycle of deregulation, re-regulation, and subsequent deregulation of the cable industry. Despite a recommendation by the Carter administration to adopt common carrier regulations, the Cable Act of 1984 effectively preempted both state and federal regulation of nascent cable services. In less than a decade, the cable industry grew to a highly concentrated industry based on local monopolies and tight control of both sides of the cable two-sided platform. In addition to charging monopoly prices to consumers, cable operators used their control of customer “eyeballs” to demand ownership interests in video programming; used control of programming to prevent the emergence of competitors; and used their control over network attachments to exact additional fees for network devices such as cable boxes and remote controls. They also began to extend control into the previously independent market for video cassette recorders (VCRs).

The Cable Competition and Consumer Protection Act of 1992 briefly reversed some of the worst abuses of cable operators. Congress mandated the FCC develop a common interface for

cable systems, televisions and VCRs. This opened the customer premise equipment (CPE) market to competitors. As a result, the 1990s saw a surge in the availability of “cable-ready” televisions that combined VCRs and eliminated the need for a set-top box. Numerous regulatory changes effectively curbed the ability of cable operators to leverage their control of customers to prevent rivals from obtaining necessary programming. This, coupled with a further change in the law in 1999 giving direct broadcast satellite (DBS) providers access to local broadcast programming, allowed DBS providers DISH and DIRECTV to emerge as serious subscription video competitors. Direct rate regulation arrested the cycle of annual cable rate increases.

Unfortunately, the Telecommunications Act rolled back rate regulation, as well as restrictions on entering related communications markets. Although the 1996 act contained a statutory provision designed to update the successful interconnection regime for home equipment to include digital devices, the FCC failed to implement it. Cable went on to enjoy the general deregulation that accompanied the implementation of the act and its aftermath. As a result, cable providers retained their position as the dominant multichannel video programming distributors (MVPDs) and re-established control over adjacent markets such as set-top boxes (STBs) and digital video recorders (DVRs). Perhaps most detrimental to consumers and competition generally, cable operators became the dominant providers of residential broadband internet service. This has allowed cable operators to maintain monopoly profits by raising the cost of broadband to offset losses from declining cable subscribership and allows cable operators to advantage their vertically integrated services over those of competitors accessed via the internet. For example, by “zero rating” its own streaming video service, Comcast gives itself an advantage over other streaming services, for which the subscriber must either incur overage charges or limit broadband use generally.

These trends offer useful lessons for seeking to promote competition and protect consumers in complicated, networked markets. In particular, by comparing the failure of network unbundling in the United States with its more successful implementation in Europe (Benkler 2010), we learn a number of critical lessons applicable to digital platforms:

- Regulation should focus on eliminating or mitigating those elements that create monopoly, rather than focus on behavior modification.
- Rules should be as “bright-line” (*i.e.*, clearly delineate permissible from impermissible conduct rather than rely on adjudicating disputes after they arise) and self-executing as possible.

- Although agency oversight remains crucial to ensuring the effectiveness of rules, private litigants need private rights of action as well as agency enforcement to protect against political capture or loss of political will.
- New technologies are never a panacea for old problems, and they don't displace the need for regulation or structural remedies. Absent a watchful regulator, these markets lend themselves to concentration, cartelization, and segmentation.
- Installed customer base, access to the home, bundling, and the contest for users benefit existing incumbents in their efforts to take over adjacent markets.
- Sometimes, there is no substitute for rate regulation or other "natural monopoly" regulation.

Competition does not, in and of itself, provide adequate protection for consumers. Indeed, as the history of telecommunications following the 1996 act demonstrates, competition can create new consumer problems that require new regulatory protections. For example, the regulations that enabled consumers to switch their long-distance provider easily also enabled bad actors to switch consumers' long-distance companies without their consent (aka "slamming"). In addition, when a service is so critical as to rise to the level of a public utility, a sector-specific regulator is needed to ensure that all members of the public have affordable access to reliable services. Recent failures in the phone system with regard to rural call completion (Feld 2013) and "sunny day" 911 outages (Berman 2017) are a consequence of the introduction of competition throughout the voice supply chain. The critical nature of these services underscores the need to have a sector-specific regulator capable of acting swiftly to address these problems.

CHAPTER IV: THE STRUCTURE AND CONTENT OF THE DIGITAL PLATFORM ACT (DPA).

In this section, I set out the proposed structure of sector-specific regulation of digital platforms, with one critical exception. I will touch only briefly on the question of whether to create a new agency, or to expand the jurisdiction of an existing agency such as the FCC or FTC. Too much distracting debate in policy circles has focused on this question already, usually advanced by stakeholders principally concerned with how the answer maximizes their private interest. Rather, modelling after the Communications Act (and, to a certain degree, other comprehensive sector regulation such as the Federal Power Act), I propose to address the following subjects:

1. The general goals of the statute and problems the statute seeks to address.
2. The competitive framework. This consists of three separate but interrelated sections: competition between platforms, competition using the platform, and competition in the marketplace of ideas.
3. Consumer protection and public safety.

A. DPA Title I: Purpose and Public Interest.

The statement of purpose and how it defines the public interest in the context of comprehensive statute is not merely a hortatory expression of congressional intent (or worse, PR spin embedded in the statute). Rather, this statement of the specific public-interest goals supports the design and interpretation of the statute's substance, and provides the metric by which to measure the statute's success. As established above, sector-specific regulation of digital platforms has become necessary because these platforms have become integral to our lives. That has not happened because these technologies or the companies maintaining them are intrinsically bad. To the contrary, their overall value and utility is what make them part of our critical infrastructure. The purpose of comprehensive regulation is to align private incentives with the public interest to promote social welfare and prevent social harms. Doing so therefore requires a decent understanding of what, exactly, we mean by these lofty phrases in this context.

1. How Statement of Purpose Shapes the Entire Structure of the Statute.

Why does this matter? Consider the following contrasting formulations of the public interest and the goals of the statute. K. Sabeel Rahman sees the problem as involving the dangers of concentration of private power over vital services and infrastructure (Rahman 2018). Accordingly, he

proposes that regulation concentrate on “firewalling” (limiting the exercise of private power to stifle competition or abuse consumers), “public obligations” (negative or positive commands to ensure neutral and affordable access), and “public options” (basic versions of the critical service offered by the state or by a state-controlled entity). By contrast, former FCC Chairman Tom Wheeler frames the necessary regulation under social contract theory and posits the existence of a “network compact” in network infrastructure industries (Wheeler 2019; Wheeler 2014). This conceptualization focuses on creating greater mutuality between provider and public, where the goal is to promote positive feedback between the one and the other and ensure that benefits are equitably distributed to society as a whole. These conceptualizations are not mutually exclusive by any means, and both strive to limit abuses of private power while promoting social benefit for all. Rahman’s conceptualization, however, requires heavy and significant government involvement and an emphasis on constraining rather than incenting firms. Wheeler’s conception is more likely to rely on market incentives and treat the government’s role as providing oversight and requiring accountability by private actors, rather than depending on the government to set terms or provide services (although these remain options of last resort where necessary).

My point here is not to debate these specific approaches or argue which is superior. My point is to illustrate how the overall conception of the statute is foundational in shaping its structure and approach rather than merely a decorative flourish. It is the beginning of the analysis, not a *post hoc* rationalization for predetermined solutions.

As discussed above, the evolution of technology has forced us repeatedly to reconsider the overall goals of regulation in light of our fundamental values. Traditionally, we regulated telephone networks and other means of telecommunications to achieve universal access at affordable rates, protect consumers, and promote the use and utility of the network for commerce, education, and delivery of public services (such as public safety). As a society, we valued the network for what it *enabled us to do*. Accordingly, our regulation focused on ensuring equitable provision of services and network neutrality in providing services. We encouraged competition and innovation to further enable end users. We focused first on promoting competition using the platform, for example ensuring that anyone wanting to start taking business orders for flowers or mail-order catalogs or burglar alarms could have access to a toll-free number or other necessary components of the network on equal terms with any other provider, including the network operator itself. Only later did we begin to promote competition in different segments of the platform itself, such as long distance or local voice service.

By contrast, the regulation of mass media focused on values fundamental to our conception of democracy and self-governance. We valued the network for what it *provided to us* as passive users. Accordingly, the expression of our fundamental values in media regulation focused primarily

on trying to affirmatively promote “good” content (local news, children’s educational programming, representation for traditionally excluded and marginalized communities) and police “bad” content (deceptive programming of various types, advertising to children). Regulation also focused heavily on preventing control over the “marketplace of ideas,” either directly by the government (by prohibiting censorship and making license-renewal decisions subject to judicial review) or through a concentration of broadcast licenses in private hands. Regulations designed to stimulate the production of independent and local programming included requirements that broadcasters forgo any financial interest in their programming, that broadcasters make an hour of prime-time viewing available for non-network programming,⁵⁴ and that broadcasters maintain a local studio even if they primarily relied on network programming (Federal Communications Commission 2017).

Just as the expression of our fundamental values varied significantly between telecommunications and mass media, certain problems were prevalent on one platform but non-existent on the other. For example, broadcasting rules almost never addressed rate regulation because broadcast services were free, and competition among broadcasters moderated the cost of local advertising.⁵⁵ Telephone regulation, while extensively concerned with rates, never addressed issues of content moderation or content creation — a primary focus of media regulation. Regulation of telecommunications as a “common carrier” incapable of discriminating based on either content or customer identity solved many problems (such as encouraging competition by unrelated businesses using the platform) but left other problems unsolved. For example, it did nothing to prevent people from using telephones for harassment, or to commit fraud. Rather than compromise the neutrality of the platform or the privacy of users by requiring the platform to police conversations, Congress criminalized harmful behavior and created legal processes for telephone providers to cooperate with law enforcement.

Digital platforms combine aspects of both traditional communications and traditional mass media. We value them both for what they enable us to do **and** for what they provide to us as passive audiences or traditional consumers of goods and services. We seek to encourage competition between platforms (where possible) and competition by service providers using the platform. This is particularly true for social media. Like broadcast media (and cable) before it, social media enormously magnifies the power to amplify “good” content or “bad” content. Over the last five years we have seen the power of social media to spotlight police brutality and enable

⁵⁴ *Mt Mansfield Television, Inc. v. FCC*, 442 F.2d 470 (2nd Cir. 1971) This ruling affirmed both the Prime Time Access Rule (PTAR) and Financial Syndication Rule (Fin Syn). Fin Syn was not a complete prohibition on any form of ownership, but limited financial interest and other mechanisms of control a network could exercise over the distribution of its programming.

⁵⁵ The one exception is regulation of rates governing advertising by federal candidates, which imposes a common carrier-like obligation on broadcasters to offer advertisements on equal terms to qualified federal candidates if the broadcaster chooses to take advertising from any candidates. See 47 U.S.C. §315.

organization of a powerful social movement to fight it (Feld 2018c) go hand-in-hand with the power of social media to enable genocide and ethnic cleansing (BSR 2018).

I therefore recommend a public-interest statement and overall structure for the statute that draw on both these traditions. In keeping with Wheeler’s “network compact” approach, the statute should rely principally on aligning the interests of private actors with the public interest. The cornerstone of the proposed Digital Platform Act (as suggested by the name) is to promote (not merely protect) competition and embrace competitive market mechanisms. At the same time, drawing on Rahman’s conception as primarily limiting private power over critical infrastructure, the proposed DPA would include stringent and mandatory regulation of dominant firms and contain prophylactic regulation designed to prevent the accumulation of private power over critical infrastructure.

The fatal flaw in the efforts to promote competition through the Communications Act was the belief that deregulation was not a means to an end but an end in itself. Policy became obsessed with the danger of precluding potential “efficiencies” while tolerating ever increasing levels of concentration and the accumulation of private power. To use an analogy, every medical professional will tell you that eating healthily and exercising consistently contributes to a higher quality of life than employing *post hoc* remedies such as arthroscopic surgery for blocked arteries. The consistent evidence of network economics and the history of networked industries show a natural tendency to concentration in either monopoly or a handful of firms. Regulators’ insistence that “efficiencies” require problems to be clear and manifest before they can even begin to consider possible structural or behavioral rules has proven as damaging as the decision to wait to begin a healthy diet until after your first heart attack because you might accidentally miss out on a really delicious bacon burger.

Accordingly, the prophylactic and structural measures embedded in the statute (and the remedies authorized for future enforcement) should reverse the modern presumption that “first do no harm” means “take no action.” We should presume that concentrations of power — particularly over platforms essential to democracy and self-governance — are inherently problematic. This includes entrenching market power via vertical integration and extension by dominant firms into adjacent markets. Furthermore, whatever flexibility may be necessary for economic regulation, structural protections designed to affirmatively promote competition in the marketplace of ideas should not phase out over time or be subject to any kind of “effective competition” test. Certainly, the agency charged with implementing and enforcing the act should have the power to make exceptions and update regulations when evidence so dictates. But we should not expect that the market forces that created the current environment will have an expiration date beyond which structural regulation and ongoing oversight will no longer be required.

2. Specific Statement of Purpose of the DPA.

With all this in mind, I propose the following language for Section 1 of the DPA:

“For the purpose of providing to all Americans, regardless of race, sex [etc.] access to digital platforms for the purposes of enhancing opportunities for civic engagement, expressive freedom, economic and educational opportunities;

“For the purpose of promoting access to government services, and specifically to promote public safety;

“For the purpose of promoting competition so as to encourage the creation of new services and innovation generally to enhance the public welfare, and expressly to reduce existing unhealthy levels of concentration and prevent further or future accumulation of private power over critical digital infrastructure;

“For the purpose of promoting a robust and competitive marketplace of ideas with a diversity of views and production of the quality journalism and local information on which democracy and self-governance depend; and,

“For the purpose of protecting consumers from deceptive, unfair, unjust or unreasonable practices by operators of digital platforms or users of digital platforms, and to ensure the right of all Americans to use digital platforms without fear of threats of violence or harassment consistent with our rich tradition of freedom of expression and protection for controversial speech;

“Does Congress enact this Digital Platform Act.”

This language makes abundantly clear that the primary goal is to continue to preserve the value of digital platforms primarily for what they enable us to do, rather than reducing users to passive consumers of goods, services and content. This empowerment of end users to occupy the role of both creator and consumer is critical not merely to the social value of digital platforms, but to their continued economic growth and well-being.⁵⁶ At the same time, we recognize both the danger

⁵⁶ Defenders of deregulation often find it difficult to believe that markets may actually function more efficiently with regulation than without. A simple example, however, will suffice. We could allow market negotiation to determine whether to have a mechanism to regulate traffic on roadways. Cars would collide with each other until they developed a common set of recognized voluntary protocols to signal each other and resolve disputes over rights of way. Or we can require by regulation that traffic stop at particular intersections and signal this requirement with highly visible signs in an unusual shape and bright color, or through an automatic device rotating through a series of lights going from green (“proceed”) through yellow (“caution”) to red (“stop”). Nearly

of concentrating power in the platforms themselves, and the reality that the qualities that allow platforms to enable users also enable both good and bad behavior. It is the role of government, however, not the role of privately operated platforms, to determine what speech or activity is or is not permissible. This is not to say that platform operators have *no* role in protecting users. But the same moral, economic and practical concerns that motivate us to limit concentrations of economic power apply even more strongly to limitations on private police power.

3. Implementation: Creating the Competition Tool Kit.

Below, I outline a comprehensive set of regulatory mechanisms for inclusion in the proposed Digital Platform Act. Critical to understanding my proposed structure is understanding that this is **a set of tools** rather than a list of affirmative commandments and proscriptions applicable to every digital platform in every case. At the same time, however, we must recognize that these tools often work best when used in a complementary fashion. They are not intended to be substitutes for one another. Each proposed regulatory tool addresses a particular type of anticompetitive behavior or incorporates a rule historically found to enhance competition. Just as a screwdriver is not a substitute for a saw, the statutory tools to promote competition described in this section are not substitutes for one another.

This is not to say that Congress or the enforcing agency should not consider how these provisions potentially interrelate. Rather, Congress should make sure that the DPA contains all the tools needed to promote competition, while providing appropriate direction to the enforcing agency. To assure that the enforcing agency has all the necessary tools at its disposal to address a field as diverse, dynamic, and essential to our economy as digital platforms, Congress should make the **authority** of the agency to consider even the most draconian solutions crystal clear. History has shown that redundancy is far less a concern in statutory drafting than under-inclusiveness, and that agencies are more often reluctant to use their full statutory powers for fear of judicial reversal or political backlash than they are to overreach.⁵⁷

all drivers agree that imposing “rules of the road” by regulatory fiat has proven less costly and more efficient over time than negotiating voluntary “industry-based” standards at each intersection.

⁵⁷ As an advocate with two decades’ experience in the field of telecommunications and media regulation, I can say from personal observation that the hoary cliché in public choice theory that regulators seek to expand their regulatory authority as a means of accumulating power and perks — whatever truth it may have had decades ago — has little merit in today’s world. To the contrary, the backlash that follows every controversial decision — such as threatened or actual budget cuts, endless oversight hearings and congressional inquiries, and agency resources diverted to defend the decision from inevitable litigation — all work to persuade the rational, self-interested actor to keep as low a profile as possible. Nothing may be more telling than the statement of Ander Crenshaw (R-FL), then chairman of the House Appropriations Committee, to then-FCC Chairman Tom Wheeler in July of 2016: “This committee has held the FCC’s funding at a flat level since 2012, because we believe that the commission can and should do less with less. We believe you all should do a better job of managing your resources and focusing on your core operations. Unfortunately, the commission seems to be pursuing politically charged issues, rather than the mission-critical work of the FCC.” [<https://www.govinfo.gov/content/pkg/CHRG-114hrg97181/pdf/CHRG-114hrg97181.pdf>] To the extent that public choice theory genuinely employs rational actor theory rather than magical thinking about regulatory boogeymen, it should reflect the actual environment

B. Competition Between Platforms and Competition on the Platform.

When analyzing the question of competition using digital platforms, it is important to consider competition among platforms providing the same type of service (e.g., between Google Search and other general search providers such as Bing), competition between the platform and some subset of services (e.g., between Google Search and specialized “vertical” search platforms such as Yelp), and competition among businesses using the platform (e.g., two businesses selling goods through the Facebook Marketplace). This last category can also include competition against a vertical affiliate of the platform itself (e.g., between retailers and Amazon’s competing retail products). I call the first type of competition “between platforms competition,” and the second type “on platform competition.” This distinction is primarily useful for determining how to implement the competition-promoting tools discussed below.

A form of this debate has been a feature of U.S. telecommunications policy debate since former FCC Chairman Michael Powell distinguished between competition through overbuilding as *intermodal* competition and competition through resale of unbundled network elements as *intramodal* competition (Blevins 2009). Champions of intermodal competition argue that allowing rivals access to the dominant provider’s platform keeps these rivals from building their own competing platform. They also claim this creates a disincentive to investment by the dominant platform. Apparently, they believe the suggestion in rational-actor theory that businesses will seek to take advantage of any revenue opportunity applies only to hypothetical competitors rather than actual incumbents.

The evidence in Europe and the United States contradicts the purely intermodal approach for telecommunications. Comparison of both retail rates and investment in infrastructure supports the theory that regulation creating intramodal competition confers broad benefits to consumers and does not, in fact, create disincentives to investment in network upgrades (Benkler 2010). But even if we assume the validity of the intermodal competition argument in physical networks, there appears to be no reason to suppose that it applies to digital platforms. Additionally, as in telecommunication, nondiscrimination and neutrality are important tools to ensure competition on the provider side of the two-sided market — even in the presence of competition between platforms.

The primary importance of the distinction will come with implementation of the competition mechanisms outlined below. Some of these, such as data portability, are more useful in encouraging intermodal competition between platforms. By contrast, nondiscrimination is usually a concern only

confronted by regulators: consistent unremitting hostility to regulation whose goal is to protect the public interest at the expense of powerful incumbents.

for entities using a specific platform to compete against one another or against a subsidiary of the platform.⁵⁸ Policy makers should therefore be clear if they intend these tools to promote a particular type of competition or to promote all types of competition.

Tim Wu has identified a basic framework for using regulation to promote competition (Wu 2017b). He identifies a taxonomy for regulatory tools that is useful here. I generally adopt this taxonomy with some modification.

Separation or Quarantine Rules — designed to break longstanding ties or bundles.

Switching Cost Reducers — designed to prevent lock-in and to facilitate customers' ability to move from one platform to another.

Cost of Entry Reducers — In addition to making it easier for customers to switch from one platform to another, regulatory regimes can reduce the cost of entry in other ways. This may include what Wu calls “pro-competitive deregulation,” such as eliminating rules that significantly raise the cost of entry. I have expanded this category beyond deregulation to recognize that the explicit goal is to encourage new entrants and facilitate competition. This may mean explicitly waiving rules for new entrants as opposed to generally deregulating.

Equalizers — Rules designed to equalize the conditions of competition, such as common carriage. Wu breaks out Patent Reducers as a separate category, but reducing the ability to exclude or raise the cost to rivals through control of essential patents (or of other intellectual property, such as copyright over exclusive “must-have” content) is basically a form of equalization.

Information Transparency Regimes — As discussed in Section I, the ability of a platform to control the information available to both sides of a transaction on a multi-sided platform is one feature of digital platforms. Consumers' inability to clearly associate higher cost or negative experiences with the platform, rather than with the other party or parties to the transaction taking place on the platform, is a significant barrier to consumers “voting with their feet.”

As noted above, and as also observed by Wu, the best mechanisms for promoting competition are the most straightforward and, to the greatest extent possible, self-executing. This should not obscure the fact that creating such solutions may require considerable regulatory effort.

⁵⁸ There can be other reasons for nondiscrimination. For example, we prohibit discrimination on the basis of race or sex in places of public accommodation as an expression of social values rather than to enhance economic competition. Indeed, one reason to mandate some form of nondiscrimination may be to prevent manipulation of news or suppression of speech.

For example, development of the standard telephone jack following the *Carterfone* decision took years of rulemaking and required additional regulations to prohibit other forms of discrimination against competing services. Telephone number portability, another significant pro-competitive innovation that is seamless from the perspective of the user, required creation of an entirely new management system for telephone numbers (which, in turn, has given rise to its own set of issues, such as number spoofing). We must therefore recognize that while simplicity of use and ease of implementation are important design elements for rules designed to promote competition, creating these systems may take considerable initial regulatory oversight and enforcement. At the same time, we must not lose sight of the fact that when the systems are in place, they should be as simple as possible for competitors and consumers to use and to enforce.

Using the Wu framework, we can identify the following statutory provisions to promote competition between platforms, and on platforms where appropriate. Some regulations will serve multiple purposes, whereas others will only be relevant in discrete situations.

DESCRIPTION	TYPE OF REGULATION	HOW IT WORKS	Potential Problems	Solution
Data portability	<i>Switching Cost Reducer</i>	Allows consumers to move data from one service to another easily, enhancing choice and enhancing social graph knowledge of rival.	Privacy of those connected to switching customer. Originating service retains information.	Limit use of social graph. Permit deletion of information by customers or third parties whose privacy is potentially compromised
Fair Reasonable and Nondiscriminatory (FRAND) licensing terms for Standard Essential Patents (SEP)	<i>Equalizer, Entry Cost Reducer</i>	Prevents lockout of rivals or artificially raising rivals' costs.	Difficulty in determining which standards are essential and what are "fair" and "non-discriminatory" terms.	Agency oversight using criteria established by Congress. Self-executing with defense of FRAND/SEP available against infringement claims. Mandatory arbitration by adjudicatory panel or by selection of parties.
Open Application Programming Interface	<i>Equalizer, Switching Cost Reducer</i>	Allows rivals to access/replicate necessary elements/functions, Reduces switching cost by creating interoperability among rivals.	Commodification of product. Stagnation in industry. Potentially creates cybersecurity vulnerabilities.	Apply only to firms capable of imposing significant cost of exclusion (COE). Mandatory cybersecurity standards and practices to reduce risk.

Customer Proprietary Network Information	<i>Equalizer, Switching Cost Reducer</i>	Allows firms to interconnect and exchange necessary information without exposing proprietary information to rivals. Allows customers to switch easily between parties.	Can be difficult to enforce.	Audits. Structural Separation. Arbitration and private rights of action.
Limits on Vertical Integration/ Horizontal Cap (including possible break ups)	<i>Equalizer, Separation and Quarantine</i>	Prevents concentration of power, or extension of power into related markets.	Difficult/impossible to control organic growth, especially in global markets. Lines of related business very blurry. “Starfish” problem. Situations when vertical expansion necessary or has clearly demonstrable benefits beyond “efficiencies.”	Permit organic growth subject to agency oversight. Agency review of acquisitions under industry specific criteria (“public interest standard”). Clear definition of “core” function where possible.
Product Unbundling/Structural Separation	<i>Separation and Quarantine</i>	Prevents tying/lock in. Allows for development of multiple competing product markets. Creates benchmarks to verify nondiscrimination.	May be cumbersome and difficult to enforce. May create security issues.	Careful design, but recognize there will be trade-offs.
Nondiscrimination	<i>Separation and Quarantine, Equalizer</i>	Prevents platforms with COE from favoring own products on the platform, capturing new related markets, or extorting rents in exchange for access.	Platforms often must inherently “discriminate” to perform their functions. Difficult to detect/police.	Limit nondiscrimination to harmful economic discrimination. Establish criteria for “black box” testing. Right to audits conducted by agency or third-party testers.
Privacy By Design	<i>Information Transparency, Separation and Quarantine, Equalizer</i>	Limits stockpiling of information to what is necessary to provide the product or service. Prevents “cross-subsidy” of services and cross-marketing.	Line-drawing as to what constitutes information necessary to provide the service. Possible loss of valuable historic data. Limits research into new product design and research. May degrade customer experience. Policing and discovery.	Permit customer information audits. Liability for breaches and liquidated damages for stockpiling “unnecessary” information or improper sharing. Permit aggregate data collection and clear exceptions for research.

Due Process Rights	<i>Information Transparency</i>	Ensures that rivals cannot be cut off or suffer unreasonable discrimination. Ensures rivals using essential inputs from a dominant platform of sufficient stability to conduct business	Can be cumbersome, must be administered.	Multiple due process regimes already exist. Limit application to entities with COE.
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Not every one of these mechanisms will apply in every circumstance. Although digital platforms are definable by common characteristics, they represent a highly diverse field in terms of business case, size, and market power. Rules important to constrain the market power of a massive online retailer such as Amazon will not be necessary for the vast majority of much smaller platforms trying to compete with Amazon. To the contrary, since the goal is to facilitate competition, there are often excellent reasons to exempt or more narrowly tailor application of specific rules to smaller, competing firms.⁵⁹

At the same time, a number of these rules must apply to all digital platforms to achieve the goals of the statute. In the telecommunications arena, for example, number portability and mandatory interconnection apply to all providers. Congress must determine in the first instance which rules are necessarily universal to create a competitive and consumer-friendly landscape, and which are necessary to curb specific instances of market power. Congress must then empower the enforcing agency to take the necessary steps, guided by the statutory language and the goals of the statute. Granting an administrative agency discretion does create a degree of risk. While the frequent criticism of agencies as subject to industry capture or other elements of public choice theory have an outsized influence on public policy, they do contain some truth. Nevertheless, especially in a field as diverse and central to the economy as digital platforms, granting the enforcing agency some degree of discretion is critical.

⁵⁹ Indeed, legislators should regard the “level playing field” arguments frequently made by incumbents with considerable suspicion. The entire point of imposing greater regulatory oversight on dominant firms is to mitigate the real-world advantages incumbent firms enjoy, so as to advance competition and the overall goals of the statute. Similarly, the argument that this is “picking winners and losers” is absurd. Our national critical infrastructure is not supposed to be a game of Monopoly in which a single winner triumphs. If we agree that a competitive market is, in fact, the goal of the statute, then the statute must be designed to create a competitive marketplace that remains competitive. It is as harmful for the market to produce a single dominant winner or winning oligopoly as it would be for the government to anoint one by regulatory fiat.

In short, the statutory remedies listed here are tools to achieve the ends of the statute. They are not ends in themselves. But even if a tool is rarely used, it must still be included in the statutory toolbox for those times when it is needed.

1. Data Portability.

Numerous advocates have proposed allowing users to transfer their personal data, particularly the “social graph” information about their interactions with others. Doing so would reduce switching cost between platforms and help equalize competition among platforms (especially for digital advertising). Data—particularly individualized profiles — is important to platform size and revenue, and hence important to creating possible competitors to the largest platforms. Social graph portability, and data portability generally, are often compared to telephone number portability — an innovation of the Telecommunications Act of 1996 that allows customers to transfer their existing phone numbers to a new carrier. This analogy is somewhat misleading, however, since the seamlessness from the consumer perspective today (it was not seamless when initiated, and carriers were permitted 10 days to port a number to another carrier) often leads people to underestimate the effort and expense required to enable portability.

Developing the system to support telephone number portability was involved and complicated. It required a complete restructuring of how telephone numbers were administered, and how the telephone system routes calls. It also enabled an unanticipated new realm of services that have both useful and nefarious purposes, such as “burner phones” with temporary phone numbers. This is important to appreciate in light of one of the chief objections to mandating data portability. It sounds good, but it is difficult to engineer and potentially expensive to engineer. Additionally, opponents raise concerns about privacy — particularly if the contacts of the transferor do not wish to have their information exposed to whichever third-party service the transferor wishes to receive the social graph.

It is therefore useful to recall that similar issues were raised with regard to number portability and were overcome — with enormous benefits to competition. Indeed, the better comparison to data portability is not necessarily number portability, which required massive changes to the entire call routing system, but data portability for telecommunications services. Beginning in the 1970s, the FCC mandated that carriers must make a customer’s information available to rivals at the direction of the customer, including providing sufficient technical information to enable interconnection with customer premise equipment (CPE). These rules evolved into the comprehensive scheme in 47 U.S.C. § 222 and FCC regulations.⁶⁰ Of relevance here, Customer Proprietary Network Information

⁶⁰ I will discuss CPNI in considerably more detail below.

(CPNI) regulations limit both the purposes for which the receiving carrier can use the information and the purposes for which the *transferring* carrier can use the information.

It is easy to overlook the importance of this last feature. Consider a platform aware of a request for a data transfer that uses the fact of the request to try to retain the customer or to guess which services the new platform offers. The “losing” platform will also be aware of the ability of the “winning” platform to market to other customers based on the newly received social graph and may try to interfere with these marketing efforts. Similar restriction on the use of information provided to enable a data port, including the fact of the request itself, should be included in mandatory data portability regimes.

It should be noted that several of the largest platforms are engaged in a voluntary standard-setting exercise for data portability through the Data Transfer Project (Data Transfer Project 2018). While industry-led standard-setting in response to regulatory mandates for interoperability has yielded positive results in the past (for example the development of the standard phone jack), history shows it also has significant dangers of which regulators must be wary. Cable operators have consistently thwarted implementation of device interoperability through means such as onerous licensing terms (Bergmayer 2007); including complex, expensive and otherwise consumer-unfriendly requirements for interoperability to function; or, as a last resort, simply refusing to participate in the standards-setting process (FCC 2016). Any statute should therefore address these concerns. For example, the statute should clearly prohibit the behaviors described above, as well as any other means of forestalling adoption and implementation of an effective standard. The statute should also require the relevant agency to approve any industry standard, authorize the agency to make any changes in the standard necessary to achieve the purpose of easy consumer data portability, and create a private right of action for competing platforms or consumers encountering deliberate obstruction in application of the data portability mandate. Congress should also consider requiring a relevant federal agency to create a default standard and permitting the agency charged with enforcement to approve additional privately developed standards that meet the statutory criteria.⁶¹

Portability of the social graph differs from traditional data portability in fields such as healthcare and financial services because it inherently includes the personal data of others. I may wish a new social network to know who my friends are and how often I communicate with them. My friends, on the other hand, may not want yet another platform to know about their existence at all,

⁶¹ Voluntary standards may become tools for dominance if they gain sufficient power through network effects or other means to become the industry default (Hein 2013). If private standards are permitted, the agency must have the obligation to ensure that these standards do not become means for limiting competition or extracting monopoly rents.

never mind glean whatever information it can from their association with me. This problem becomes especially acute for the individual wishing to be let alone who has multiple friends joining a platform. As more of my contacts transfer data to a new platform, that platform learns more about me. This is the very nature of “big data,” and is the reason that transfer of the social graph enhances competition for targeted advertising dollars and minimizes switching cost by moving my preferences and dislikes to the new platform.

Part of the solution to this problem, of course, is generally applicable strong privacy laws. But adoption of data portability should not wait on a global solution. The new statute should limit the use to which the receiving platform can put the information. It should prevent the receiving platform from selling the acquired third-party information to others, or from using that information for any purpose unrelated to providing the service to the transferring party. The receiving platform could use the information for targeted advertising to the transferor (subject to strong, generally applicable privacy protections), but not for marketing to the third party. Additionally, the receiving platform (or the originating platform) should notify the third party about the information transfer and provide the third party the opportunity to delete information about itself acquired by the receiving platform within some reasonable time frame. These requirements strike a suitable balance between a general interest in competition and the legitimate desire of individuals to retain reasonable control of their data.

As an additional means of enhancing competition, the right to transfer data should be coupled with a customer’s right to require the “losing” platform to delete the customer’s social graph. Unlike the situation where a customer moves a phone number from one carrier to another, the “losing” platform still has access to all the previously gained customer information. This presents two dangers to competition. First, to the extent acquisition of massively outsized databases of personal information confers a competitive advantage, allowing the losing platform to retain the customer’s information safeguards the losing platform’s advantage, even if the competing platform now also has the information. While this provides some boost to competitors, it would further enhance competition if the departing customer could actually “take” their information with them rather than simply copy it onto an additional platform.⁶²

The second reason involves a trade-off in policy between temporary consumer advantage versus the long-term benefit of promoting competition. In the telecommunications world, the losing carrier may not use the request to port a phone number to another carrier as an opportunity to

⁶² This is an important distinction in the telecom universe between how number portability works and how customer proprietary network information (CPNI) works. When a customer ports a number, that number is transferred from one carrier to another. By contrast, when a customer requires a carrier to transfer information to a different provider, the carrier still has the information and retains the customer as a network subscriber.

dissuade the customer from switching. Prohibiting this behavior, called “customer retention,” represents a determination that the long-term advantages to consumers of promoting a competitive marketplace are more valuable than any short-term benefit a consumer may accrue in a tug-of-war between competing carriers. Congress should consider, or empower the implementing agency to consider, whether the value of enhancing competition overall by permitting customers to “take” their information from the losing carrier outweighs the potential benefits to consumers of allowing platforms to use the customer’s social graph to engage in targeted advertising or other customer retention efforts.

2. Open APIs.

Achieving data portability will require development of common application programming interfaces (APIs). APIs provide the points of interconnection needed for interoperability and other kinds of interaction with the platform (Riley 2017; Palfrey and Gasser, 2012). Open APIs enhance competition by preventing lock-in and by providing third parties access to those elements of the platform necessary to compete with the platform and with one another. This is similar to the ways network unbundling facilitated competition by third-party providers or competition on the platform, and development of the standard phone jack permitted competition in the device market.

“Open” in this context can mean several different things (Whitt 2018). It is sometimes used to mean non-proprietary software or hardware. For example, anyone can use the standards developed by the Internet Engineering Taskforce (IETF) without agreeing to a licensing agreement. It can also mean “non-proprietary” subject to certain conditions. For example, the GNU General Public License imposes certain conditions on anyone using software. “Open” can also mean proprietary but generally available to anyone willing to agree to the licensing conditions. This last definition of “open” creates significant concerns for competition. Facebook, for example, has “open” APIs subject to changes in the licensing agreement, and critics have alleged that Facebook uses these terms to limit competition (House of Commons 2018). In the communications realm, cable operators have used licensing agreements in “open” proprietary standards developed by CableLabs, the industry’s standard-setting organization, to render them essentially unworkable for potential competitors (FCC 2016; Dunne 2008).

At the same time, mandating that all APIs must be open creates significant security concerns in both development and implementation (Riley 2018; Palfrey and Gasser 2012). It is not that open standards are inherently less secure than proprietary standards, as some have claimed. Rather, as discussed by Palfrey and Gasser, mandating universal interoperability creates risks as well as benefits. This may include granting unauthorized access to information or systems. It also creates a

danger common to monocultures: A single vulnerability may affect the entire sector using the same API.

There is a critical difference between interconnection in telecommunications and open APIs for platforms. Telecommunications is a commodity service. It is designed to transmit information of the sender's choosing to a point of the sender's choosing without any alteration or interference. Providers compete on the basis of price and quality of service. Platforms, by contrast, might offer commodity services such as messaging, but also strive to create unique goods and services. Mandating open APIs may enhance competition by creating common, easy-to-use interfaces that reduce switching cost by preventing the need for users to learn entirely new operating systems. But it may also stifle the positive benefits of competition, such as innovation, if taken too far.

These dangers are often exaggerated in policy debates and declared by incumbents to be insuperable barriers and/or unacceptable costs of regulatory action. The history of success in standardized interfaces and interoperability, both when voluntarily adopted by the market and when mandated by government, belies the argument that open standards and interoperability invariably impose costs. Indeed, as demonstrated by Palfrey and Gasser and Mozilla's Chris Riley, interoperability frequently enhances innovation and reduces overall costs. Oversensitivity to these exaggerated concerns makes regulators too timid. So, while the statute should recognize potential costs, it should be more focused on requiring regulators to be sufficiently aggressive than on obsessing about regulatory restraint.

The statute should strike a balance between mandating interoperability in some cases, and authorizing the enforcing agency to take additional steps to encourage or require interoperability where necessary. Nevertheless, since proprietary APIs can provide important benefits, such as security, the statute should not prohibit proprietary APIs as a general matter. Rather, the statute should explicitly authorize the enforcing agency to require that platforms adopt open APIs when doing so would further the statutory goals of competition (including competition in the marketplace of ideas) and consumer protection. This should include clear authority to require non-proprietary APIs. In the case of proprietary APIs subject to licensing, the agency should have the power to set license terms, prohibit certain types of terms, and alter any specific licensing agreement as necessary to further the goals of the statute. This should include explicit authorization to ensure that licensing fees are just and reasonable, and to prohibit licensing terms that are unjust or unreasonable or that unjustly or unreasonably discriminate.

3. Intellectual Property as “Essential Facility:” FRAND, SEP and Other Types of IP Bottlenecks.

We may expand the problem of licensing terms beyond APIs to other forms of intellectual property, such as patents and copyright. As a general matter, society promoted innovation by providing inventors with the exclusive rights to their inventions and authors with the exclusive right to their writing. As software has become increasingly dependent on both patents and copyrights, firms have found ways to use their intellectual property to thwart competition in ways the patent and copyright statutes never intended.⁶³ This problem is particularly acute when an industry standard, even if generally open, incorporates a patent or patents held by a dominant firm. This problem is generally known as “standard essential patents,” or SEP. Over the years, antitrust authorities have addressed anti-competitive practices with regard to SEP by requiring fair, reasonable, and non-discriminatory licensing terms (FRAND) for the patents necessary to implement the standard (Li 2016).

Antitrust has focused on patents, particularly standard essential patents, because they have become the most obvious means by which firms can establish dominance through the standard-setting process rather than by developing superior products or otherwise winning in the competitive marketplace. Additionally, the enormous number of patents in any complex device or application, combined with the problem of patent holders threatening infringement suits over dubious patents, have made control of patents a common tool in a number of industries to erect and maintain barriers to competition. Patents as part of industry standards are not the only tool that may be leveraged in an anticompetitive fashion (Lemley, Richardson, and Oliver 2017). For this reason, the power of the enforcement agency to require licensing on fair and reasonable terms should not hinge on whether the patent is part of an industry standard, or otherwise meets the definition of “standard essential patent.” This is particularly important when a patent holder uses its control over patents to delay entry by potential rivals, particularly in related markets. For example, if Amazon were to acquire a portfolio of patents related to “home networks/digital assistants,” it could use them to threaten potential retailers of rival systems. Even if the claims of infringement are weak, history shows that many would-be retailers (especially small businesses) will simply avoid the cost and risk of litigation rather than carry a potentially infringing product.

⁶³ It is not my intent in this paper to review the debate on the role of intellectual property in innovation and competition generally. It is merely my intention to focus on the generally accepted view that there have been cases where firms used their control over intellectual property to thwart competition, and that antitrust authorities and regulators have, on occasion, addressed this problem without seeking to debate how rare or widespread the problem is. It has been particularly true in the worlds of telecommunications and mass media, where Marconi used his patents to delay the entry of competing radio equipment manufacturers, Edison used his patents to attempt to cartelize the early movie industry (Wu 2010), and cable operators used their control over programmers to thwart the entry of competitors such as Direct Broadcast Satellite (DBS) (Feld 2010).

Nor should the ability of the enforcement agency to set licensing terms or otherwise prevent abuse of intellectual property be limited to patents. As just discussed, control over copyrights — both for software and for “must-have” content — can be used to thwart competition and consumer choice (Dunne 2008). Antitrust authorities and regulators have also addressed abuse of copyrights through similar mechanisms. In some cases, such as music licensing for streaming services, a royalty board sets a rate for a mechanical license (FMC 2016). In other cases, such as cable programming, the statute prohibits “unfair” methods of preventing rivals from obtaining programming. For a limited time it also required licensing of programming affiliated with incumbent cable operators on reasonable terms (47 U.S.C. §548). In addition to general remedies, media competition has recognized the concept of “must-have” programming, *i.e.*, programming essential to attracting sufficient viewers to compete with dominant providers (Feld 2017b).

To prevent platforms from using intellectual property to thwart competition, the statute should expressly empower the enforcing agency to require licensing of any patent or copyright on reasonable and non-discriminatory terms, including express authorization to conduct rate hearings or prohibit unjust and unreasonable licensing conditions. The act should also make available a private right of action, which would include the ability to recover triple damages (as permitted under antitrust law) on a finding that a firm abused a standard essential patent or copyright. To assist in compliance and enforcement, the statute should set explicit criteria to guide both the enforcing agency and the courts in determining whether the patent or copyright is “essential.”

4. Customer Proprietary Network Information (CPNI).

Consumer privacy in electronic communications predates the Communications Act of 1934. Specific provisions such as 47 U.S.C. §605 (prohibition on publishing or intercepting any electronic communication) and the Cable Privacy Act, codified at 47 U.S.C. §551, reflect traditional concerns that people and businesses need to have confidence that their private communications will remain genuinely private. In some situations the very existence of a communication, let alone the address information or information about contents, can be personally or commercially sensitive.

CPNI is not merely designed to protect consumer privacy and proprietary business information generally. In the 1970s and 1980s, in an apparently unrelated trend, the FCC began opening up the traditional telephone network to competition on multiple levels. This included requiring incumbent local carriers to interconnect with rival carriers, deliver calls from a competing network to the incumbent’s customers (and vice versa), and generally let these competitors access customers on a carrier’s own physical network. In addition, in a set of orders called the “Computer Inquiries,” the FCC required the telephone companies to provide wholesale access to their networks for providers of “enhanced services” (Candeub 2018).

Whether or not the telephone company offered a competing “enhanced service,” nothing prevented the carrier from learning everything about the enhanced services offered over its networks and then offering its own competing services (with the additional ability to favor its own offering over that of the unaffiliated enhanced service provider). To take an example, suppose I want to start an alarm service that will send a signal to an alarm center and call the police or fire department if a burglar alarm or smoke alarm is triggered in the customer’s house. To do that, I have to have access to the customer’s phone wiring. I need to plug my system into the phone network and have the phone network send the call to the alarm center when the alarm goes off. This is impossible without the cooperation of the phone company. Furthermore, in order to integrate with the phone system, I not only have to reveal to the phone company that this telephone user subscribes to an alarm service, but I also may have to reveal to the telephone company all kinds of details about how my alarm technology works.

As an alarm company, I regard all this information as proprietary — and with good reason. The phone company can add up alarm companies’ customers on its system and determine whether or not there is sufficient demand to start its own alarm service. By learning details about how the alarm-company technology and network routing work, which the alarm company often must share to ensure compatibility with the network, the phone company can easily replicate this for its own rival service. It can then use its knowledge of which network subscribers already subscribe to an independent alarm service to offer them special deals to sign up for its own service. Indeed, the phone company doesn’t even have to wait for the rival to start serving the customer. Once a rival tells the phone company, “I need to connect a customer at this address using this phone number,” the phone company knows that this subscriber is interested in the service and can market directly to the customer even before the rival starts providing service. Alternatively, if a rival is seeking customer information to pull a customer away from the carrier (say, to transfer their phone service to my competing voice service), the carrier can reach out to try to prevent the customer from switching. Even if the carrier does not start its own service, it can sell this information to rival alarm companies or otherwise warp competition.

The FCC created the precursor to the CPNI rules to address this issue (Feld *et al.* 2016). The rules prohibited a carrier from using the information revealed to it by another carrier or enhanced service provider if the new competitor revealed that information in order to provide service to a carrier’s customer in the first place. Basically, the rules prevent a carrier like Verizon from acting on information provided by a competing carrier, like AT&T, or another business, like ADT Security, that relies on the phone carrier's network. Additionally, a carrier is required to provide information to a competitor when so directed by the customer. In other words, if I tell the phone company, “I’ve

decided to go with a competing alarm company, so give them my phone information so they can provide me with service,” the FCC requires the phone company to honor my request.

The CPNI regime proved so useful that Congress in the Telecommunications Act of 1996 made it mandatory by statute.⁶⁴ It has also been included in the telecommunications chapter of multiple trade agreements so as to facilitate competitive entry by American carriers in foreign markets. The DPA must include CPNI protections for providers using the platform to reach customers, and for direct competitors with the platform — as touched on in the section on data portability. This does not, of course, mean simply replicating the existing telecommunications regime. Rather, the DPA should incorporate the following two principles derived from the success of CPNI in the telecommunications world:

i. Distinguish between what the platform needs to know to provide service and what the platform “knows.”

One of the key insights of CPNI is to regulate the *use* of information rather than the collection of information. This recognizes that a network operator is not an individual human being who either “knows” something or doesn’t. It is quite possible to build systems that do not share information with each other, limiting access to those systems and purposes permitted by law and consistent with privacy. An example: Apple creates encryption for its iPhones that Apple cannot break without hacking the phone. Apple has set up this phone encryption so that the iPhone “knows” the user password in the sense that when the user enters the password the phone makes the appropriate functions or information accessible. But Apple itself doesn’t “know” the password because the iPhone is designed to prevent Apple from having access to that information. Once Apple makes and implements the design choice, it doesn’t matter what Apple wants going forward, even when pressured by law enforcement. No one at Apple can access the password without hacking the phone unless the customer shares the password (Feld 2018).

Similarly, we can require companies to structure their networks so that they collect information necessary to provide the service (or provide other functions, such as targeted advertising) but lack the ability to share this information with other systems or with any actual persons. Mark Zuckerberg’s testimony before various congressional committees illustrates how Facebook does this now. As Zuckerberg testified, he cannot personally discover a specific person’s geolocation or other personal information because the system is not designed to allow him to collect and organize the information that way. This does not stop Facebook from “knowing” a customer’s location and delivering a very specific targeted advertisement, or stop Facebook from

⁶⁴ Congress also used the opportunity to enhance customer privacy, but that is not relevant to the discussion here (Feld *et al.* 2016).

giving others access to customer information by interconnecting directly with Facebook’s data collection system. (These third parties can then analyze and organize the information as they choose, subject to law or contractual agreements.) Well-drafted legislation can require platforms to structure their systems so as to prevent such third-party access — or permit it if the customer so directs.

Legal protections are valueless without some means of enforcement. It is next to impossible for a platform user to know whether a platform is compliant with the law. Fortunately, this is not a new problem. Whether as a matter of contractual enforcement, or as a matter of regulation, a number of solutions to this problem have been tested in the real world. This includes a right for platform users and regulators to audit the information a company holds about them and how it uses it. For individual users, this would be modelled on the Cable Privacy Act, which requires the cable operator to provide at the customer’s request a copy of all personal information collected, the purpose for which it is collected and how it is used.⁶⁵ The FCC requires telecommunications carriers subject to CPNI regulations to provide certified reports of compliance.⁶⁶ Penalties for violation must be substantial enough to act as a genuine deterrent. This includes a private right of action with a sufficiently large liquidated damages clause.⁶⁷

ii. *Limit the ability to collect information from third-party providers of content or services that use the platform to reach customers.*

As I stressed above, a critical aspect of CPNI is often overlooked. CPNI affirmatively promotes competition by protecting the information that potential competitors must provide to the carrier in order to reach the carrier’s subscriber and provide the service. This does not prevent the carrier from “knowing” the information for acceptable purposes. For example, if the carrier collects payment for the third party by putting the fee on the subscriber’s bill, the carrier certainly “knows” all the information necessary to collect from the customer and remit to the third-party provider. But it cannot use that information *for any other purpose*.

The EU Antitrust Authority has launched an investigation into whether Amazon uses the information it collects as part of its third-party vendor program to develop its own line of competing products (White 2018). Application of a CPNI regime would prevent Amazon and any other digital platform from using third-party information to promote its own products or unfairly compete with third parties using its platform. Nothing about this would prevent the digital platform from policing third-party content, products, or services to prevent anything dangerous, nasty, inappropriate, or

⁶⁵ 47 U.S.C. §551.

⁶⁶ 47 C.F.R. §64.2009.

⁶⁷ A liquidated damages clause provides for a minimum remedy without the need to prove actual damages.

contrary to the policy of the platform. Again, the critical distinction is between the information the platform collects and can use only for limited purposes (what the platform “knows”) versus giving the platform unlimited discretion to use the information it collects (what the platform “knows it knows”).

iii. CPNI is a complement to consumer privacy protection, and must be compatible with broader privacy protections.

Although the Communications Act has several provisions designed to protect consumer privacy, CPNI is unique in combining both consumer protection provisions and competition enhancement (Feld *et al.* 2016). As a consequence, this has sometimes generated confusion, and occasional conflict, over whether CPNI is primarily about protecting consumer privacy or enhancing competition. For example, the easier to obtain CPNI, the easier it is for the consumer to purchase a competing enhanced service. At the same time, however, it becomes easier for scammers, stalkers, and other bad actors to gain access to the information (FCC 2007). Alternatively, as demonstrated in recent debates with regard to the FCC’s role in protecting consumer privacy, decision makers may focus entirely on the consumer protection role of CPNI to the exclusion of its role in promoting competition (Feld 2018). The ongoing effort to draft comprehensive consumer privacy protection at the state and federal levels increases the possibility of confusion and conflict over the role of a CPNI-like statute in promoting both competition and consumer protection.

Congress and the relevant agency should be aware of this confluence and potential conflict in drafting and implementing legislation. It should be clear that whatever CPNI-like provision is adopted to regulate platforms, it is intended to work in a complementary fashion with other consumer privacy safeguards. This will require some inherent flexibility in the statute, with a clear statement of congressional intent aimed at limiting the discretion of both the relevant agency and any reviewing court: Platform-specific CPNI is not intended to preempt other generally applicable laws or regulations protecting consumer privacy. This may sometimes require the duty to enhance competition to yield to the broader interest of protecting consumer privacy. This is therefore a case where it is better to require Congress to recalibrate the balance by design where necessary than to leave the matter open to agency discretion.

5. Horizontal Caps and Limitations on Vertical Integration — Including Possible Breakups of Existing Platforms.

As discussed above in Chapter I, antitrust does not impose a single defined limit on how large a firm may grow or impose a specific limit on the ability of firms to move into vertical markets. Sector-specific regulation, particularly regulation of electronic media, generally does. This

addresses not simply the question of “monopoly” but of “monopsony” — a situation where a single buyer becomes large enough to exert unhealthy influence on the market (Kahn 2017). Additionally, the structure of many markets lends itself to “duopoly,” a situation where two firms control the market and can either avoid competing with each other or limit competition in ways that would otherwise benefit consumers, or to “oligopoly,” control by a small number of dominant firms able to avoid intense competition on price and other factors. Standard antitrust attempts to capture these possible dangers through various metrics, but because of its general nature, antitrust does not provide a maximum limit applicable in all cases (DOJ FTC 2010; Galston and Hendrickson 2018).⁶⁸

By contrast, sector-specific regulation lends itself quite well to setting specific limits on size. Because sector-specific regulation addresses one defined area of the market, Congress or the delegated regulator can study the market or its submarkets and determine whether concentration above a specific level might undermine the public interest goals identified by Congress in the relevant statute. In these situations, regulators set “caps” on a firm’s size as a percentage of the market, whether by acquisition or by organic growth.⁶⁹ This has been particularly true for regulation of electronic media, where Congress and the FCC have prohibited levels of horizontal concentration far below those generally considered acceptable by antitrust, in order to encourage the production of news and perspectives from diverse and antagonistic sources.⁷⁰ For the same reasons, both Congress and the FCC have imposed limits on vertical expansion, sometimes referred to in the regulation of electronic media as “cross-ownership limits.”

Indeed, in the communications sector Congress and the FCC have sometimes gone so far as to require divestiture of horizontal or vertical assets without any evidence of an antitrust violation in order to promote an important public-interest goal. For example, when the market for daily newspapers collapsed in the 1960s and 1970s, the FCC imposed a “cross-ownership” limit on ownership of a broadcast license and a daily newspaper in the same market. Despite having initially favored cross-ownership of broadcast licensees by newspapers to encourage production of quality news, the FCC determined that the change in the market required a change of policy. As part of this change in policy, the FCC required divestment of broadcast licensees by local daily papers in

⁶⁸ As discussed in Chapter I, traditional antitrust has used a number of presumptions over time. This is different from setting a specific numeric limit on horizontal growth or on vertical expansion.

⁶⁹ It is important to note that Congress and agencies, for a variety of reasons, may decide not to impose divestiture even when setting a horizontal or vertical limit on an existing market. Additionally, Congress or agencies may sometimes permit organic growth but prohibit growth by acquisition (although, as we shall see, the case for permitting organic growth is far stronger in the vertical context than in the horizontal context). In all cases, it is important not to confuse the question of horizontal caps with the question of dominance. A firm may be at or under the ownership cap, but still have sufficient market power (either on its own or in combination with other firms) to warrant regulation as a dominant firm. Imposition of a specific limit on market share is only one tool to limit monopsony power.

⁷⁰ See *Turner II* (“Federal policy, however, has long favored preserving a multiplicity of broadcast outlets regardless of whether the conduct that threatens it is motivated by anti-competitive animus or rises to the level of an antitrust violation”). I shall discuss the history and importance of this “diversity principle” in greater detail in Chapter V.

approximately 20 markets. The Supreme Court affirmed this demand for divestiture in the absence of any antitrust violation as a reasonable exercise of agency discretion aimed at encouraging diverse and antagonistic sources of news in every major local market.⁷¹

i. What Do “Horizontal Caps” Mean in Cyberspace?

Traditionally in communications, the FCC and Congress have imposed limits on the number of subscribers a company may have or may serve. For example, in broadcasting, Congress in the 1996 act set the maximum audience reach of any entity holding FCC licenses at 35 percent of the national population. Setting a horizontal ownership cap works to avoid levels of concentration considered uniquely dangerous for the industry, as distinct from general levels of antitrust concern. This is particularly important in two-sided markets and markets subject to network effects. In both cases, the platform’s value (and therefore the cost of exclusion) is directly proportional to the number of customers on the platform.

The nature of platforms makes it difficult to apply horizontal ownership limits through a cap. For communications industries, a cap on customers or audience reach can be enforced by limiting the firm to a specific geographic area and prohibiting further expansion. This permits organic growth within the license area. But digital platforms are delivered via the internet and potentially serve global audiences. It is difficult to limit subscribers without harming the basic functionality and value of many digital platforms.

Horizontal ownership caps for digital platforms may be possible by acting to limit the vendor side, rather than the customer side, of the platform. This would essentially limit the share of the relevant market a platform can control before it is prohibited from acquiring any additional direct competitors. Some may argue that existing limits imposed by antitrust law make this redundant. To the contrary, such a horizontal limit would provide a necessary backstop to existing antitrust law, particularly in the wake of *Ohio v. American Express*.⁷⁷ A hard limit on acquisitions would express congressional judgment as to what constitutes a dangerous level of concentration without needing to prove a negative impact on consumer welfare to an increasingly skeptical judiciary.

This is particularly important in light of the concern that dominant firms prevent the emergence of competitors by purchasing them when still small. Because the firm being acquired has extremely small market share, the acquisition does little to change the absolute level of concentration as measured by the Herfindahl-Hirschfeld Index (HHI), the standard measure used by U.S. antitrust agencies (DOJ FTC 2010). Although the antitrust statute does not mandate the use of

⁷¹ *FCC v. National Citizens’ Committee for Better Broadcasting*, 436 U.S. 775 (1978).

⁷⁷ 585 U.S. ____ (2018).

HHI, it is difficult to persuade antitrust enforcers — and for them to persuade a federal court — to block a merger where a horizontal transaction does not directly result in a substantial increase in concentration as measured by HHI.

Furthermore, as noted in Chapter I, the peculiar nature of digital platforms makes it difficult to measure their market power using traditional metrics. Not only can it be difficult to define the relevant market, but the lack of obvious barriers to entry or significant switching cost can mitigate the argument for blocking a merger. Current antitrust law considers not merely existing competition, but the relative ease of entry of new competitors (a factor called “contestability”). This reflects the theory that potential competition keeps an existing monopsonist from abusing its market power as effectively as actual competition. Under this theory, if competition is waiting in the wings and can enter the market with relative ease, a monopsonist seeking to raise prices will simply attract new competitors anxious and eager to take advantage of its greed and poor judgment (Wu 2018).

This theory has been subject to considerable criticism, notably that markets are rarely as contestable as merger applicants and regulators assume (Baker 2015; Caves and Singer 2018). Nevertheless, merging firms continue to justify their steps to create highly concentrated markets by pointing to other companies that do not at the moment provide competition but appear likely to do so. Some courts have continued to find these arguments persuasive despite all experience to the contrary.⁷² As a consequence, antitrust law alone does not reliably prevent dangerous levels of concentration.⁷³ This is particularly worrisome in the case of social media. It has long been the policy of the United States to prevent levels of concentration in media far below those considered a violation of the antitrust laws.⁷⁴

The history of the caps on national broadcast ownership and cable horizontal ownership illustrates why it would be safest for Congress to set a specific limit. In both cases, aggressive judicial decisions by the D.C. Circuit struck down FCC efforts to maintain the broadcast cap⁷⁵ and effectively prevented the FCC from ever establishing a cable horizontal ownership limit.⁷⁶ Because of the deference owed to congressional line-drawing, a limit set by Congress has a greater likelihood of withstanding judicial scrutiny. But this creates some difficulty. The concept of “digital platform” covers numerous areas of commerce ranging from retail sale of goods to social media. A single horizontal ownership limit is unlikely to make sense for all digital platforms. Indeed, because

⁷² *United States v. AT&T*, 310 F. Supp. 3rd 161 (D.D.C. 2018).

⁷³ Indeed, acceptance of this “contestability” argument has the perverse result of making the emergence of this potential new competition even less likely, given the resulting market power concentrated in the merged firm.

⁷⁴ *Turner II*.

⁷⁵ *Fox Television Broadcasting Stations v. FCC*.

⁷⁶ *Comcast Corp. v. FCC*, 579 F.3d 1.

the limit will not apply to subscribers or customer reach, it will need to be specifically tailored to the seller side of the multi-sided market.

Congress could establish a numeric horizontal limit on a specific market by legislative fiat, in the same way that it established a 35 percent audience reach for broadcasting in the 1996 act. To use digital advertising as an example, Congress could say that, as a matter of law, no business may control more than 30 percent of the total digital advertising market. This approach addresses the range of platforms that compete with each other for digital advertising. The 30 percent limit reflects the traditional metric of market power in antitrust established in *Philadelphia Bank* and reflected in the current Hirfindahl-Hirschfeld Index (which assumes a market is highly concentrated at HHIs of 2500). Although this metric is frequently mitigated by other factors in U.S. antitrust analysis, it is still used in more rigorous antitrust regimes, including Europe's. Because the goal is to establish a horizontal limit that affirmatively promotes competition, adoption of the 30 percent limit as a matter of congressional line-drawing is rational and appropriate in this case.

As this example demonstrates, however, even the apparent simplicity of a legislative limit on market share raises numerous questions (Verveer 2018). For example, how do we define the "online advertising" market? What does it mean to "control" 30 percent of it? Should the prohibition simply be on growth by acquisition, or on organic growth as well. To return to the broadcast television "audience reach" test, the limit does not require divestiture if a broadcast licensee's reach grows above the limit through organic population growth in its designated market areas, but if a licensee seeks to make new acquisitions, the actual audience reach is used and the merging firms must either divest to get below the limit or seek a waiver. It is not entirely clear how this could work with digital platforms, since unlike broadcast stations, digital platforms do not cover defined geographic areas and cannot reduce market share by divesting licenses, outlets, or other physical assets. Still, horizontal limits on ownership have proven sufficiently important in constraining market power that finding a way to apply them to digital platforms deserves serious consideration.

Congress should make clear that ownership limits, however defined, and whether a function of legislative fiat or agency rulemaking, do not eliminate the need to analyze dominance by determining whether a firm enjoys market power based on its high cost of exclusion. The point of the horizontal (or vertical) limit is not to create a concentration safe harbor, but to set a clear concentration limit. COE is designed to supplement traditional market power metrics, such as market share, and reflects the numerous cases in which traditional measures of market power have proven inadequate. It is a supplementary tool to identify firms with market power, whose exclusion of individuals would harm their ability to participate in the digital public sphere. Accordingly, imposing a horizontal cap does not eliminate the need to determine whether a firm remains dominant or requires additional regulation to limit its ability to impose a high cost of exclusion.

ii. Unique Concerns Around Vertical Integration: ICE v. The Black Swan.

In the last 40 years, regulators and the courts have shifted from deep suspicion of proposed vertical integration to deep suspicion of arguments against vertical integration (Baker *et al.* 2019; Salop 2018; Frieden 2003; Farrell and Weiser 2003). Farrell and Weiser describe the reasoning behind this shift: an argument that a vertically integrated business — even one with monopoly or market power in its own market — is better positioned to internalize complementary efficiencies. Farrell and Weiser dub this the theory of “internalized complementary efficiencies” or “ICE.” Farrell and Weiser propose several circumstances in which, even accepting that ICE describes the general case (a concession that more recent scholarship has challenged), an incumbent with market power would have stronger incentive to use vertical integration in an anticompetitive fashion or might fail to recognize the efficiencies. The history of telecommunications regulation suggests several additional factors that weigh against permitting vertical integration.

New considerations suggest that vertical integration in digital platforms raises even greater concern than in telecommunications markets generally. As noted in the definition of digital platforms in Chapter I, digital platforms are unusual in that a combination of vertical features can enhance the overall complementary network effects they enjoy, thus increasing dominance by enhancing the cost of exclusion. For example, Amazon’s addition of Prime video streaming and Twitch does not simply make it a better competitor against YouTube in the distinct video streaming market. It enhances Amazon’s overall value and the overall value of its Prime membership, enhancing its dominance in the online shopping market. Similarly, the value of Prime in the online shopping market enhances the value of Amazon’s Prime streaming service.

Traditional antitrust, with its siloed view of distinct markets, is indifferent to Amazon’s dominance in a related field. If anything, it regards as a net positive Amazon’s ability to use its dominance in one market to enhance its ability to compete in a related vertical market (Tucker 2018). This reasoning underlay the recent court decision permitting the acquisition of Time Warner by AT&T over the objections of the Department of Justice. AT&T argued that combining its massive market share in traditional multichannel video programming distribution (through DIRECTV) and its massive market share in the mobile broadband and voice market (through AT&T Wireless), would enable it to use Time Warner’s content to compete better in the related advertising market (against Google and Facebook) and online streaming (against Netflix).⁷⁷ Whatever the merits of this theory in non-platform markets, it is clear that extending a platform into a related market increases its overall

⁷⁷ *United States v. AT&T*, 310 F. Supp. 3rd 161 (D.D.C. 2018).

power by enhancing direct and complementary network effects that in turn boost the overall cost of exclusion from the platform.

While it is tempting to create a blanket rule against vertical integration (at least by dominant firms), a handful of cases provide sufficiently strong counter-examples to warrant a presumption against vertical integration rather than a complete bar even in the case of dominant firms. A recent example of such positive vertical integration is Google Fiber — and the need for broadband providers to offer bundled MVPD services to attract customers. Despite subsequent difficulties in the face of incumbent resistance, Google Fiber demonstrated the enormous, pent-up demand for gigabit connectivity, and dramatically stimulated the deployment of fiber-to-the-home — a significant public-interest benefit (Levin and Downes 2018). This and other “black swans”⁷⁸ suggest that, at a minimum, non-dominant firms should be permitted to integrate vertically and that there may be other circumstances in which vertical integration may be necessary to achieve important public-interest goals.

iv. Vertical Integration Limits.

Throughout the history of regulation of electronic communications and electronic media, we have had limits in place preventing certain types of vertical expansion. Generally, these have restricted both acquisition and organic expansion into related markets. Over the last 40 years or so, antitrust law has looked more favorably on vertical integration than on horizontal integration. Whether or not this trend is warranted (Salop 2018), the history of networked industries generally, and communications and electronic media specifically, makes clear that vertical integration in these industries harms competition (Farrell and Weiser 2003; Frieden 2003). In communications and electronic media, control over access to customers conveys power in related markets. Dangers range from foreclosing rivals through control over critical inputs to eliminating potentially disruptive rivals. This last concern is particularly true in the digital platform market. As discussed above, digital platforms can rapidly expand and add new services. Platforms in different lines of business may therefore become competitors to each other.

Additionally, because network effects make size so significant, and because digital platforms are multi-sided platforms, adding apparently unrelated lines of business can contribute significantly to a platform’s dominance. For example, classic tools of antitrust would deem search, email, and

⁷⁸ The problem of the Black Swan is a proof of the problem of inductive reasoning and the principle of falsification proposed by the philosopher David Hume. Hume asked how many white swans one would have to see before concluding that all swans were white. The answer is that it is impossible to state definitively that all swans are white on the basis of inductive reasoning, but the observation of a single black swan can falsify the absolute statement that “all swans are white.”

As discussed *infra*, if it were merely a case of hypothetical efficiencies, or modest efficiencies, the rational trade off would be to prevent vertical integration altogether as simply posing too great a risk to competition. But the handful of cases discussed demonstrate that under certain conditions important public-interest goals cannot be achieved without permitting vertical integration.

video distribution to be completely unrelated markets. They would offer no reason to question the acquisition of YouTube by Google. But because Google relies primarily on advertising, the addition of video distribution powerfully augments Google's dominance in the targeted advertising market. Additionally, the millions of new users and searches on YouTube contribute additional data, reinforcing its dominance in search. The potential ability to favor its own video products and feature them prominently in search results illustrates how the apparently unrelated vertical acquisition reinforces dominance in Google's core markets while simultaneously enhancing its new product's dominance in the video market.

The DPA should therefore reverse the current antitrust bias in favor of permitting vertical integration through acquisition, since it is not harmless to competition. (As discussed below, there are reasons to take a more relaxed view with regard to organic extension into vertical lines of business.) Instead, the DPA should adopt a presumption against vertical acquisitions, at least by dominant platforms. As a general rule, the larger and more dominant the firm in one line of business, the less willing the enforcing agency should be to permit vertical acquisition in another line of business. Congress should strengthen this presumption by listing factors demonstrating the merger will serve the public interest and requiring their consideration. Congress should also list factors the reviewing agency may **not** consider as justifications for an acquisition.

Importantly, the DPA should reject the trend of the last two decades to allow mergers, despite existing levels of concentration and dangers to competition, on the speculation that competition will surface at some point after the merger. (For example: Despite long-standing federal policy disfavoring such integration, the D.C. Circuit Court decided in *United States v. AT&T* to permit AT&T to absorb video programmer Time Warner and combine it with MVPD DIRECTV on the grounds that Netflix and other online streaming services would eventually become direct competitors of MVPDs.)⁷⁹ History shows that the promised competition rarely appears.⁸⁰ These merger justifications are based on the belief that allowing a dominant firm to acquire another firm permits "efficiencies" that the merged firm will pass on to consumers rather than use to enhance its dominant position, and that despite the dominant firm's newly enhanced ability to block new entrants, rivals will nevertheless enter the market. The DPA should reject this argument as fundamentally contrary to the goal of enhancing competition. Even if regulators impose time-limited behavioral conditions to encourage the emergence of competition, any potential entrant faces all

⁷⁹ Online services such as Netflix generally offer only "video on demand" (VOD) content, rather than the full suite of live programming channels plus VOD offered by MVPDs. Netflix and other online video distribution services (OVDs) have not traditionally been considered direct competitors to MVPDs. While it is true they compete for "eyeballs," so do movies and broadcast television, which are also not considered direct competitors with MVPDs. The difference is that MVPDs offer a unique suite of live programming and VOD in the home. See discussion of the problems with using the "attention market" as an antitrust market in Chapter I.

⁸⁰ In the case of AT&T, for example, the combined firm has now raised prices several times since the district court rejected the government's challenge to the merger, despite insistence at trial that the resulting merger efficiencies would reduce prices to consumers (Hiltzik 2019).

the previous barriers **plus** the additional market power now exercised by the merged firm. Worse, permitting such mergers invariably sets off an “arms race,” as the remaining competitors in both vertical markets seek to combine so as to “better compete” with the newly vertically integrated firm. Permitting an otherwise harmful merger because “potential competition” or “future competition” will someday make the market competitive again should be prohibited as contrary not merely to public policy, but to common sense.

Nonetheless, the DPA should permit organic **addition** of vertical services, even when it does not permit vertical **acquisition**, subject to structural separation discussed below. This exception addresses several potential objections to a complete ban on vertical integration (as opposed to limits even on organic growth in horizontal limits).⁸¹ First, it is often difficult to judge whether a related market is entirely separate. While it is easy to distinguish between search and video distribution, it is much more difficult to distinguish between general search (sometimes called “horizontal search”) and specialized search engines focused on specific markets, such as local search or travel search (sometimes called “vertical search”) (Duhigg 2018; FTC Staff Memo 2012). A prohibition on acquisition, particularly by dominant firms, solves this problem.

Additionally, the same factors that warn against allowing firms to acquire potential rivals through vertical acquisitions argue in favor of letting platforms expand vertically through their own efforts. For example, many advocates criticized antitrust authorities for allowing Facebook to acquire WhatsApp, in part because WhatsApp might have become a competitor to Facebook given its rapid growth and expansion from a pure texting service to a more general social media service. But to make that competition a reality, WhatsApp would have needed to be able to expand into the broader social media market — which would be impossible if the DPA banned all vertical integration.

Finally, when breaking into a highly concentrated market entails considerable cost and significant risk, it may be that only a firm dominant in one line of business will risk challenging the dominant firm via vertical expansion. For example, Google needed to expand into the mobile operating-system market to prevent complete dominance by Apple in the smartphone market. Until Google entered the market with Android, Apple enjoyed near monopoly control over the emerging application market as a result of its control over iOS, the dominant mobile operating system at the time.⁸² Similarly, Google Fiber helped to stimulate the deployment of gigabit residential fiber at a

⁸¹ Recall that we limit horizontal expansion so as to encourage head-to-head market competition and protect against the formation of monopsony power. Unlike vertical expansion, we have no problem identifying a firm engaged in direct head-to-head competition. Nor do we have any concern that competing services or wholly new services will fail to emerge in the context of horizontal growth. Although there may be cases where permitting organic horizontal growth may be justified as a matter of public policy (e.g., expansion into unserved or underserved markets), the case for permitting organic horizontal growth is far weaker than for permitting organic vertical expansion.

⁸² The subsequent failure of competition demonstrates the limits of relying solely on encouraging dominant firms to compete with each other. No additional firm successfully entered the mobile operating system market,

time when neither member of the residential broadband duopoly — cable and DSL — believed there was a market for high-speed connections. While these do enhance the overall value of the network as a whole, and therefore increase the cost of exclusion from the platform as a whole, the offsetting social benefits may justify permitting greater concentration of market power.

I recognize this is a subset of a standard debate in competition policy, the “false positive” versus “false negative” debate (Woodcock 2017). Robert Bork and subsequent champions of the affirmative benefits of consolidation stress the danger of “false positives,” cases where government intervention prevents mergers that represent no harm to consumers but instead offer potential benefits through the enhanced efficiencies of the combined firm. Opponents of existing levels of consolidation argue that antitrust enforcement should worry much more about “false negatives,” cases where concerns about losing hypothetical efficiencies cause antitrust enforcers or courts to permit mergers that ultimately prove harmful (Baker 2015). I believe that antitrust enforcement generally (and recent court decisions specifically) place too great an emphasis on the supposed danger of false positives and show inadequate concern for the danger of false negatives. Nevertheless, this debate remains unresolved, and a fair discussion of limits on vertical integration should at least acknowledge the possibility of false positives and weigh whether it is appropriate to provide mechanisms to address this concern.

v. *Consideration of Structural/Behavioral Conditions for Both Horizontal and Vertical Acquisitions.*

Antitrust agencies and sector-specific regulators with merger review authority have in many cases sought to allow mergers and acquisitions that promise efficiencies, while imposing structural conditions, such as divestment, or behavioral conditions requiring certain safeguards or prohibiting certain types of activities, to limit the harms. Both conservative and progressive antitrust scholars have criticized this approach. For conservatives, the danger chiefly lies in transforming antitrust into a new form of generalized behavioral regulation, thus undermining its utility as the least restrictive means of regulating markets. Progressive scholars argue that for a variety of reasons these behavioral remedies are rarely effective. Antitrust agencies are generally not structured to act as behavioral regulators and have a poor record of enforcing merger conditions (Hawley 2019; Kwoka 2017). Since these conditions are often time-limited based on the unreasonably optimistic theory that the market will evolve over a predictable period of time to make future exercise of market power impossible, even firms that scrupulously observe their merger conditions need only wait until the conditions expire before exercising their enhanced market power.

despite efforts by well-funded companies such as Microsoft, creating a duopoly in that market. Nevertheless, we should not ignore the positive effects of Google providing a competitor offering a very different operating system and business model.

Regulators and scholars who support the use of remedies argue that choosing only between permitting a merger and prohibiting it fails to serve consumers well. Particularly in the case of structural remedies, allowing a business to divest in some markets (or from some lines of business) can genuinely enhance competition by strengthening remaining competitors or creating new ones. For example, the conditions attached to the transfer of spectrum licenses from cable operators to Verizon Wireless included a requirement for Verizon to divest licenses to rival firm T-Mobile. This enhanced T-Mobile's ability to compete aggressively in the market, while providing Verizon with a more diverse set of spectrum licenses to improve the operation of its wireless network. Additionally, because regulators allowed the agreement between Verizon and the consortium of Comcast, Time Warner Cable, and Bright House (SpectrumCo) to go through in modified form, Comcast acquired a right to resell Verizon Wireless spectrum capacity, which it is now using to offer a competing wireless service (FCC 2012; Gibbs 2016).

As with the question of whether to permit vertical integration, the question of whether to permit the reviewing agency to impose structural or behavioral conditions is not as simple as one might hope. There is a legitimate concern that, faced with an "all or nothing" choice, a regulator may choose to permit mergers that pose real dangers out of fear of "false positives" or a belief that the potential harm appears modest compared to the scope of the transaction overall. Allowing regulators to tailor transactions to ensure they serve the public interest will enable them to take appropriate precautions where necessary, or use merger review to enhance competition or consumer protection in the industry as a whole.

As with basic review of mergers, Congress should not leave the question of remedies entirely to the discretion of the agency. The DPA should include mandatory factors for the enforcing agency to consider before permitting a merger that would be harmful to the public interest in its original form to proceed in modified fashion. Furthermore, the DPA should require the enforcing agency to revisit any grant of merger permission to a dominant firm on a regular basis, and require the firm (if it has maintained dominance) to demonstrate why the existing conditions are adequate and why the agency should not force divestiture of the acquired firm. This will prevent the problem of "unscrambling the egg" once an acquisition has been approved. Certain conditions should not be relaxed as long as the acquiring platform maintains its pre-acquisition dominance.

Permitting acquisitions by non-dominant firms (those with low COE), and generally permitting organic expansion into related lines of business subject to structural separation and other safeguards (such as nondiscrimination), would strike a reasonable compromise between the proven dangers of permitting vertical expansion by dominant firms and the need to encourage platforms to expand into competing lines of business with one another. Where vertical integration continues to

threaten competition or undermine the goals of the DPA, Congress should authorize the enforcing agency to impose divestitures.

vi. Divestitures and the Starfish Problem.

No matter how careful the reviewing agency, firms inevitably might rise to dominance and threaten competition despite all efforts to restrain their behavior. When this happens, regulators must be prepared to break up the company. Indeed, many commentators feel that several of the largest platforms (such as Amazon, Google and Facebook) are already too big and require immediate break-up (Wu 2018; Kahn 2017). While the Constitution prevents a statute from targeting a specific company by name,⁸³ Congress can create objective criteria that would require divestitures by existing businesses as well as businesses that meet the criteria in the future.

Congress should consider whether to mandate divestitures (both horizontal and vertical) once certain specific “triggers” are met by a firm, or whether simply to authorize divestitures via enforcement where appropriate. Mandating divestitures has the advantage of spurring competition, particularly in markets where a single firm is already dominant. But divestitures create enormous implementation problems. Even if Congress could adequately describe criteria consistent with the Constitution for triggering automatic divestiture by specific existing dominant firms, implementation would cause significant difficulties.

Divestitures, especially involving both vertical and horizontal elements, are rare in American law for several reasons. First, courts strongly disfavor them. As the D.C. Circuit explained in *United States v. Microsoft*,⁸⁴ divestiture as a remedy in antitrust requires a clear, causal connection between the harm and the ownership to be divested. In the case of a statute, Congress identifies the nexus, not a court. Although this removes the strict limitations imposed by precedent for violations of the antitrust laws, Congress has still been reluctant to order divestiture by statute. Even if we ignore these issues so as to conceptualize the ideal statute, a larger and more significant problem remains: I call it “the starfish problem.”

Certain species of starfish have tremendous powers of regeneration. If you tear one to pieces, the individual pieces grow into new starfish. When separating the component pieces of dominant digital platforms, it is entirely possible that each segment will become dominant in its own line of business. Alternatively, the dominant portion of the business might “regrow” its dominance, fed by the same forces that contributed to its initial dominance.

⁸³ This is known as a “Bill of Attainder” and is prohibited in Article I of the Constitution. See *United States v. Brown*, 381 U.S. 473 (1965).

⁸⁴ 253 F.3rd 34 (D.C. Cir. 2001) (*en banc*).

For example, if we were to forcibly separate WhatsApp, Instagram and Facebook, we would not suddenly have vibrant competition. Facebook would still have approximately 2 billion subscribers. The spinoff of WhatsApp and Instagram would also instantly create two new dominant platforms — one in messaging and one in photo-sharing. The Facebook starfish would now be three starfish, each dominant in its specific market. Possibly these new entities might compete against each other. But absent some sort of regulatory restraints, it seems more likely that one platform would again emerge dominant over its rivals, or that the three new firms would avoid competing with one another so as to avoid any challenge to their existing dominance.

Google provides an even starker example. Merely separating Google Search from YouTube would limit the available data to each company, somewhat reducing their combined power in the targeted advertising market. But Google and YouTube would remain the dominant search and dominant video sharing sites respectively. As discussed in the section on horizontal ownership limits, these functionalities do not lend themselves to easy horizontal separation. They are inherently global on the public-facing end of the platform.

The most successful breakups, such as the AT&T breakup and the breakup of vertically integrated movie theaters and movie production studios, have had clear lines of demarcation, carefully tailored conditions to prevent the remaining dominant entity from reasserting itself, or both. In the case of AT&T, for example, the court broke up AT&T’s physical network into seven regional Bell operating companies (RBOCs) and prohibited the RBOCs from offering long distance services or “electronic publishing” services.⁸⁵ In addition, the FCC continued to regulate AT&T as a dominant long-distance carrier until 1995 (FCC 1995). Following passage of the Telecommunications Act of 1996 and its subsequent implementation by the FCC, which removed limitations on the RBOCs, the RBOCs quickly re-assimilated and absorbed the competing long-distance providers (Kimmelman and Cooper 2017).

While horizontal and vertical divestitures are potentially important tools, they are neither simple to implement nor sufficient to prevent future concentration. The DPA should therefore explicitly authorize the enforcing agency to force divestitures where appropriate. The DPA should also authorize steps preliminary to divestiture designed either to promote competition in the presence of dominant firms or to prevent firms from achieving dominance. In particular, product unbundling and structural separation, discussed below, can limit the need for divestitures or — when divestitures are necessary — provide a needed roadmap for dividing the dominant firm into non-dominant components.

⁸⁵ *United States v. Western Electric Co.*, 569 F. Supp. 990 (D.D.C. 1982).

6. Product Unbundling and Structural Separation.

Product unbundling and structural separation require a firm to separate particular products and business lines. The general purpose of these limitations is to prevent a dominant firm from leveraging its position in related markets. Product unbundling and structural separation have been at the core of the most successful pro-competitive regulations in telecommunications. The FCC's *Carterfone* decision, which separated the customer device market from the network, and the *Computer Proceedings* regime, which allowed the development of competing services over the telephone network and promoted the evolution of the modern internet, all relied on product unbundling and/or structural separation.

The purpose of product unbundling is to create a competitive market and keep firms with market power from tying together goods so as to drive up costs or undermine rival products. For example, Microsoft's bundling of Internet Explorer (IE) with its Windows operating system during the 1990s (and its arrangement with AOL to bundle IE with its subscription software in exchange for including AOL's subscription software with Windows) allowed Microsoft to fend off the challenge posed by independent browsers such as Netscape. Consumers are much less likely to pay for an independent product when they receive a competing product "free" with their purchase of a related good. Because Windows was the dominant operating system for personal computers, tying the internet browser with the operating system ensured that everyone using a PC (essentially the only device through which consumers could go online in the 1990s) already had IE and therefore had no need to pay for an independent browser (Wu 2018).

i. Different Gradations of Structural Separation.

Structural separation has had different meanings in different sectors over the years. In some cases, "structural separation" is essentially a form of vertical prohibition. For example, the Glass-Steagall Act, part of the Banking Reform Act of 1933, initially prohibited banks from operating as both an investment bank and a merchant bank. As of this writing, Rep. David Cicilline (D-RI) has proposed a "Glass-Steagall for technology companies." (Stacey 2019) Others have also argued that "true" structural separation requires that companies (or at least dominant companies) be prohibited from entering particular lines of business.

Alternatively, structural separation can be an intermediate step between full vertical prohibition and simple product unbundling. This form of structural separation has been used primarily when product lines are sufficiently intertwined that the dominant firm has too many opportunities to favor its own product or affiliate. Essentially, the unbundled product line is placed in

a separate, independent company and the dominant firm is prohibited from favoring its affiliate over rivals. The level of separation is, to some degree, dependent on the ease with which the dominant firm can favor its affiliate and on the difficulties encountered by rivals and the enforcing agency in policing discriminatory conduct.

Communications law contains examples of both. Congress and the FCC have, at various times, imposed full prohibitions on broadcast networks owning cable providers or daily newspapers in their license area,⁸⁶ and prohibited telephone companies from entering the cable market. But the FCC permitted telephone companies to offer “enhanced services” such as voice mail in competition with independent providers, though they were subject to strict rules requiring that they offer these services through a separate affiliate (Cannon 2003). Having discussed prohibitions on vertical integration above, I will limit my discussion in this section to forms of structural separation that permit a platform to offer the related service through a separate affiliate, and other safeguards.

ii. ***Structural Separation and Affiliates.***

Structural separation can be a powerful tool for limiting dominant players, but it must be carefully designed. Dominant firms can stifle competition by taking advantage of the fact that payments between affiliates still benefit the ultimate parent. For example, in Comcast’s merger with NBC Universal (NBCU), the Justice Department addressed the difficult problem of how to prevent Comcast from using its control over NBCU programming to undermine the emerging online video distribution market. At the time, relatively few online video distributors (OVDs) existed, and they generally relied on programming created by major studios such as NBCU. In the mature market for NBC’s broadcast programming by existing MVPDs, the FCC simply imposed a price limit on NBC broadcast programming based on comparable competing producers of broadcast programming. No such market existed for online programming to provide a suitable benchmark for NBCU programming to OVDs. Accordingly, the DOJ consent decree with Comcast/NBCU imposed a condition (subject to arbitration) that required Comcast/NBCU to license programming to an OVD once the OVD had a licensing agreement in place with a comparable production studio. These two conditions (one based on an existing market, one based on the independent emergence of a new market) illustrate the ability of carefully structured unbundling requirements to advance public policy goals of preserving and enhancing competition (FCC 2011).

⁸⁶ FCC definitions of “ownership” can be complicated. Even under the “complete prohibition” on cross-ownership, certain types of passive investment or non-controlling interest were considered acceptable. My point is simply to contrast a form of cross-ownership prohibition designed to prevent any control or influence over the affiliate, with limits on ownership designed to prevent discrimination in favor of the affiliate.

Structural separation provides an additional advantage. When done correctly, it may sufficiently limit market power so as to make break-up and divestiture unnecessary. Or if break-up and divestiture become necessary, dividing the dominant firm into separate affiliates provides a road map that addresses some of the difficulties with divestitures discussed above. In the AT&T break-up, the final division of the company reflected many of the structural divisions already imposed by the FCC prior to the break up.

For all its advantages, however, structural separation can be extremely complicated to implement. This is especially true in a highly technical field, such as digital platforms, where discrimination in favor of one's affiliate can be subtle and difficult to detect. Arbitrating complaints by rivals that the dominant firm is favoring its affiliate can be lengthy and time consuming. This raises the concern that structural separation may prove too complicated to manage.

History offers two ways to alleviate this concern, often used in combination. The first is to impose extremely strict separation between the affiliate and the dominant firm. Under the highly successful *Computer Proceedings* regime, the FCC required separate affiliates offering advanced services to maintain entirely separate corporate boards and officers, entirely separate accounting, and entirely separate equipment. It also expressly prohibited any coordination between the parent and the affiliate. The FCC retained the power to review corporate contracts and to audit the financial records of both parent and affiliate to ensure independence. This was facilitated by the fact that the dominant parent was a rate-regulated firm subject to tariffing and significant regulatory oversight, and was required to maintain its books and records in reviewable form. State regulatory commissions and boards, which also regulated telephone companies, conducted separate oversight and provided forums for competitors who felt wronged or argued that services embedded in the telephone network — or telephone company personnel — were being used to stymie competition by providing sub-par services to competitors and overcharging them (where possible) compared to affiliated services.

Tariffing also limited the ability of the dominant parent to discriminate in favor of its affiliate. Tariffing requires set prices for the necessary network inputs to be offered on a non-discriminatory basis, subject to government oversight. This made it easy for rivals and the FCC to verify that a separate affiliate had not been given uniquely favorable terms (at least not for tariffed services). Furthermore, the terms offered to the affiliate set a baseline for the appropriate terms to be provided to rivals — subject to government oversight of the rates through the tariffing process.⁸⁷

⁸⁷ Economists warn that, in addition to the problem of competitors being charged different rates for non-tariffed services, a simple non-discrimination rule may still permit effective discrimination against non-affiliated businesses by charging all parties (the affiliate and unaffiliated businesses) an artificially high price. Because the affiliate and the company providing the service have a common owner, the artificially high price does not seriously affect the affiliate any more than moving money from one pants pocket to the other pants pocket

Many of these necessary safeguards are likely to be unavailable with digital platforms. It is entirely impractical to suggest tariffing for digital platforms. Such a highly intrusive form of price setting is so foreign to the existing market structure that imposing tariffing even on dominant firms would be highly disruptive and would require a huge investment in regulatory infrastructure. But a successful scheme of structural separation — where employed — must include substitutes that similarly provide rivals and regulators with some benchmark of the fair market rate and the means to ensure reasonable nondiscrimination. These mechanisms could include filing of contracts with the enforcing agency, subject to challenge and review (but with sufficient safeguards to protect proprietary information). The statute and enforcing agency should emphasize strict corporate separation to minimize the incentive to discriminate in favor of the affiliate. Mandatory timelines to resolve complaints coupled with clear appeal rights and private rights of action can eliminate costly delays. Nevertheless, we must recognize that the oversight needed to make these separation and unbundling arrangements work will be massive and time-consuming.

The statute and the enforcing agency should emphasize strict corporate separation to minimize a corporate parent's ability and incentive to discriminate in favor of an affiliate. But maintaining full separation is difficult. Even in the context of the relatively "simple" phone networks — with clear demarcations where one physical network element ends and another begins — there were ample opportunities for phone companies to shift costs or engage in creative accounting and passive resistance to rival providers. Nevertheless, as the considerable accomplishments of the FCC's structural separation regime demonstrates, perfection is not required to produce positive results. Certainly, both Congress and the enforcement agency need to make every effort to "get it right," but the fact that some discriminatory practices will slip through does not render useless the exercise of structural separation, where warranted. In many cases structural separation will prove easier to implement than full divestiture — both technically and politically. Still, structural separation may be an *easier* remedy, but this does not make it objectively easy.

Of course, the time and effort needed to construct an effective structural separation regime should not dissuade regulators from imposing it when it is the most appropriate solution. Rather, it is important for regulators to assess the cost of creating a functioning structural separation regime versus the cost of failing to create structural regulation when it is necessary. Public policy is never about perfection. It is about maximizing the likelihood of good outcomes while minimizing the likelihood of bad outcomes, after factoring all the costs and benefits involved.

alters how much money someone has on their person. Economists call this the problem of a "transfer payment," meaning the affiliate simply transfers money to the provider with no actual economic impact.

To conclude, when choosing among regulatory tools for opening up markets dominated by incumbents, there is good reason to favor simple product unbundling over full structural separation — subject to interoperability and nondiscrimination standards. Unbundling can generally be accomplished more quickly and at lower cost and has often proven as effective as structural separation (especially when combined with other pro-competitive policies). For example, product unbundling combined with mandatory interoperability and nondiscrimination proved sufficient in the case of internet browsers. The growth of a strong independent market for browsers has encouraged operating system providers not subject to the MS antitrust decree, such as Apple, to adopt similar interconnection and nondiscrimination with regard to browsers, despite bundling their own browser with their operating system.

Congress should certainly authorize structural separation where necessary to further competition or the other goals of the statute. But it should carefully define the triggering conditions for structural separation (and the triggering mechanisms for eliminating the requirements), or allow the enforcing agency to determine when and how to implement structural separation (subject to clear instructions on which situations make unbundling the preferred remedy). Product unbundling should generally be tried first, before imposing full structural separation.

7. Nondiscrimination.

Nondiscrimination features prominently in enabling competition. General nondiscriminatory treatment, or prohibitions against discrimination in favor of an affiliate, may be required of dominant firms — or of firms generally — both to safeguard a competitive marketplace and to protect consumers from recommendations based on opaque corporate relationships rather than publicly advertised features.⁸⁸ This requires some discussion about the principle of nondiscrimination and its application, particularly in telecommunications and electronic media. As I explain below, true “common carriage” equivalency does not translate well into the realm of digital platforms. Nevertheless, basic nondiscrimination principles pertain, and in some cases can be applied in the same manner as traditional common carriage.

i. Nondiscrimination versus Common Carriage.

We begin by distinguishing between the strict definition of “discrimination” and our common, everyday usage. Strictly speaking, to discriminate means to distinguish or differentiate. In everyday usage, particularly in the commercial sphere, we use “discriminate” to mean making a distinction between products or customers based on specific criteria. In particular, when we impose a duty of

⁸⁸ Nondiscrimination as a concept also plays an important role in the marketplace of ideas. Those considerations are addressed separately in the relevant section.

nondiscrimination, we prevent the subject from making distinctions on the basis of criteria we have determined are pernicious. Classic examples are discrimination based on race, gender, or sexual orientation. We impose a general duty on all employers and most businesses and places of public accommodation not to discriminate based on these criteria because we regard such discrimination as contrary to our fundamental values as a society.

When we use “discrimination” in a general commercial sense, we do not generally mean it to apply to distinguishing between goods or customers based on relevant criteria. For example, requiring goods to meet a clear standard of quality, or refusing to do business with someone who previously defaulted on payment or whose merchandise generated customer complaints, is not generally regarded as impermissible discrimination. Even where discrimination is not generally permitted, it may be excused under appropriate circumstances. For example, the Americans with Disabilities Act (ADA) generally prohibits discrimination based on disability, but only requires employers to make “reasonable accommodations” for those requiring them and permits discrimination based on disability when the need for certain capabilities is a *bona fide* occupational qualification of the job.

As experience has long shown, those determined to engage in impermissible discrimination can find ways to apply supposedly neutral criteria to achieve prohibited discriminatory ends. This can range from simple deceit (claiming an unsold house is under contract when a non-white family seeks to buy it), to failure to apply criteria in a neutral manner (requiring credit checks only for disfavored customers), to using criteria that appear neutral but have predictably disparate impacts (English language requirements to screen out immigrants). Those charged with enforcing the laws against discrimination must therefore have means to see through such “pretexts” while allowing permissible forms of discrimination.

Why review these commonsense distinctions? Because in the general debate around nondiscrimination in commercial arrangements — particularly when it involves the principle of common carriage — opponents portray it as an inflexible and unworkable arrangement with innumerable edge cases that creates paralyzing confusion for its subjects. We should recognize the fallacy of this *reductio ad absurdum*. Even the most rigid nondiscriminatory common carriage schemes generally prohibit only *unreasonable* discrimination: that is, discrimination based on criteria irrelevant to the nature of the service provided. A common carrier shipping company may be prohibited from refusing a package that meets its specific criteria, but it does not have to ignore relevant factors such as size and weight. Nor need it ignore potentially dangerous or damaging packages, such as leaky shipping containers or explosives.

In the media and telecommunications world, we have seen a range of nondiscriminatory criteria, from a general prohibition on discrimination based on affiliation for cable carriage,⁸⁹ to federally approved tariffs for telecommunications services that require the same terms be offered to any and all similarly situated customers.⁹⁰ Perhaps unsurprisingly, the success or failure of these nondiscrimination regimes has hinged on a combination of factors, especially the ease of detecting prohibited discrimination and the political will to enforce non-discrimination. Factors such as the complexity of the enforcement scheme, the likelihood of complainants succeeding, and the potential for retaliation by the dominant provider also contribute to the success or failure of the nondiscrimination regime.

Consider two nondiscrimination regimes put in place by the 1992 Cable Act. They addressed incumbent cable operators' use of their dominance to gain control over cable programming networks, and their moves to prevent entry by rival multichannel video programming distributors (MVPDs).⁹¹ Because cable networks needed access to cable customers on the other side of the platform, cable operators were able to demand equity shares in the network in exchange for carriage. Because potential rivals needed programming (particularly popular "must-have" programming such as news, sports and certain highly popular channels), incumbent cable operators prevented entry by denying them access to affiliated programming or by imposing contractual conditions on independent programmers that prevented sale to rival MVPDs.⁹²

Congress sought to address these problems with two separate nondiscrimination provisions. Section 628 of the Communications Act,⁹³ generally referred to as "program access," prohibits "unfair" means of competition, with particular emphasis on withholding programming. Section 628(c) mandated (for a limited time) that the FCC develop comprehensive rules prohibiting a cable operator from influencing the decisions of an affiliated network and from discriminating in favor of its affiliated cable network or against rival MVPDs. Section 616,⁹⁴ generally referred to as "carriage access," prohibited cable operators from "requiring a financial interest" or demanding exclusivity as a condition of carriage (but did not prevent voluntary investment arrangements). It also prohibited MVPDs from discriminating based on affiliation or non-affiliation.

Section 628(c) enjoyed reasonable success until its program access rules were allowed by the FCC to expire in 2012.⁹⁵ Under this nondiscrimination regime, rival MVPDs (primarily satellite

⁸⁹ 47 U.S.C. §536.

⁹⁰ 47 U.S.C. §203-05.

⁹¹ MVPD is the term used by the Communications Act for subscription video services offering multiple streams of programming. See 47 U.S.C. §522(13).

⁹² Cable Consumer Protection and Competition Act of 1992, Pub. L. 102-385 §2.

⁹³ 47 U.S.C. §548.

⁹⁴ 47 U.S.C. §536.

⁹⁵ Section 628(b) generally prohibited "unfair methods of competition, or unfair and deceptive acts or practices" with regard to access to programming. The specific requirement to make available affiliated programming on

companies in the 1990s, then telephone companies starting in the mid-'00s) secured access to necessary programming and were able to become viable competitors. By contrast, Section 616 has generally proven ineffective. Independent programming has remained negligible. MVPDs and broadcasters hold ownership interests in the vast majority of cable programming networks, and new networks such as Major League Baseball (MLB) routinely offer ownership interests to major operators “voluntarily” to secure widespread distribution (Feld 2009).

What distinguished these two nondiscrimination regimes? Most importantly, cable operators could no longer deny programming outright to rivals. Additionally, since the market structure required programming networks to execute contracts with unaffiliated cable operators that provided service outside the affiliated cable operator’s footprint, regulators had a benchmark against which to measure contracts with directly competing MVPDs in the event of complaints. To be clear, this did not eliminate all forms of discrimination. Cable operators argued that the statute did not apply to programming delivered to cable systems terrestrially (traditional programming being delivered by satellite to cable operators around the country), and began moving local and regional sports programming to terrestrial distribution. It took the FCC more than 15 years to close this “terrestrial loophole,” with significant impact on rival services.⁹⁶ Nevertheless, despite this and other discriminatory practices by cable operators, the program access regime gave rival providers access to sufficient “must-have” programming to launch competing services.

By contrast, the carriage access regime did not prohibit cable operators from refusing to carry unaffiliated programming. It merely stopped explicit demands for ownership interests and explicit forms of discrimination — narrowly defined as favoring one’s own affiliated network over identical programming from an independent network. This made it easy for cable operators to offer pretexts for prohibited discrimination against independent programmers, especially those that declined to take the broad hint that ‘voluntary’ sale of an ownership interest would help facilitate reaching a carriage agreement (Feld 2006b). The FCC staff’s lack of interest in pursuing enforcement (Feld 2006a) and the general lack of successful prosecution of program carriage complaints have made the nondiscrimination requirements of Section 616 effectively nonexistent.

ii. Applying These Lessons to Digital Platforms.

With this background in mind, we must consider the challenges of applying an effective nondiscrimination regime to relevant practices on digital platforms. Discrimination based on criteria

commercially reasonable terms was contained in Section 628(c), which stated that these specific mandatory rules would expire 10 years after passage of the 1992 Cable Act unless the FCC extended them (See 47 U.S.C. §548). The FCC extended the rules for five additional years in 2002, and another five years in 2007, but found that the rules did not need an additional extension in 2012 (FCC 2012a).

⁹⁶ *Cablevision Systems Corp. v. FCC*, 649 F.3d 695 (D.C. Cir. 2011).

we generally find contrary to our values, such as discrimination based on race, should be clearly prohibited in the search and recommendation process. This includes using race as a factor even when evidence may support a correlation between race and other variables, such as shopping preferences. Our experience as a society is that, in addition to promulgating racial stereotypes and harming the ability of non-whites to access goods and services (Jan and Dwoskin 2019), this sort of “data” is generally self-reinforcing. For example, Amazon recently suspended use of a hiring tool because it found that it systemically downgraded applications by women. Closer examination revealed that Amazon’s hiring practices systemically discriminated against women in technical fields. The hiring tool’s discrimination reflected the intrinsic bias we as a society wish to overcome, rather than a real-world correlation (Dastin 2018).

Turning to pure commercially motivated bias, applying non-discrimination to platforms poses numerous obstacles. Where we deal simply with access to interoperable APIs or other tools that we have decided to make accessible, nondiscrimination is relatively straightforward. As with the standard phone jack, the API needed to access a relevant discrete functionality can be made available on neutral terms to all similarly situated parties. Similarly, discrimination familiar from traditional lines of business, such as different schedules for shipping affiliated products versus competing third-party products, are straightforward in terms of discovery and remedy. The real difficulty comes in the area of search and recommendation. It is in finding, organizing, and presenting the endless stream of data and possible answers to queries that digital platforms have the greatest opportunity to discriminate in favor of their own products and against rivals. Discrimination in search and recommendation can be virtually impossible for an end user to discover, and proving discrimination has been exceedingly time-consuming and expensive in both private antitrust litigation and antitrust enforcement actions (Luca *et al.* 2015; Ip 2018).

Before applying telecom’s lessons, we must first address the factors that make nondiscrimination obligations for platforms particularly challenging. We begin by acknowledging that all search and recommendation functions — such as Google Search, Amazon product recommendations, and Facebook newsfeeds — *must* discriminate to be effective. We count on these digital agents to help us sort through the potentially infinite possible responses to our basic query, and we judge the value of the result based in large part on how well it succeeds in delivering to us a response that we, personally, consider relevant.

This brings us to another limiting factor. While it is not critical for search and recommendation functionalities to learn our personal preferences, this can be very useful. The same search query can yield different relevant responses depending on the context of the inquiry, which can be determined to some degree by a knowledge of past searches or successful recommendations. Even if the algorithm does not depend on my past search history but on knowledge of similarly situated

people, e.g. “people who bought X also bought Y and Z,” this requires the algorithm to have collected, stored, and analyzed the purchase histories of some untold number of people before me and to incorporate my purchase history into that vast store of information. This benefits me and future customers/searchers. People prefer searches to yield relevant material rather than irrelevant material. Indeed, if searches or platform recommendations deliver a stream of useless or otherwise undesired information, it renders the service essentially unusable (Bracha and Pasquale 2008).

In other words, common carriage makes sense for systems where such mechanical nondiscrimination makes the system work better from the user’s perspective. If I know the phone number of a business I want to call, I don’t want the telephone system to nudge me, either obviously or subtly, toward something else. If I am shipping a package, I want the shipping cost to be regular and predictable, so I can budget accordingly. But on many digital platforms, the mechanical nature of common carriage makes the operation of the digital platform worse, not better.

At the same time, our reliance on these search and recommendation functions and their ability to learn our preferences and behavior gives platforms the ability to manipulate users and engage in anticompetitive and anti-consumer practices (Tessier, Herzog and Lofred 2017). Even assuming the best intentions, learning our preferences does not guarantee us the best selections. As Steve Jobs famously put it: “People don’t know what they want until you show it to them.” Limiting responses to the predictably familiar eliminates the browsing and discovery we routinely do when perusing the aisles at traditional brick-and-mortar retailers or scanning library shelves by category. This deprives consumers of the pleasure of accidental discovery and comparison based on browsing. It also reduces the likelihood that new entrants with no existing track record will have their product discovered. Accordingly, while we should acknowledge that search and recommendation algorithms genuinely improve the user experience, and that these functions need to “discriminate” in a way that makes pure common carriage nondiscrimination effectively impossible, this cannot be a generic excuse for discriminatory behavior. Even well-intended forms of discrimination may have unintended negative consequences.

Finally, we should acknowledge that companies have valid reasons to protect their algorithms from the possibility of disclosure — either by having code made directly available to rivals, or by code being reverse-engineered for the ostensible purpose of determining impermissible discrimination. Algorithms are the key product differentiator for competing firms. While policy should reduce artificial barriers to competing algorithms, such as anticompetitive abuse of standard essential patents, algorithms are not physical resources subject to foreclosure and bottleneck control. Firms can, and should, compete on the strength and innovation of their algorithms.

Platforms are legitimately concerned about bad actors manipulating search and recommendation if they are capable of testing the algorithm in an unsupervised manner. Already the “search engine optimization” industry — essentially an entire industry devoted to trying to manipulate Google Search — generates billions of dollars annually. There is no question that, given the opportunity for direct, unsupervised access to the relevant algorithms, parties will seek to use that access for improper purposes.

Still, we can derive certain principles to be incorporated into the statute and employed by the enforcing agency that erect safeguards for determining prohibited bias/discrimination but still protect the complaint process from abuse by bad actors:

- Clearly prohibited types of discrimination, in addition to a general standard such as “unfair and deceptive” or “unjust and unreasonable.”⁹⁷ These might include prohibitions on favoring goods or services based on ownership or payment, and prohibitions on discrimination against rival services. It should be explicit that a harmed party does not need to prove discriminatory intent or other improper motive (although these factors may contribute to consideration of penalties).
- An ability for the enforcing agency and private parties to test algorithms for prohibited bias through a “black box” process that shields the code from repeated testing designed to reverse-engineer the algorithm. For example, the test could be run by the enforcing agency at the request of third parties, or by a neutral third party.
- A detailed, straightforward process for complaints, coupled with timelines for decision.
- A private right of action as an alternative to agency action.

Clear prohibitions on specific types of bias. Agencies such as the FTC and the FCC have had mixed success with general standards such as “unjust and unreasonable” or “unfair and deceptive.” On the one hand, agencies need flexibility to address the ability of platforms to engineer loopholes in any specific prohibitions. On the other hand, agencies and the courts have at times narrowed the

⁹⁷ We must very clearly distinguish between impermissible discrimination and neutral policies that result in downgrading some content relative to other content. A business is not entitled to a particular ranking in search results or a newsfeed, and a platform may use a wide variety of subjective criteria to determine relevance. Nor should platforms fear that changing their algorithm for competitively neutral reasons will result in lawsuits or enforcement actions. Similarly, I distinguish here between commercial forms of discrimination and other forms of discrimination in content based on suspect classifications such as race or gender, and concerns about ideological discrimination or the political consequences of platforms acting as gatekeepers by discriminating based on political affiliation or perceived liberal or conservative bias. I address these concerns in Chapter V.

definitions to exclude conduct that clearly has anticompetitive impact or is otherwise contrary to the intent of Congress. This is particularly true of bias claims, where many legitimate factors may enter into consideration but where these legitimate factors may easily be pretextual. Accordingly, the statute should combine a general standard with a list of specifically prohibited types of bias.

As the history of the program access rules demonstrates, the statute should clearly state that the specific prohibitions supplement the general standard and are not the sum total of possible prohibited conduct. It took the FCC more than 15 years to determine that the general prohibition on unfair and deceptive conduct in Section 628(b) provided general authority and was not solely limited to the specific “minimum contents of regulation” detailed in 628(c). For similar reasons, the statute must not limit itself to any particular type of technology but should speak clearly to prohibited conduct. The invention of the “terrestrial loophole” came about because Section 628 used specific technology to describe the type of programming covered by the statute.

History shows that it is far easier to enforce “Thou shalt not engage in bad behavior” than “Thou shall engage in good behavior.” This is especially true when some forms of discrimination are inherent in the nature of the business. Because discrimination is inherent in any sort of search and recommendation function, platforms must have the opportunity to demonstrate that the purpose and effect of the conduct subject to complaint serves a legitimate purpose. To prevent this from becoming a mere exercise in recitation of some legitimate goal, the more precisely Congress can limit safe harbors or defenses for discrimination, the better. Open-ended standards for defenses, such as being “reasonable,” lend themselves too easily to pretexts such as “encouraging innovation.” (I will discuss issues such as burden of proof below.)

Even where the behavior serves a permissible goal, Congress must take steps to prevent platforms from engaging in prohibited discrimination to achieve permissible goals. Because it can be extremely difficult to prove intent, and because intent (rather than effect) is irrelevant to establishing a pro-competitive regime, Congress should make clear that complainants or the enforcing agency need only prove effect, not intent. Congress should also make clear that if prohibited bias is established, it can only be excused where the appropriate purpose cannot otherwise be achieved.

While the history of the last several decades demonstrates that under-enforcement is a much greater concern than over-enforcement, Congress should be cognizant that the complaint process might be abused. For this reason, the list of prohibited forms of bias should be limited to those found to be clearly anticompetitive. Additionally, Congress should consider whether to prohibit certain types of bias by dominant firms, while permitting more flexibility to smaller, non-dominant firms. Firms may be particularly vulnerable to abuse of process by rivals at an early stage, and

limiting the ability of rivals to undermine potential competitors with litigation may better serve the public interest than strict enforcement. To prevent such bias from being deceptive, Congress should require that where bias prohibited by dominant firms is permitted by non-dominant firms, the non-dominant firms must clearly inform consumers. This is already standard practice with sponsored content and should be extended to any other form of bias Congress deems permissible in smaller firms.

Black-box testing. As we have seen in the context of the EU’s antitrust enforcement action against Google (EC 2017), and research by third parties such as academics or private antitrust litigants (Luca *at al.* 2015), it is possible to test for certain types of bias. Without clear testing standards, however, parties have no idea what is needed in order to demonstrate prohibited discrimination. The less clear the standards for how to conduct testing and in terms of what the data represent, the more expensive the complaint process and the harder it is to predict the outcome. Without a clear understanding of what complainants must show, or instructions on how to show it, parties and agencies will be reluctant to commence enforcement actions. It is also unfair to platforms accused of bias, since they have no clear way to demonstrate that they are not discriminating in an impermissible manner.

I therefore propose what I call “black-box testing.” Congress should require development of suitable standards and testing by either the enforcing agency or another standard-setting agency, such as the National Institute of Standards and Technology (NIST). While this development process should involve academic experts, standard-setting bodies, and other stakeholders, the final determination of the appropriate standards should be determined by the agency. The enforcing agency or other designated neutral party will conduct the testing and will make the results known to the parties and the public. While the information disclosed to the parties should be sufficiently detailed to allow the parties to verify the testing, information disclosed to the public should be more limited, to protect potentially proprietary information.

Because developing appropriate standards and procedures will take time, especially if the standards process is subject to litigation, Congress should explicitly authorize the enforcing agency or complainants to provide alternate forms of evidence to demonstrate prohibited discrimination. While testing will likely be the primary means of proving or disproving prohibited bias once the testing procedures are well established, parties should be able to present other evidence that supports a complaint of prohibited discrimination. This is important because testing may become outdated by changes in the market and the relevant technology. Additionally, discriminatory effects may occur in the real world that do not occur under the conditions that constrain any laboratory test. The ability to present evidence that algorithms have a prohibited discriminatory impact but escape verification by the approved testing method provides a useful check on the system.

Complaint process. Demonstrating prohibited bias when discrimination is generally permissible often places heavy burdens on complainants. Notably, evidence to support the claim frequently lies entirely under the defendant's control. Complaint processes therefore usually require the complainant first to make a *prima facie* case of prohibited discrimination. While this standard is high enough to screen out frivolous complaints, it should not be so high as to require the same level of evidence needed to survive a motion for summary judgment. Once the complainant has made a *prima facie* case, the burden shifts to the defendant to prove that either there is no prohibited discriminatory impact or that the discrimination is otherwise permitted.

The chief difficulties confronting complainants, especially individual consumers, are expense, delay and uncertainty. The complaint process should seek to minimize these. In particular, the complaint process should have clearly defined timelines. The FTC, for example, currently provides no information to complainants once a complaint is filed. As a result, consumers have no idea whether the FTC is even investigating the complaint, or what evidence a complainant must show to move the agency to at least investigate a claim. This is highly discouraging to consumers. For the average consumer, writing a complaint on a rock and throwing it down a well would provide greater satisfaction than filing a complaint with the FTC. At least one can tell when the complaint has reached its goal from the sound of the splash at the bottom.

I therefore recommend that when consumers file informal complaints with the enforcing agency, the agency should be required to determine within 60 days whether to dismiss the complaint or refer the case for further action. If the agency dismisses the complaint, it should provide some explanation to the complainant as to why. If at any stage in the enforcement process the agency decides to terminate the investigation or settle with the defendant, the agency should notify the complainant. As a matter of general transparency, the enforcing agency should be required to publish an annual report (or otherwise make public) a general tally of complaints, actions taken, and the number of complaints left unresolved.

In the case of formal complaints, strict timelines are even more necessary. Complaints can linger indefinitely at the FCC — sometimes being dismissed because the statute of limitations passed while the agency investigated. Companies waiting years have gone bankrupt. This is not merely unfair to complainants, it actively discourages injured parties from bringing worthy complaints. While the enforcing agency requires some flexibility in determining its process, this sort of adjudication by inaction makes a mockery of any enforcement regime.

Time limits on enforcement action should be tolled while a complaint and appeal are pending (*i.e.* the countdown for any statute of limitations is frozen in place until the complaint proceeding is

finished.) Additionally, the statute should require that a complaint pending for some specified period of time can be “deemed denied” by the complainant. In other words, a party may choose to appeal the agency inaction as if it were a denial of a complaint and seek redress from a reviewing court. This will prevent the agency from becoming a barrier to enforcement rather than a mechanism for enforcement.

Private right of action. Agencies may fail in their enforcement duties for a variety of reasons, ranging from lack of resources to lack of political will. Since a private right of action is a necessary safeguard for a number of pro-competitive and consumer protection provisions, I deal with the general characteristics of what should be included in such a provision below. Because a private right of action is in part a check on agency inaction, Congress should specify that the doctrine of “primary agency jurisdiction” (the legal rule that agencies rather than a court should resolve questions of law under the jurisdiction of an expert agency) does not apply, or that the agency has a limited time to respond to a referral under the doctrine of primary agency jurisdiction. Otherwise, the agency may simply allow the matter to continue to languish indefinitely.⁹⁸

History teaches that discrimination complaints require additional consideration beyond those usually necessary in private rights of action. Proving discrimination can be difficult, especially where decisions to favor or disfavor a particular business or service can plausibly rest on many permissible intangible factors, such as judgments based on taste (or algorithmic predictions about taste). Proving discrimination is even more difficult because the accused platform will generally own the evidence needed to show that it discriminated in an impermissible manner. At the same time, rivals may try to use accusations of discrimination to gain commercial advantage and hinder rival firms. Even without a platform’s deliberate ill intent, companies that rank low in search results, find themselves no longer recommended as potential purchases, or otherwise fare poorly on a particular platform may genuinely believe they are victims of impermissible discrimination and bring meritless, but potentially expensive or otherwise damaging lawsuits.

To address these concerns, nondiscrimination regimes often use a burden of proof known as the *prima facie* case. As a threshold to avoid dismissal, the complainant must provide some reasonable

⁹⁸ In one notable case involving unjust and unreasonable rates charged to prison inmates for phone calls, *Martha Wright v. Corrections Corporation of America* (D.D.C. Civil No. 00-293), plaintiffs filed their lawsuit in 2000. The district court referred the matter to the FCC under the doctrine of primary agency jurisdiction in August of 2001 and dismissed the case before it pending resolution at the FCC in 2003. It was not until 2013 that the FCC issued interim rules designed to limit rates for prison phones generally; it issued final rules in 2015. These rules were reversed by the D.C. Circuit in 2017. (*Global Tel*Link v. FCC*, 859 F.3d 39 (D.C. Cir. 2017)). At the time, FCC Chairman Ajit Pai (who, it should be noted, dissented from the rulemaking orders as a commissioner, and on becoming chairman in January, 2017 ordered the FCC to drop its defense of the rate cap portion of the rules) promised to address the problem of unjust prison phone rates in a manner consistent with the court’s ruling. The FCC, however, has done nothing further. This is justice delayed to the point of absurdity and could have been avoided had the district court been required to make a decision on the matter before it in 2001 rather than referring the matter to the FCC.

evidence that makes it seem likely that the complainant is the victim of discrimination. At that point, the burden shifts to the accused to show that they have not engaged in impermissible discrimination. Congress should explicitly adopt this *prima facie* case/burden-shifting with regard to discrimination complaints.

8. Privacy by Design and Limitations on Use.

“Privacy by design” is the principle that digital tools should protect personal privacy as a design requirement, so that only the personal information needed to provide the service is collected, and it is protected to the greatest extent feasible consistent with providing the service (House of Lords 2019; Wheeler 2018). We generally think of privacy by design as a consumer protection. But the key role played by collecting and storing personal information on platforms gives privacy by design an important pro-competitive aspect beyond the pro-competitive aspects of CPNI. A constant complaint against dominant firms is that their gigantic stockpiles of accumulated personal information constitute an impossible burden to successful competition (Pasquale 2018). Privacy by design and limitations on the use of personal information can help to rein in this advantage.

It is not my purpose here to attempt to summarize the expansive debate over privacy by design, or the appropriate legal regime to govern the use and storage of personal information. My aim is to highlight the importance of personal privacy for competition. Legislators should not think of personal privacy simply as something nice for consumers that should yield to the demands of the marketplace. In the age of information, protecting personal privacy enhances competition. Those eager to provide a competitive framework for digital platforms should therefore embrace privacy by design and strong, enforceable privacy protections.

9. Due Process Rights.

As explained by Jon Bergmayer (Bergmayer 2018), the basic principle underlying due process is an idea of fundamental fairness. The concept of due process in private dealings as well as in dealings with government is embodied in multiple statutes — especially those designed to address a disparity of marketing power or to address the problem of trust in a market with significant information asymmetries. “Lemon laws,” for example, provide purchasers of used cars the right to return the car and get their money back within a set period of time, thus addressing the inability of a purchaser to find non-obvious mechanical problems without actually buying the car (Akerlof 1970). Consumer credit agencies are required by law to make a consumer’s credit report available, and to allow a consumer to correct any errors (USA.gov 2019). This reflects the enormous

significance of creditworthiness in our commercial life, and the need to provide basic, enforceable rights so that people can discover negative credit-score information and correct errors that harm their ability to carry out any of the numerous economic activities that require a credit check, such as renting an apartment. Even under the common law, certain relationships create duties between the parties as a matter of basic fairness to the individual (Seipp 2011; Balkin 2018a).

Given digital platforms' importance and their capacity for nearly perfect information asymmetry, due process becomes extremely important both as a pro-competitive policy and as a consumer protection. In the competitive context, merchants on platforms should not be arbitrarily cut off. No platform should be required permanently to offer the same services, interfaces, or search algorithms. But they should be held to standards of basic notice, so that businesses using the platform can adequately prepare for any changes and — where possible — seek alternatives. It is no excuse to say that since services are offered for free, users of the platform should have no rights in the platform. This constitutes a “bait and switch” in which users are encouraged to maximize their use of the platform, only to find themselves squeezed once they've come to rely on the availability of the platform. Equity has long recognized reliance interests of this sort, for example in laws governing the duties of bailees to bailors or through the doctrine of reliance interest in contract law. There is good reason to extend this basic principle of equity into the digital age.

As Bergmayer observes, the duty owed by a platform should vary with both the size of the platform and the nature of the service. This is particularly true in the commercial context, where merchants are generally more accustomed to negotiating for specific rights and protections. Indeed, given the changing nature of the digital world, merchants should understand that digital platforms may well change over time. But there is a proper balance between overly proscriptive regulation and the current environment of *caveat emptor*. At a minimum, commercial customers of platforms should be entitled to reasonable notice before a significant change. Where a platform is the functional equivalent of a shopping mall leasing space, merchants should be entitled to some explanation for any exclusion and to a basic right to appeal.

Congress should establish clear due process criteria to ensure fundamental fairness, determining the appropriate level of process in relation to the cost of exclusion from the specific platform. Because this is not an exact science, and because of the dynamic nature of the digital platform economy, Congress will need to delegate to the enforcing agency the power to evaluate whether a specific platform is dominant and the details of due process rights necessary to protect competition and consumers.

C. Enforcement and the Need for Private Rights of Action.

Private rights of action are necessary to address the problems associated with agency enforcement. In the case of implementation of cable device interoperability, agency enforcement has been hampered by lack of resources and political pressure from powerful interests. Moreover, agency enforcement depends on the political will of the agency. Agency heads or agency staff who disagree with statutory policy can effectively kill a statutory mandate via lack of enforcement. Congress can starve an agency of resources necessary to enforce, or even prevent enforcement altogether via an appropriations rider. Private rights of action serve as a vital safeguard.

The Supreme Court has become increasingly hostile to private rights of action in the statutory enforcement context. The Supreme Court has found that the Federal Arbitration Act permits businesses to include forced arbitration clauses and to require waiver of the right to join class actions — even in contracts of adhesion (Wilson 2012). As many commenters have noted, this has severely curtailed the effectiveness of private rights of action to deter bad conduct. Additionally, the Supreme Court over the last few decades has consistently raised the barriers of standing for private litigants, and made it increasingly difficult to certify a class (Campbell 2013).

For private rights of action to serve their purpose, the DPA should expressly prohibit any forced arbitration or any limit on the right to join a class-action lawsuit. This will allow small businesses and start-ups to exercise their rights and enjoy the protections of the statute regardless of the political will of the enforcement agency. Additionally, Congress should provide for liquidated damages and injunctive relief, as well as for recovery of any actual damages.⁹⁹ This will ensure standing for parties affected by anticompetitive behavior.

⁹⁹ “Liquidated damages” is a legal term meaning minimum monetary damages awarded by statute (or, in the case of a contractual penalty, set by the parties). Liquidated damages are used when it can be difficult to prove actual damages because the harm is either intangible or difficult to measure. Congress may also choose to set damages at a level designed to discourage violations. For example, the Cable Privacy Act imposes liquidated damages of \$100 a day per violation, but not greater than \$1,000. See 47 U.S.C. §551(f)(2)(A).

CHAPTER V: COMPETITION IN THE MARKETPLACE OF IDEAS — DIVERSITY, CENSORSHIP, AND THE PROBLEM OF CONTENT MODERATION.

Ever since the first comprehensive regulation of broadcast radio under the Federal Radio Act of 1927, we have struggled to protect free expression while protecting the public from the harms of amplifying misinformation and hate speech. A 1939 *Columbia Law Review* note on “Radio Censorship and the Federal Communications Commission”¹⁰⁰ observes the concern with limiting hate speech and fraud versus the concern that the FCC effectively censored controversial speech through its policy of invoking renewal hearings based on broadcast content (including commercials). It also surveys concerns about favoritism to the administration in power and the need to enhance minority representation. A reader familiar with efforts by members of Congress to push Google, Facebook, and Twitter to moderate content — from terrorist recruitment to supposed bias against conservative viewpoints — would find the article’s concerns equally applicable to today’s social media platforms. Likewise, many of the proposed solutions would have a familiar ring, such as government ownership of radio stations, promotion of programming about controversial issues, and treating radio stations as state actors for First Amendment purposes, subject to strict scrutiny for content-based censorship.

Indeed, the caution that government censorship of “bad” content can be used to suppress information that we now would consider protected by the First Amendment and even beneficial to the public, predates electronic media. In 1873 Congress passed the Comstock Act to criminalize the dissemination of “obscene literature and immoral use.” This included birth control and materials relating to safe abortion. The Comstock Act thus became a tool to threaten advocates of women’s reproductive rights.

At the same time, the evidence has become overwhelming that malign actors are using platforms to disseminate content designed to interfere with the function of democracy, intimidate or harass individuals or targeted groups, or otherwise disrupt society. Existing law has proven incapable of addressing these harms. Nor have platforms found effective ways to police themselves. To the contrary, when platforms undertake efforts to address harmful content, they have invariably provoked criticism that they are over-inclusive, under-inclusive, biased against progressive causes in favor of white supremacist hate speech, biased against conservatives in favor of liberals, or simply do not care because they profit from user engagement (Klonick 2018; Van Zuylen-Wood 2019). Processes vary from platform to platform. Users have often complained that platforms are unresponsive to complaints, that the guidelines for each platform’s “community standards” are confusing, and that platforms may have either no process to appeal a takedown decision or

¹⁰⁰ Note, “Radio Censorship and the Federal Communications Commission,” 39 Col. L. Rev. 447 (1939).

confusing processes filled with lengthy delays (Heins 2019). This is true not merely for social media platforms such as Facebook and Twitter. On Amazon, it has become common for commercial rivals using the platform to manipulate the rules to shut out rivals through such means as planting fake reviews on a rival's product page, then complaining to Amazon about the fake reviews and triggering a takedown of the rival merchant (Dzieza 2018).

Without a set of laws clearly delineating the rights and responsibilities of platform operators and users, as well as criminalizing genuinely harmful conduct such as fraud and harassment, it is difficult to see how platforms can function effectively going forward. Worse, as observed in the controversy over the 2016 presidential election, failure to address this problem threatens the function of our underlying democracy. Whether or not Russian interference tipped the balance in that election, it cast a shadow over the election's legitimacy and reinforced hyper-partisan divisions and racial tensions.

It is not my purpose here to thoroughly examine the proper balance between the spirit of the First Amendment and the very real harms we are seeing in the form of ethnic cleansing, harassment, misinformation campaigns designed to promote distrust and influence elections, and other serious problems. To do the matter justice requires a great deal more discussion and debate, particularly with individuals and communities that have been the targets of overbroad censorship and the targets of harassment campaigns. Nevertheless, some significant discussion is necessary because any comprehensive sector-specific regulation cannot ignore these issues. Addressing issues in the age of electronic media that we have recognized for almost a century as central to our democracy must be embedded in the DNA of platform regulation.

A. Defining the Problem: Discouraging “Bad” Content While Promoting “Good” Content.

I therefore propose to set out in this section a basic framework for addressing the general category of “content moderation.” First, we must consider which problems we believe require a policy solution. These divide into two almost opposite categories. In the first instance, we wish to restrict (and possibly punish) the dissemination of “bad” content. “Bad” content can include content long punished under the common law or falling outside the First Amendment, such as false advertising, fraud, and threats of physical violence or harassment. But it can include other forms of content hurtful to individuals but not necessarily illegal (such as “revenge porn”), ideas broadly considered harmful to society (such as racist or misogynist ideologies, “fake news,” or conspiracy theories), or activities harmful to individuals, such as “cyberbullying.” Some of these ideas and expressions enjoy various levels of First Amendment protection, setting them beyond direct government prohibition. Others fall into a gray area, where the conduct arguably could be

criminalized or subject to civil penalty. Some content may be considered unsuitable for children but acceptable for adults. For purposes of policy consideration, however, we can characterize this generally as the problem of limiting (or providing incentives for platforms to limit) the creation and/or dissemination of “bad” content.

The second general category is the creation and dissemination of “good” content. Although this is much less of a public concern, the question of how to promote various forms of “good” content has been a central policy question in electronic media for nearly a century. Examples of “good” content include educational content (particularly for children), news about local, national, and international affairs necessary for self-government, and representation in entertainment of a broad and diverse population mirroring the diversity of our society as a whole. This “diversity rationale” has at times produced policies designed to create greater opportunities for the public to be exposed to diverse and competing viewpoints, and at other times has included mandates to create certain types of content.

Although the last century of regulation of electronic media offers valuable lessons both as to what our goals should be in moderating content and which methods might be useful or harmful, there are important differences between digital platforms, telecommunications networks, and media of mass communication. In the world of electronic communications, we could easily distinguish between direct communication between one individual and another (telecommunications), and mass communication from one to many (broadcasting and cable). Platforms blend these concepts seamlessly. In addition, platforms create an entirely new form of communication, self-organizing many-to-many communities.¹⁰¹ While the gatekeeper function of the platform mirrors the gatekeeper function of the telephone network or the cable system, it is no longer straightforward to develop a set of rules governing telecommunications on the one hand and mass media on the other.

This raises important questions that must inform any proposed regulatory regime. Is the goal of moderating “bad” content to shield people from content they find hurtful or objectionable, or to ban the production of harmful content entirely? Do we seek to punish those who produce “bad” content or who engage in certain types of behavior? For example, should it be illegal to use any digital platform to advance racist concepts such as “the need for a white ethnostate” or “how Jews control the world?” Or should it be difficult to find such content, so that only those who actively seek it can participate in it? Should platforms monitor messaging functions to prevent the spread of potentially violent racist polemics? At what point do group conversations move beyond a typical

¹⁰¹ The concept of self-organizing many-to-many communities, while technically possible in the world of telecommunications, is highly limited. By contrast, the ability to form self-organized communities is a core function of many platforms.

small-scale conversation and become something more global and potentially more harmful? What if the problem is not violence, but indecency?

Similarly, when considering how to promote “good” content, we must decide where the public interest in promoting diversity of content ends and becomes counterproductive, or even an exercise in state propaganda. Studies of media literacy demonstrate the value of exposing people to diverse content and avoiding “silos” that reinforce stereotypes and hyper-partisan political views (Sunstein 2018). Yet there are limits. People have a right to decide that they enjoy particular types of entertainment or favor a particular political perspective and cannot be forced to view content they do not like (or find offensive) as the price of getting their desired content. In addition, recent studies show that forcing people to read or listen to diametrically opposed views can backfire and actually reinforce a person’s pre-existing views (Benkler, Farris, and Roberts 2018; Klein 2018).

Finally, factors that encourage production of “good” content may also encourage production of “bad” content. For decades, advocates have debated whether online anonymity is an important protection for speakers or a shield for wrongdoers. The reality, of course, is both. The question of whether to favor those who require anonymity to speak honestly, explore new possibilities, and create, versus suppressing the ability of those engaged in hurtful or illegal activity to hide behind anonymity, is not amenable to some sort of logical proof or mathematical balancing. It is invariably a judgment by whomever the law empowers to make that decision.

There is no single right answer to any of these questions. Resolving them inevitably requires line-drawing, resulting in some arbitrary outcomes. But the value of any framework is found in its overall contribution, not in the most difficult edge cases. I propose the following framework to guide further debate, understanding that ultimately, drawing lines will require societal and legislative consensus.

B. A Basic Framework for Moderating Harmful Content.

The Communications Act contains multiple provisions for policing conduct deemed harmful for a variety of reasons. In the realm of telecommunications, we criminalize fraud,¹⁰² harassment,¹⁰³ and unwanted robocalls, texts, or faxes.¹⁰⁴ But efforts to criminalize indecent content (or to force telephone networks or cable operators to take steps to prevent exposing minors to indecent content) are found to violate the First Amendment. In the realm of electronic communications, the policy and First Amendment analysis become even more complicated. Depending on the medium

¹⁰² 18 U.S.C. §1343.

¹⁰³ 47 U.S.C. §223.

¹⁰⁴ 47 U.S.C. §227.

and the nature of the regulation, the Supreme Court has used a variety of tests with regard to prohibiting content on broadcast or cable. The Court has also addressed certain types of limitations on internet content generally and on access to social media.

Because laws addressing moderation of expressive conduct raise concerns under the First Amendment, I begin with a short overview of the doctrines relevant to regulation of “bad speech” in electronic media. This includes the commercial speech standard, the various levels of First Amendment “scrutiny,” and doctrines that permit regulation of speech despite a First Amendment interest on the part of either the speaker or the platform. I will next discuss the advantages and disadvantages of relying on the platforms themselves to police content, either through extra-legal social pressure or through imposition of legal incentives and penalties such as civil liability. Finally, I will make several broad recommendations for approaches consistent with the Constitution and policy, recognizing that the details of specific language require careful drafting when translating these into statutory language.

1. Direct Government Regulation of Content and the Confusing Question of First Amendment Standards: Commercial Speech Doctrine, Strict versus Intermediate Scrutiny, Reasonable Time and Space Restrictions, “Intrusiveness,” and Other Mitigating Doctrines.

Unsurprisingly, some forms of “bad” content have proven easier to regulate than others. In general, content that violates common-law torts, furthers criminal activity, or is otherwise unfair and deceptive does not qualify for protection under the First Amendment. For example, content that is deceptive or clearly causes consumer harm, such as false advertising, generally enjoys no constitutional protection. Similarly, content designed to intimidate through the threat of violence or other unlawful actions, false statements about individuals that damage their reputation, or clear steps to engage in a criminal enterprise have long been prohibited by common law and statute. The difficulty in policing these kinds of “bad” content lies primarily in distinguishing between prohibited content and content which, while socially harmful or distasteful, enjoys First Amendment protection.

Even where speech is protected, however, not all speech is protected equally under the First Amendment. Much commercial activity relates in some way to speech. If the First Amendment prevented regulation of all commercial activity that somehow related to speech, virtually no commercial regulation would be possible. This is especially true with regard to online businesses, where information is constantly being collected, manipulated, and distributed as part of the normal course of business. The law distinguishes between mere commercial activity subject to regulation and commercial speech. Furthermore, while commercial speech enjoys some protection under the

First Amendment, it does not enjoy the same level of protection as non-commercial speech.¹⁰⁵ Under the commercial speech/*Central Hudson* test, a regulation that affects commercial speech (assuming the speech is neither misleading nor related to unlawful activity) survives if (a) the regulation serves a “substantial” government interest; (b) the regulation directly advances the government interest; and, (c) the regulation “is not more extensive than necessary” to serve that interest.

The inquiry does not end with the distinction between commercial and non-commercial speech. Often the Supreme Court employs an additional layer of analysis, particularly when it comes to electronic media. Traditionally, broadcast media receive little direct First Amendment protection. As long as there is a rational (and content-neutral) reason for limiting or requiring speech by a broadcaster, the regulation will survive First Amendment scrutiny. The next highest level of scrutiny is “intermediate scrutiny.” This applies to platforms such as cable providers that do not generally “speak” to their customers but play a role in selecting the content available on the platform. Intermediate scrutiny requires that the regulation advances an important government interest unrelated to the suppression of speech and does not burden more speech than is necessary.

Laws regulating newspapers or otherwise directly regulating speech or the press must survive “strict scrutiny” under the First Amendment. Strict scrutiny is an extremely difficult hurdle to overcome. To survive strict scrutiny, a regulation must serve a “compelling” government interest, and the regulation must be “narrowly tailored” to serve the compelling interest. This standard is sufficiently hard to meet that it is often described as “strict in theory, fatal in fact.”

Additionally, all laws that in some way regulate speech must be “content neutral.” Defining “content neutral” is difficult, since the purpose of a law that addresses speech in some way is to affect “content” and is therefore not “content neutral” in the conventional sense. “Content neutral” in this sense generally means not favoring or disfavoring speech because of its point of view. For example, in traditional media regulation, government efforts to promote local news production by limiting the number of media outlets a broadcaster may own in a local market, or by requiring cable operators to carry local broadcast stations even when the cable operator does not wish to carry them, are content neutral because the government is not favoring a particular viewpoint (e.g., Republican or Democratic, liberal or conservative). While it can be argued that the government is favoring one perspective over another in the conventional sense, i.e., local over non-local, the government is not providing or prohibiting specific content (Sunstein 1994). Similarly, when the government bans “harassing” or “threatening” speech, it is not making a judgment as to whether specific ideas are good or bad in themselves. To survive as content neutral, regulation of harassing

¹⁰⁵ See *Central Hudson Gas and Electric v. Public Svc. Comm’n* 447 U.S. 557 (1980) (“*Central Hudson*”).

or threatening speech judges whether the intent is to cause fear or emotional distress, rather than to expose people to “bad ideas.”¹⁰⁶

Finally, in drafting potential laws relating to content moderation, we must consider two somewhat related doctrines that inform the First Amendment analysis. The Supreme Court has found that the government can impose “reasonable time and space restrictions” on expression and can protect members of the public from unwanted or unusually intrusive speech. For example, the First Amendment does not prohibit the government from imposing noise limits in residential neighborhoods or banning trucks with loudspeakers playing during residential sleeping hours.¹⁰⁷ The First Amendment permits the government to regulate “robocalls” and “robofaxes.”¹⁰⁸ The First Amendment permits restricting “adult” entertainment to particular areas (or excluding them from particular areas) as a consequence of their secondary effects on property values and concerns about crime.¹⁰⁹

Perhaps most relevant, the Supreme Court has found the prohibition on broadcasting “indecent” content constitutional, in *FCC v. Pacifica Foundation*.¹¹⁰ There, the Supreme Court found constitutional a warning issued by the FCC against a radio station for playing a comedy monologue by comedian George Carlin called “Filthy Words.” The Court found the content “indecent” rather than obscene, and therefore subject to protection under the First Amendment. Although the *Pacifica* decision noted in passing that broadcasting enjoys a lower measure of First Amendment protection than any other medium, the decision did not rely on this distinction. Rather, the Court found that the uniquely “pervasive” nature of broadcasting (at least at the time of the decision) made it effectively impossible to keep unwanted indecent speech out of the home. This uniquely “pervasive” and “intrusive” quality of broadcasting posed a particular challenge to parents trying to shield their children from exposure to indecent content. Analogizing congressional and FCC regulation of indecent broadcast content to nuisance law, the Court found in *Pacifica* that punishing broadcast of indecent content at times when children were likely to be in the audience did not violate the First Amendment.

It is therefore possible, at least in theory, that restrictions on certain types of content on digital platforms would pass muster either as a means of blocking unwanted, intrusive speech or as “reasonable time and place” restrictions. As demonstrated by Congress’s difficulties prohibiting or

¹⁰⁶ Compare *Ashcroft v. Free Speech Coalition*, 535 U.S. 234 (2002) (Congress cannot criminalize “virtual” child pornography on grounds that doing so normalizes actual child pornography) with *Virginia v. Black*, 538 U.S. 343 (2003) (cross-burning can be prohibited if done with ‘intent to intimidate,’ but cannot itself be *prima facie* evidence of intent to intimidate).

¹⁰⁷ *Kovacs v. Cooper*, 336 U.S. 77 (1949).

¹⁰⁸ *Moser v. FCC*, 46 F.3d 970 (Ninth Cir. 1995).

¹⁰⁹ *City of Los Angeles v. Alameda Books, Inc.*, 535 U.S. 425 (2002); *Renton v. Playtime Theaters*, 475 U.S. 41 (1986).

¹¹⁰ 438 U.S. 726 (1978).

otherwise limiting indecent content in other areas of electronic communications, and the FCC's subsequent trouble enforcing indecency regulation in broadcast, employing these doctrines effectively is extremely difficult in practice. The Supreme Court has generally found that where a party takes "affirmative steps" to bring content into the home, then the indecent content cannot be considered "intrusive" and should receive First Amendment protection.

*United States v. Playboy Entertainment Group*¹¹¹ provides an instructive example of how these doctrines interact, and therefore a useful roadmap for drafting content-moderation regulations applicable to digital platforms. *Playboy* dealt with a provision of the Communications Decency Act (itself part of the Telecommunications Act of 1996) requiring cable operators to take steps to prevent the intrusion of unwanted sexually oriented programming that was considered merely indecent, rather than obscene.¹¹² In addition to limiting access by children to indecent programming directly, Congress sought to address a problem with analog cable systems known as "signal bleed," where a blocked channel's content was nevertheless partially available in some comprehensible form due to the provider's inability to screen it out completely. Section 504 required a cable operator offering adult-oriented indecent programming channels to "fully block" such channels at the request of the cable subscriber. Section 505 additionally required that cable operators "fully block" channels dedicated to sexually oriented indecent programming, "so that one not a subscriber to the channel does not receive it." The definition of "fully block" was designed to include blocking any signal bleed. Where cable operators could not technically comply with the blocking requirement, the statute required them to limit transmission of indecent material to the same "safe harbor" hours as for broadcasting, 10 p.m. to 6 a.m., when young children are presumed not to be watching.

In analyzing the constitutionality of these provisions, the Court agreed with the government that cable programming, like broadcasting, "comes into the home uninvited" and could therefore be regulated in a manner similar to broadcast indecency. However, because Sections 504 and 505 directly targeted speech based on its content, it nevertheless required strict scrutiny. The Court distinguished its zoning cases because the statute was not designed to address secondary effects of constitutionally protected speech. The Court then found that the requirement to limit indecent programming to the "safe harbor" hours imposed an impermissible burden on adults wishing to receive the indecent protected content. The Court then concluded that the government failed to show that Section 505 was the "least restrictive" means of achieving the goal of keeping unwanted indecent material out of the home. By contrast, Section 504, which required cable operators to "fully

¹¹¹ 529 U.S. 803 (2000).

¹¹² The distinction is important for First Amendment purposes. Obscene material enjoys no protection under the First Amendment and may be criminalized (and is prohibited by law from transmission on cable systems). Indecent content is protected by the First Amendment. Discussion of the distinctions between obscene content and indecent content are beyond the scope of this paper.

block” such channels at the request of the cable subscriber, did survive scrutiny as the “least restrictive” means of allowing subscribers to block the unwanted content.

Several other elements in the analysis are worthy of note. First, the Court faulted Congress for its failure to compile a substantial record as to the nature of the problem and to explain why the universal blocking requirement of Section 505 was necessary, rather than the less restrictive means of requiring subscribers to request blocking of specific channels. The Court dismissed the argument that because few subscribers availed themselves of this remedy, the remedy was ineffective. As the Court stressed, the general rule for handling unwanted content is to require people who wish to avoid unwanted content to do so, rather than to silence speakers. Even when the unwanted speech is intrusive and therefore the government may take steps to assist individuals in blocking unwanted content, it is appropriate to require some action on the part of the individual wishing to block the speech rather than placing the entire burden on the controversial speaker.

Finally, when Congress or a regulator does regulate on the basis of the specific content of the speech, strict scrutiny will always apply even if the speech interest would be considered “weak” under intermediate scrutiny. As the Court explained in its *Playboy* decision, when content is directly targeted based on its controversial expression, the analysis revolves around the direct speaker and the adult listener desiring to receive the content. As a result, the Court will not consider the strength or weakness of the speech interest. By contrast, when regulating to address negative secondary effects (such as zoning adult theaters or bookstores) or when regulating a platform under a content neutral regime (such as cable must-carry), the Court does look to the relative strength of the speech interest and/or the importance of the speech.

2. A Checklist for Congress on Content Moderation Laws.

As we have seen, the First Amendment is not the complete barrier to regulating content some have claimed, but neither can it be ignored. No one can doubt that the rise of hate speech and the use of social media and other communications platforms to encourage and even organize physical assaults on vulnerable individuals and communities raises deep concerns for the safety of life and property, and for the ability of targeted individuals to participate fully in society. The First Amendment does not require the government to sit idly by while people are harassed and threatened. Likewise, the First Amendment does not protect fraudulent content in commerce or in non-commercial speech. Nor is the First Amendment blind to the way in which technology amplifies the power of bad actors. Just as the government can reasonably limit the use of voice-amplifying equipment in the real world to protect sleeping residents at 2 a.m., the government may take action to address digital platforms’ amplification of bad actors’ harmful conduct. In doing so, Congress may

impose regulation on the platforms themselves, as well as on those who use the platforms for illegal or harmful purposes.

But the First Amendment does impose limits. Because of the importance we have attached in our democracy to allowing controversial speech even when hateful or offensive, it is not enough for Congress simply to find that particular speech-related activities are harmful. Nor can the rights of individuals engaged in bad conduct be casually thrust aside. Courts have found that bad actors do not lose the entirety of their First Amendment rights as a consequence of their bad acts. As the Supreme Court found in *Packingham v. North Carolina*, even a convicted child sex offender cannot be perpetually barred from access to all social media.¹¹³

To address the First Amendment concerns around legislation aimed at harmful content, I propose the following checklist for consideration.

- 1. Does the regulation raise a First Amendment question at all?** There is a tendency to assume that all online conduct is somehow speech, and therefore is eligible for First Amendment protection. But a good deal of regulation has nothing to do with speech. A requirement to collect sales tax on video subscription services, for example, is simply a mechanism for raising revenue despite the fact that it increases the cost of distributing expressive content. However, if the tax is structured in a way that is clearly designed to impose a burden on speech, or on a particular type of disfavored speaker, then it does raise First Amendment concerns. Alternatively, the conduct may be speech-related but fall into one of the recognized categories of speech that does not receive First Amendment protection, such as speech relating to illegal activities, threats, or other forms of harassment.

Sometimes this question may be mixed. For example, laws requiring truthful disclosure generally do not raise First Amendment concerns, but laws that require a specific type of notice or image might.¹¹⁴

- 2. Is the regulation a regulation of commercial speech or a general regulation of speech?** Speech proposing a commercial transaction is subject to the *Central Hudson* test. It is important to recognize, however, that simply because the speech occurs in a commercial context does not make it “commercial speech.”
- 3. Is the regulation content neutral or directed at a particular speaker or viewpoint?** If the speech enjoys First Amendment protection, then a regulation of the speech or speaker will

¹¹³ 582 U.S. ___ (2017).

¹¹⁴ *R.J. Reynolds Tobacco Co. v. FDA*, 696 F.3d 1205 (D.C. Cir. 2012).

generally need to meet strict scrutiny. A content-neutral restriction on speech may be subject to the intermediate scrutiny standard.

- 4. What is the nature of the of the government’s interest? What is the nature of the speech interest?** Unlike strict scrutiny, both intermediate scrutiny and the Commercial Speech Test look at both the nature of the government interest and the importance of the speech interest.
- 5. Does the regulation fall into a category where speech concerns are otherwise relaxed?** For example, is the regulation designed to protect minors? Is the medium of speech unusually intrusive, or otherwise impossible to block when unwanted? Does the regulation primarily relate to curtailing secondary effects rather than the speech itself? Is the regulation a “reasonable time and space” restriction?
- 6. Is the legislative or regulatory record substantial enough to support the regulation?** Any time the court determines that a First Amendment interest is at stake, it will require a substantial record to demonstrate the importance of the government’s interest and why the regulation is either the least restrictive means, or burdens no more speech than necessary (depending on the standard of scrutiny applied).
- 7. To whom does the First Amendment interest belong?** It is often argued that any regulation of online services inherently impinges on the First Amendment interest of the online service provider. While this is often stated with great vehemence, the law does not support this view. Rather, where a platform takes no role in selecting the content, it has no speech interest in the content.¹¹⁵ Alternatively, the platform may have a weak speech interest, but those directly affected might have a stronger speech interest to consider. For example, a prohibition on selling Nazi books or Nazi memorabilia online is not a First Amendment limitation on eBay, which merely serves as a meeting point between a willing buyer and a willing seller. It has no interest in the nature of the goods sold on its platform. At best, eBay might be considered to have a weak interest in maximizing the available content for sale. But such a restriction would clearly affect the First Amendment rights of those seeking to sell such books or merchandise and those affirmatively seeking to buy them.

¹¹⁵ *Sable Communications v. FCC*, 492 U.S. 115 (1989).

Table of Relevant Constitutional Doctrines

Type of 1 st A Test	Primary Case(s)	General Description	Additional Notes
Commercial Speech	<i>Central Hudson Gas and Electric Corp. v. Public Service Commission</i> , 447 U.S. 557 (1980)	Limitation on commercial speech must directly advance a “substantial” government interest; burden on speech must be “no more extensive than necessary.”	Applies only to commercial speech. Intermediate scrutiny uses similar standard for speech restrictions generally.
Strict Scrutiny	<i>Miami Herald Publishing Co. v. Tornillo</i> , 418 U.S. 241 (1974). <i>Buckley v. Valeo</i> , 424 U.S. 1 (1976).	Must serve “compelling government interest” and be “narrowly tailored” to advance the compelling government interest.	“Strict in theory, fatal in fact.”
Intermediate Scrutiny	<i>Turner Broadcasting Systems, Inc. v. FCC</i> , 512 U.S. 622 (1994) (<i>Turner I</i>). <i>U.S. v. O’Brien</i> , 391 U.S. 367 (1968).	Regulation must advance an “important” government interest unrelated to suppression of speech, and must not burden more speech than necessary.	Regulation must be “content neutral.” If speech interest protected is relatively “weak,” then lesser showing required.
“Intrusive”	<i>FCC v. Pacifica Foundation</i> , 438 U.S. 726 (1978).	If speech is unwelcome and intrusive into the home, the government may act to protect unwilling listeners.	If an affirmative act is required to access the unwelcome speech, such as subscribing to a service that has some welcome and some unwanted speech, the unwanted speech is not deemed intrusive.
Secondary effects	<i>City of Renton v. Playtime Theaters</i> , 475 U.S. 41 (Where the record shows that certain types of speech have negative “secondary effects” unrelated to the content of the message (e.g., increase of crime in neighborhoods with adult theaters), then regulation on basis of content permissible.	Requires extensive record proving correlation between the regulated First Amendment activity and the harmful secondary effects.
Reasonable Time and Place	<i>Grayned v. City of Rockford</i> , 408 U.S. 104 (1972). <i>Ward v. Rock Against Racism</i> , 491 U.S. 781 (1989).	Reasonable content-neutral regulations governing the use of venue, narrowly tailored to avoid burdening more speech than necessary.	

i. An Example: Addressing the Problem of Hate Speech on Platforms.

Taking all of these together, let us consider the question of legislating policies designed to address online harassment and hate speech. The term “hate speech” is very broad, encompassing a range of conduct from direct harassment of individuals based on a protected characteristic (e.g., race, gender, sexual orientation, religion) to broad political speech directed against a target group. It can include many tactics and tools, such as the use of bots and massive numbers of accounts controlled by a single individual to increase the potency of the harassment. Concerns about hate speech range from the impact on individuals directly threatened, to the broader impact on the ability of members of targeted groups (or those not wishing to be associated with the hate speech) to use the platform even when not the direct target, to the use of platforms by extremist hate groups to recruit and radicalize individuals to commit acts of violence. At the same time, it is very clear that at least some hate speech we as a society would generally find offensive is protected by the First Amendment.

I will address some potential approaches in Chapter VI. For purposes of this example, I want to focus on how Congress or a regulatory agency would conduct its First Amendment analysis. First, we should be clear on the specific problem we are trying to address. Is the law (or provision of the law) designed to protect individuals from harassment, to enable those wishing to avoid hate speech (or prevent their minor children from accessing hate speech), or to guard against recruitment to criminal activity linked to “radicalization?” Each harm would require a different approach. If the goal is to protect individuals from harassment or allow those not wishing to be associated with the speech (such as advertisers) to avoid that association, then we would want to focus on building a record of the vast secondary harms, and why existing voluntary solutions (such as social media users’ ability to block individuals) are not sufficient. We would need to build an extensive record detailing the compelling government purposes served by any solution that burdened speech, including burdening the ability of the platform to offer the service in the manner it wishes and to present the content it wishes. Because the restriction is clearly content-related and not viewpoint-neutral, the record will need to be far more extensive and detailed than usually required for legislation.

Part of the inquiry would be whether the legislation concerns specific platforms that are dominant and therefore unusually intrusive or difficult to avoid. It would also examine whether it bans more speech than necessary by interfering with the ability of speakers to reach willing listeners. For example, legislation that bans anyone from creating specific online forums dedicated to constitutionally protected hate speech would be virtually impossible to justify on a theory of

protecting individuals. Even legislation that bans hate speech on digital platforms over a certain size would create grave First Amendment concerns. By contrast, legislation designed to segregate hate speech into clearly designated online communities, or to require platforms to exclude hate speech from their search results or recommendations unless specifically requested, could be analyzed as a means of addressing the intrusiveness of digital platforms and the existing difficulty for individuals trying to block such speech as unwanted. The proposed remedies could also be supported by demonstrating hate speech's harmful secondary effects on the platform economy. These include a reduced willingness by advertisers or merchants to use platforms because of the consequences of being associated with hate speech, the enhanced burden on platforms trying to police such conduct, and the inability of individuals to participate in online civic discourse because of the hostile environment created by online hate and harassment.

If we are trying to prevent the harms of radicalization and organizing for violent illegal activity, it is not enough to shield individuals. It is extremely difficult to imagine a law that could successfully ban content that might radicalize individuals enough that they commit violent acts without suppressing constitutionally protected speech. But this would not leave the government entirely helpless. Remedies would be limited to outlawing behavior that falls outside the First Amendment (such as speech directly related to planning a crime), or requiring mechanisms designed to assist law enforcement in surveillance that are narrowly tailored to address the unique properties of digital platforms.¹¹⁶

On the other hand, certain approaches might not trigger strict scrutiny. Congress could directly prohibit (or impose civil penalties for) certain types of conduct that fall outside the realm of First Amendment protection, such as harassment. For example, Congress could outlaw harassment via a digital platform in the same way it has outlawed harassment over the telephone. Congress could focus on regulating the tools that make harassment easier online, such as prohibiting the use of bots and fake accounts for deceptive purposes or to harass individuals or without the express consent of the platform provider.¹¹⁷ To the extent these trigger First Amendment concerns, they are far easier to draft in a content-neutral manner that would trigger intermediate scrutiny rather than strict scrutiny, or that could be addressed as commercial speech under *Central Hudson*.

¹¹⁶ An example of this kind of legislation is the Communications Assistance to Law Enforcement Act (CALEA), which requires operators of telephone networks to build into their networks an ability for law enforcement to surveil their systems. This legislation does not change the due process standard necessary for law enforcement to secure a warrant to conduct the surveillance, but it ensures that ongoing surveillance is possible.

To be clear, I am not proposing such an approach for digital platforms. I merely cite CALEA here as an example of legislation that can assist law enforcement in countering illegal activities without suppressing speech or violating other constitutional protections.

¹¹⁷ The right to speak anonymously is constitutionally protected under some circumstances and is valuable in many circumstances — including in cases that involve controversial speakers. Similarly, not all uses of bots are harmful. Many uses of bots, including anonymous bots, are beneficial. Any legislation would clearly need to take these issues into consideration. My sole purpose here is to provide an example of how Congress or a regulator should analyze any proposed remedy under the First Amendment.

To conclude, while the First Amendment imposes significant restrictions on how federal or state regulation may address the problem of moderating unwanted or harmful content, it does not render the government helpless in the face of real harms. With careful drafting and a substantial record, Congress and other regulators can address problems of harassment and disinformation.

3. Platforms as Gatekeepers: Advantages and Problems of Private Censorship; Potential First Amendment Issues.

Generally speaking, the First Amendment ban on direct prohibitions applies only to government action. As we have seen over the last several years, existing laws banning deceptive advertising or other types of traditionally prohibited content have proven ineffective against the flood of harmful content that undermines our ability to engage in positive civic discourse online and diminishes the value of digital platforms for either commercial or social use. This does not mean that more effective laws cannot be drafted. But this explains why platforms have faced increasing social and political pressure to police themselves (Keller 2019).

Whether to rely on informal private censorship of platforms for content moderation has given rise to an extensive literature and intense discussion over the last few years (Keller 2019; Klonick 2018; Hassen 2018; Balkin 2018b). For purposes of brevity, I do not explore these arguments here in any great detail. Suffice it to say that proponents of leaving content moderation to private companies, relying on incentives and social pressure (and criminal penalties for individuals who use digital platforms for illegal purposes), highlight the dangers of government censorship. They worry especially that governments will use laws designed to protect people from harmful content to suppress dissent and control information. Both history and present practice support these arguments and illustrate the cost to freedom and innovation when these laws are abused.

Those who argue against turning digital platforms into gatekeepers/censors, either through informal social pressure or through legal liability for permitting “bad” third-party content (however defined) to appear on their platforms, rightly point out that corporate censorship can be just as inimical to free speech as government censorship, and lacks the legal protections of due process and the First Amendment. For-profit businesses (especially large businesses) tend to try to avoid controversy and to limit litigation risk. This historically has led to over-censoring permissible speech, particularly political speech or speech from traditionally marginalized communities that the mainstream might find uncomfortable. Worse, large platforms are subject to political pressure — so-called “regulation by raised eyebrow” — to block speech that governments or law enforcement officials find embarrassing or upsetting to the status quo. Yet this is precisely the kind of speech that deserves the highest levels of First Amendment protection.

Instead of choosing a side, I wish to draw attention to several uncomfortable truths that argue against complete immunity for platforms or making platforms the primary police of content.

No scheme of content moderation can be effective unless it combines both public and private rulemaking. We have seen the effects of delegating content moderation entirely to the private sector by immunizing providers from any consequences for their failure to successfully censor their platforms.¹¹⁸ The result, all would agree, has proven highly unsatisfactory. Often, companies have no incentive to address harmful content, or have incentives to ignore or even encourage harmful content. Even where companies have strong incentive to develop effective mechanisms to police content, such as eliminating fraudulent product reviews that undermine confidence in reviews generally, these processes often punish innocent conduct, fail to identify disallowed content, are difficult to use for ordinary consumers or businesses, and are still subject to manipulation and gaming by “bad actors.” (Emerson 2018; Hazony 2018; Dzieza 2018)

This is not to say that systems developed by statute or regulatory agencies are perfect either. Rather, it is clear that the issues and potential policy tradeoffs are far too complicated for private companies to handle alone. Digital platform providers and users are enormously frustrated by the lack of clear rules of the road or guidance. Nor is this a situation in which competition among platforms is likely to produce platforms with optimal policies that draw users “voting with their feet.” Setting aside the numerous objections to whether “voting with one’s feet” is even possible when it comes to digital platforms (given problems such as information asymmetry, switching cost, lack of alternatives, and potential collective action problems), there are many situations in which people are injured even if they do not subscribe to the platform where the harmful speech occurs. For example, if someone creates a “deep fake” pornographic video and distributes it through a platform dedicated to “deep fakes,” the harm occurs regardless of whether the victim subscribes to the platform (Cole 2017). Given that there is demand for the technology and product, no rational person can expect a market mechanism to emerge to address this issue.

It will therefore take a combination of private action and public regulation even to begin to address the problems that have emerged.

Regulators and the public must have realistic expectations for the ability of private platforms to administer content moderation policies. This requires ongoing oversight by regulators capable of familiarizing themselves with the technology and retaining institutional knowledge as the technology evolves. Anyone using modern digital platforms

¹¹⁸ I will discuss Section 230 of the Communications Act, 47 U.S.C. § 230, in greater detail below.

understands that the technology seems both capable of anything and frustratingly incompetent. On the one hand, platforms and advertising firms promise incredible precision for targeted advertising, based on creating incredibly detailed digital profiles. At the same time, these companies cannot seem to reliably identify political advertising or distinguish between real people and bot armies controlled by a handful of individuals in the service of foreign governments (Hazony 2018; Emmerson 2018; Confessore *et al.* 2018). The companies always explain why they can't possibly do something they don't want to do but seem always capable of building in new capabilities to do something profitable. Because the technology itself is an enormously complex "black box," regulators, advocates, and the general public often lack a way to check independently whether the companies' claims about feasibility are true.

As a result, regulators in the last two decades have treated technology as some fragile Rube Goldberg-like contraption that could shatter at the lightest touch of regulation. Today, as scandals mount and the good will these companies long enjoyed has been replaced with suspicion, officials' perception has swung to the opposite extreme: If only companies have incentive to "nerd harder" they will come up with filters that can make highly individualized, context-dependent decisions perfectly, to everyone's satisfaction, every nanosecond, on things that human beings frequently disagree about. Neither view permits development of healthy and sustainable policy.

One important reason Congress traditionally uses legislation to define broad policy goals and then delegates to agencies the power to achieve those goals, is the difficulty of monitoring dynamic and changing sectors of the economy. Especially in the case of a complex and rapidly evolving industry, public policy works best when there exists a regulator that is capable of defining the parameters of a problem, is responsible for hearing input from all interested parties, and whose decisions are reviewable by a court. Additionally, designation of an agency allows for development of expertise, preserved over time, so that regulators and the public do not constantly need to re-educate themselves every time a new policy question arises.

Development of an effective system will only emerge over time. No system can operate perfectly on Day 1, or even Day 100. Enforcement systems will need to evolve over time as they are applied. This means designing systems that are tolerant of error and capable of adapting over time.

Aligning platforms' incentives with those of the public interest requires mechanisms to lower the cost of good behavior and raise the cost of bad behavior while not mandating censorship of permissible speech. Policy is not about getting people to do the right thing for the right reason. Policy is about getting people to do the right thing for their own reasons. As we have seen, the existing incentives of digital platforms (including the desire to avoid bad publicity and the desire of advertisers to avoid association with harmful content) are insufficient to address the

numerous problems associated with harassment, fraudulent content, and the impacts of racist and sexist content. We must therefore keep in mind that public policy works most effectively by lowering the cost of desired behavior and raising the cost of undesired behavior.

This requires a combination of clear instructions and obligations on platforms to make compliance possible; safe harbors to protect platforms that are genuinely working to comply with the law; and penalties of sufficient magnitude that platforms do not consider the cost of violation an affordable cost of doing business. Enforcement powers and private rights of action are longstanding mechanisms with a substantial track record for success. Private rights of action are a necessary supplement to government enforcement for two reasons. First, it would be difficult, if not impossible, for a single agency to police an entire industry sector. Second, enforcement is a matter of political will. When the prevailing winds of policy shift away from enforcement, private rights of action remain available to ensure that corporate incentives remain properly aligned with the goals of public policy.

Because we deal here with speech, we must be particularly careful in how we balance the incentives. If penalties are too harsh or private rights of action are too liberal, then platforms will take the conservative route and prohibit even clearly permissible speech. This is why it is particularly important that duties are clear and that safe harbors are available for platforms operating in good faith to the best of their ability.

The debate on this balance of liability and safe harbors generally revolves around Section 230 of the Communications Act (47 U.S.C. § 230) and, to a lesser extent, Section 512 of the Copyright Act (17 U.S.C. § 512). Section 230 limits liability of interactive services for content generally, and Section 512 limits liability for copyright infringement by users of interactive services. Because these provisions have been the subject of considerable debate in recent years, I discuss them at greater length below.

Systems must be transparent to both complainants and their targets, and must incorporate reasonable safeguards to prevent bad actors (either complainants or objects of complaints) from gaming content moderation systems. Any process for moderating content, especially one mandated by law, will succeed only if the public and reviewing courts see it as fair. This requires a process that is straightforward to use for all parties (the complainant, the object of the complaint, and the administrator of the complaint process), transparent as to the decision-making process, and affording remedies commensurate with the nature of the harm and the size of the platform. Additionally, given that speech is often time sensitive, the system needs to reflect the likelihood that users will seek to manipulate the content moderation system — to gain advantage over a competitor, to gain political advantage, or simply as a new form of harassment. At the same

time, platforms must have freedom to respond when there is good reason to believe that there is an immediate risk to life or safety.

While we tend to think of the problem of content moderation as arising primarily in the realm of social networks, political speech, or other forms of controversial speech, moderation of reviews is also an important part of content moderation. As the importance of reviews and review sites has grown, competitors have found ways to manipulate the process to have rivals removed from Amazon or other important commercial platforms (Maynes 2019; Dzieza 2018). Any policies adopted must sharply distinguish between the broad protections afforded to political speech, criticism, and other non-commercial uses, versus regulation of industry practices that, while they may involve speech, are more properly analyzed as commercial speech, or even simply as commercial activity raising no First Amendment concerns.

It is the responsibility of government, not the private sector, to find the appropriate balance between protecting freedom of speech, protecting individuals from harm, and ensuring that the digital world does not become so polluted with false, fraudulent, or harassing content that it cannot reach its potential for serving the public interest. The temptation for Congress and federal regulators to rely heavily on the private sector to set content moderation rules and policies is immense. Reliance on finger-wagging, threats of regulation, and pressure from public shaming avoids the thorny problem of balancing First Amendment interests. It also allows decision-makers to avoid the hard process of drafting laws that will, inevitably, be over-inclusive, under-inclusive, or both. This temptation to “pass the buck” is not simply a refusal to draft. It also includes use of vague terms and standards. Germany’s NetzDG law, for example, requires digital platforms to remove “obviously illegal” content within 24 hours. In a no-doubt unintended irony that highlights the problems with such standards, NetzDG extends this deadline to seven days when it is complicated and non-obvious to determine whether the content is “obviously illegal” (Feld 2018b; Kinstler 2018).

Particularly in the sensitive area of balancing what we as a society find intolerably threatening and vile, Congress cannot outsource the decision to private companies. The political process is the process by which we as a society try to reach a rough, workable consensus on how to manage the right of individuals to live freely in our digital society while maintaining the right of individuals to live without fear of harassment as the cost of participation. It is not merely our elected representatives’ legal responsibility, but their moral imperative, to find the appropriate balance and to embody that balance in sound policy. We may never reach complete agreement on how to strike that balance or how to craft effective policy. But to refuse to act, thus delegating fundamental judgments on the governance of digital content to a handful of private actors, would be a stunning failure and an act of moral cowardice.

C. “Publisher Liability,” Section 230 and the Digital Millennium Copyright Act (DMCA).

As noted above, one important aspect of aligning the incentives of platforms to protect users from unwanted, harmful content is through private rights of action. Imposing fear of liability for negligence is the traditional means of encouraging businesses to observe a basic duty of care. Fear of liability for defective products is the traditional means of encouraging businesses to build products that function as advertised. Fear of liability for the acts of employees and subordinates is a traditional means of encouraging businesses to exercise reasonable oversight over their employees. Jack Balkin and others have proposed the idea of an “information fiduciary,” imposing an obligation to protect information that users disclose to platforms (Balkin 2018b). As a consequence of decisions made as part of the Telecommunications Act of 1996, providers of “interactive computer services” enjoy special protection from liability for third-party content. The Telecommunications Act of 1996 amended the Communications Act to include a new Section 230, designed to limit the liability of newly emerging “interactive computer services” for third-party content or for failing to perfectly protect users from third-party content they promised to block.

Few sections of the Communications Act have enjoyed such a storied history of hasty drafting, radically broad interpretation, and subsequent misunderstanding. As a consequence, Section 230 has been interpreted by the judiciary as conferring broad civil immunity for third-party content to broadband providers and digital platforms, and now sits at the center of the debate over content moderation and liability. Worse, it has confused the entire issue by focusing on the red herring of “publisher liability,” an extremely limited form of liability that would not address the question of liability for third-party content in the manner envisioned by proponents of eliminating or substantially modifying Section 230.

To untangle this debate, I will review the history of Section 230 and why “publisher liability” (or even “speaker liability”) would do little to affect platforms’ content moderation policies. Worse, because Section 230 has been in place for so long, simply to remove it (or substantially modify it without clear guidance on how the new liability regime should operate) would create enormous uncertainty and chaos as courts examine what “publisher” or “speaker” liability should actually mean in this context and whether they apply even in the absence of Section 230. I will also argue that the notice and takedown schemes that replicate the flawed model used in Section 512 of the Copyright Act, a model often proposed for requiring platforms to moderate content deemed harmful by the regulating authority, would be disastrous if applied to digital platforms generally.

1. History of Section 230 and How It Has Confused the Current Content Moderation Debate.

Online services became commercially available to consumers in the 1980s. These services, however, were quite different from modern internet service providers, or even the dial-up ISPs that would flourish after 1994. These early online services were primarily focused on “walled gardens” where users interacted with one another. Even sending external emails from one online provider to another might incur a separate charge. These services were actually called “electronic publishing” by the FCC in its *Computer* proceedings, and “electronic publishing” was the term used to describe these and similar activities in the breakup of AT&T.¹¹⁹

For some years, these online services remained the province of early adopters and technophiles. The invention and popularization in the early and mid-1990s of hypertext, the World Wide Web, and web browsers such as Mosaic (and later Netscape) changed that. Suddenly, “the internet” became a cultural phenomenon. New content proliferated, and ISPs increasingly shifted from trying to keep subscribers inside their “walled gardens” to permitting greater exchange of content and messages between subscribers and the rest of the online world.

This context is important in understanding the origin and evolution of Section 230. As internet access proliferated, so did “harmful” content, however defined. This triggered lawsuits against the existing online communities under various theories. In one of the first cases in 1991, *Cubby, Inc. v. CompuServe, Inc.*,¹²⁰ the court found that the online provider CompuServe could not be held liable for content uploaded to one of its ‘forums’ because it had no opportunity to review or alter the content. Because CompuServe had no specific knowledge of the content it distributed, it could not be held liable as the publisher of supposedly libelous statements against Cubby by a business rival.

In 1995, a different court found the exact opposite. In *Stratton Oakmont, Inc. v. Prodigy Services Co.*¹²¹ a New York state court found that Prodigy could be liable as a publisher for purportedly libelous statements against Stratton Oakmont. The *Stratton Oakmont* court relied on early statements by Prodigy that it marketed itself as a “family-friendly” service that actively screened content, that Prodigy had an acceptable-content policy, and that Prodigy did make efforts to screen content that violated this policy. The court distinguished *Cubby* on the grounds that

¹¹⁹ The newly created ILECs, aka the “Baby Bells,” were initially prohibited from offering electronic publishing services for fear that they would favor their own content and affiliates over those of rivals. The Court found this prohibition served the interests not only of competition, but the interests of the First Amendment. *United States v. Western Electric Co.*

¹²⁰ 776 F. Supp. 135 (SDNY 1991).

¹²¹ 23 Media L. Rep. 1794 (N.Y. Sup. Ct. 1995).

CompuServe made no promises to moderate content and had no history of efforts to police content. The court concluded that explicitly holding itself out as moderating content made Prodigy a publisher, subject to potential liability for the defamatory third-party statements.

At the same time, the rise of the internet brought with it the rise of online pornography and indecent content, as well as new opportunities for harassment. Even more alarming, the anonymity of online communications, particularly “chat rooms” and “bulletin boards” used by subscribers to exchange text information, provided new opportunities for sexual predators. Lurid accounts of the supposed smorgasbord of smut available to minors through a new technology their parents barely understood filled news reports, while accounts of pedophiles using chat rooms to target and recruit victims led to predictable moral panic (Wu 2016). In 1995, Sen. J. James Exon (D-NE) introduced S. 314, the Communications Decency Act (CDA), to limit access to indecent material online.

The proposed Communications Decency Act gained broad support in the Senate and was eventually added by amendment to the Telecommunications Act of 1996. In the process of negotiation, Sen. Ron Wyden (D-OR) and others raised concerns about imposing liability on these new “interactive computer services” (defined in the CDA to include what we would now think of as both online access providers and digital platforms) for indecent content. One argument raised in opposition was the *Stratton Oakmont* decision. Opponents argued that interactive computer services that attempted to filter out obscene content and offer “family-friendly” services would, under the logic of *Stratton Oakmont*, be liable for any indecent material that slipped through. Opponents of “intermediary liability” (holding internet services liable for third-party content) argued that, absent legal protection, online services would take the safe course under *Cubby* and try to shield themselves from liability by explicitly adopting a “no content moderation” policy. Opponents of intermediary liability warned this would prevent anyone from offering “family-friendly” or otherwise curated services, since a single failure to catch a post in violation of the family-friendly policy could result in liability, as in *Stratton Oakmont*.

As a compromise, the CDA included an amendment from Sen. Wyden containing the “Good Samaritan Provision for Blocking and Screening of Offensive Material.” This amendment added Section 230(c), which provided that “no provider or user of an interactive computer service shall be treated as the publisher or the speaker of any information provided” by a third party.¹²² Although the Supreme Court would later strike down the indecency provisions of the CDA in *Reno v. ACLU*,¹²³ the rest of Section 230 — including Section 230(c) — remained good law. In a series of subsequent decisions, courts found that Congress intended to confer broad immunity on interactive computer

¹²² 47 U.S.C. § 230(c)(1).

¹²³ 521 U.S. 824 (1997).

services for third-party content.¹²⁴ For those concerned about the impact of potential liability on digital platforms, especially during the start-up phase, Section 230 is regarded as a foundational law that protects innovation. For those seeking to force digital platforms to police various sorts of harmful content, Section 230 is regarded as a major obstacle that needs to be repealed or significantly modified.

In point of fact, elimination of Section 230 would do little to get at the kinds of harmful speech increasingly targeted by advocates. Liability as a “publisher” or “speaker” was at issue in the *CompuServe* and *Prodigy* cases because the complaint involved defamation and libel, causes of action for which publishers and speakers are traditionally liable. But publishers are not generally responsible for bad acts committed by people inspired by their published works, or if the works they publish offend people.¹²⁵ Even liability for harassment as a “speaker” typically requires some kind of intent to harass,¹²⁶ which would clearly be absent in efforts to hold digital platforms liable for harassing hate speech. Following the precedent in *Cubby v. CompuServe*, digital platforms are likely to respond to repeal of Section 230 by eliminating their existing content moderation policies rather than by enhancing them to address problems of harassment or hate speech.¹²⁷

Nor is modification of Section 230 necessary to prosecute cases of actual criminal law. Section 230 exempts several categories of third-party content from protection. One such exception is for federal or state criminal statutes. This is important, as discussion of modifying or repealing Section 230 liability protection often involves arguments that these changes are necessary to punish criminals and deter crimes such as sex trafficking or illegal drugs. It is important to recognize that this argument is not literally accurate. In circumstances where an actual publisher would be liable for assisting criminal activity, so would any digital platform even under current law. Advocates of intermediary liability should note that both the 2018 anti-sex-trafficking act known as SESTA

¹²⁴ See, e.g. *Klayman v. Zuckerberg*, 753 F.3d 1354 (D.C. Cir. 2014); *Zeran v. America Online*, 129 F.3d 327 (4th Cir. 1997). But see *Doe v. GTE Corp.*, 347 F.3d 655 (7th Cir. 2003) (questioning broad interpretation of scope of Section 230).

¹²⁵ For example, in *Doe v. GTE Corp.* the court found that it did not need to address the scope of Section 230 because, even absent Section 230, simply providing internet access and content storage to a third party does not trigger liability for third party’s tortious actions. For example, an effort to sue Oliver Stone for purportedly “inspiring” a violent shooting with the movie “Natural Born Killers” was ultimately dismissed because plaintiffs could not show any intent by Stone or Warner Brothers to actually advocate for violent killing.

¹²⁶ *Elonis v. United States*, 135 S. Ct. 2001 (2015). In this case, the Supreme Court found that an individual posting “rap lyrics” describing violent fantasies about his ex-wife on his public Facebook page did not violate the criminal statute against harassment by wire without a showing of specific intent to harass. While *Elonis* was a matter of statutory interpretation of a criminal statute, it is consistent with the First Amendment ruling in *Virginia v. Black*.

¹²⁷ It is, of course, impossible to say with any certainty how the common law on liability for third-party content would have developed without the passage of the CDA. Nor can we predict how it would evolve today if Section 230 were repealed. It does seem likely that, absent any other guide to behavior, platforms would reflect the distinctions made between *Cubby* and *Stratton Oakmont* and decline to adopt any moderation policy as the safest course.

¹²⁸and the notice and takedown provisions of the DMCA did not simply exempt the targeted content from the protection of Section 230. Both needed to take additional steps to impose liability on the platforms for the third-party content deemed harmful.

To say that eliminating Section 230 would neither create liability for many kinds of harmful content nor aid criminal prosecutions, is not to say that Section 230's protections have been meaningless, or that its removal would be harmless to the internet ecosystem. To the contrary, Section 230 has protected digital platforms (and ISPs) from particular kinds of lawsuits. Amazon, TripAdvisor, and Yelp, for example, have not needed to worry about being sued out of existence over every bad review. The recent lawsuit by Rep. Devin Nunes (R-CA) against Twitter for \$250 million (Coaston 2019) is precisely the kind of lawsuit brought for political reasons, or to intimidate critics, that digital platforms would face regularly — at least until the law settled. The legal foundation provided by Section 230 is now settled law. Eliminating Section 230 without providing a meaningful replacement would create legal uncertainty for websites, ISPs, and the entire internet ecosystem potentially classifiable as “interactive computer services.”¹²⁹ Years of litigation against every sector of the internet economy under every possible theory of liability would ensue until a new legal equilibrium was reached. But worse than the possible cost would be the likelihood that eliminating Section 230 would do absolutely nothing to address the problems of harassment, hate speech, or other harmful content that advocates of eliminating Section 230 believe they could reach with civil suits in the absence of Section 230.

The best policy is therefore to leave Section 230 alone as irrelevant to resolving the issues of content moderation. Instead, Congress should focus on developing the details of the appropriate regime for content moderation along the lines of the recommendations below.

¹²⁸ SESTA began life as a version in the House called the Fight Online Sex Trafficking Act (FOSTA). Some sources therefore refer to the law as FOSTA-SESTA. Additionally, some source material refers either specifically to the House bill or to the law as passed as FOSTA rather than SESTA.

¹²⁹ If broadband providers were classified as Title II common carriers, they would have no need for protections such as those provided by Section 230. Common carriers are automatically immune to liability for the traffic they carry, since they are powerless to prohibit it. The FCC's decision in December 2017 to reclassify broadband as an “information service,” based in part on a novel interpretation of Section 230(a), eliminated the default liability protection for common carriers and restored broadband access providers to the “interactive computer services” definition under Section 230.

A discussion of the classification of ISPs is not germane to this paper. I merely point out here that the collateral damage of elimination or radical restructuring of Section 230 would go well beyond social media or even the entire digital platform sector. Eliminating Section 230 would transform ISPs back into “electronic publishers,” with accompanying liability for content under the same circumstances as digital platforms. Legislation imposing liability must specifically exempt ISPs or otherwise modify the definition of “interactive services” in Section 230 (unless, of course, legislators intend to impose similar liability).

2. Lessons from Existing Content Moderation Regimes: SESTA, DMCA, and NetzDG.

Since Section 230 became law, we have seen two major exceptions added in the United States. In 1998, Congress passed the Digital Millennium Copyright Act (DMCA), which contains a “notice and takedown” requirement for allegedly infringing material posted by third parties on digital platforms. Variations on the DMCA “notice and takedown” regime can now be found in the laws of many nations, creating the best-known approach to civil liability for platforms for third-party content. More recently, Congress passed the Stop Enabling Sex Trafficking Act (SESTA) in April, 2018 (Romano 2018a). In 2017, Germany passed its NetzDG law, a “notice and takedown” requirement for “obviously illegal” third-party content. All of these regimes provide insight into the difficulties in using civil liability as a means of requiring platforms to police their content (Feld 2018b).

Predictably, platforms have been extremely aggressive in moderating content in the face of potential liability. As we shall examine below, this leads to chilling effects for legal content and creates significant opportunities for political or commercial entities to use these systems to target rivals. This not only imposes significant costs on those improperly blocked and those denied access to legal content. It imposes significant costs on digital platforms that are not paralleled in the offline world.

In the case of SESTA, whatever the long-term effectiveness, it appears to have had immediate unintended consequences that may aggravate the problem of human trafficking rather than alleviating it. Sex workers have stated that a law arguably designed to protect them has, in fact, placed them in life-threatening danger by requiring them to return to streetwalking and the use of pimps. San Francisco experienced a 130 percent surge in the number of human trafficking complaints in the last year, as well as associated complaints from neighborhoods where streetwalking has increased, since SESTA triggered the takedown of online personal sites used by sex workers to screen potential clients (Steimle 2019). Other police departments have likewise complained that SESTA has made it harder to catch pimps and that sex trafficking has actually increased as a result of the law (Masnick 2018). While there is less direct evidence with regard to the impact of Germany’s NetzDG law, it is noteworthy that nearly all of Germany’s opposition parties have called for its repeal, and that free speech advocates contend that platforms have been overaggressive with regard to policing speech (Pearson 2018).

A common weakness in all three regimes is the lack of reporting metrics that allow lawmakers to track the impact of these laws over time. (NetzDG has metrics and a reporting requirement, but as I explain below, these metrics are not terribly useful in gauging whether critics are right that platforms are overaggressively censoring content.) This is one of the difficulties in acting directly rather than through an enforcement agency. An agency with permanent oversight

jurisdiction can monitor the impact of a law over time, and can mitigate impacts from a law that turns out to be too harsh in practice, or creates uncertainty, or otherwise has negative unintended consequences. If nothing else, the agency has the capacity to report to Congress on the need to amend legislation in light of unfolding developments.

i. Impact of SESTA — Simple Civil Liability.

SESTA is an example of a direct imposition of civil liability to require platforms to screen and prohibit content deemed harmful. SESTA imposes criminal and civil liability for anyone who “recruits, entices, harbors, transports, provides, obtains, advertises, maintains, patronizes, or solicits by any means,” for a business where either a person under age or a person subject to threats or coercion (defined by the statute) engages in a “commercial sex act” (also defined), or who “benefits” from any such “venture.”¹³⁰ But whereas criminal penalties generally require a fairly high standard of either actual knowledge of the forbidden conduct or reckless disregard for clear signs that the intent is criminal, civil liability requires a lower standard. SESTA therefore also imposes civil liability on anyone who “knew or should have known” that the thing they were advertising or “soliciting by any means” violated the law.¹³¹ Civil liability also applies to anyone who “benefits” from any of these activities in support of such a “venture.” A victim or a state attorney general can bring a civil suit for up to ten years following the conduct at issue.¹³²

The language “knew or should have known” is highly ambiguous, and often implies a responsibility to engage in some sort of investigation to ensure that the conduct in question does not violate the law (Clough 2018a). This was arguably intentional on the part of the drafters. Imposing potentially broad liability maximizes the incentive for platforms to police themselves and ban content well beyond what could be subject to the due process and other constitutional protections of criminal law. Even if a platform were ultimately found not liable, the expense of litigation is quite high — and can be crushing for small and medium-size platforms. Platforms — especially smaller platforms — therefore have particular incentive to refuse advertisements that a physical publication would routinely accept.

Whether intended or not, SESTA triggered a widespread takedown of interactive websites and advertising venues that could conceivably incur liability under SESTA. Platforms began to suspend broad swaths of content and activities. Craigslist, for example, removed its

¹³⁰ 18 U.S.C. §1591(a).

¹³¹ 18 U.S.C. §1595.

¹³² SESTA also permits states to pass their own criminal and civil liability statutes consistent with the federal statute.

entire personals section — a mainstay of traditional classified advertising that contained predominantly legal content (Romano 2018a). In a lawsuit brought in the Federal District Court for the District of Columbia Circuit, advocates for sex workers and free speech generally argued that SESTA creates a chilling effect on clearly protected speech, such as advocacy to make sex work legal (Gullo and Greene 2019).

As a consequence of the mass takedown of websites and services traditionally used by sex workers, as well as the refusal of remaining websites to take any advertising or permit content that could arguably trigger liability under SESTA, sex workers who voluntarily engage in sex work¹³³ have complained that SESTA has placed them in far greater physical danger, the opposite of SESTA’s purported intent (McCombs 2018). Prior to SESTA, sex workers could use direct advertising to avoid traditional “streetwalking,” to provide phone information so they could pre-screen clients, and to avoid pimps and other potentially abusive middle-men. It also led to the shutdown of “bad date lists,” online resources maintained by sex workers to avoid dangerous clients. As one sex worker told a reporter, “The bill will, and already has been, responsible for the murder, rape and arrest of sex workers” (McCombs 2018).

The law has also severely affected those engaged in legal indecent and pornographic expression. Its reach goes beyond advertising to all digital platform activities. Electronic payment processors are now declining to process payments for smaller websites associated with pornography (or indecent content) that in any way may relate to any kind of sex work. While these sorts of activities are often disfavored by law and society at large, legal erotic and indecent content is protected by the First Amendment. To the extent shutting down such protected speech is an intended rather than unintended consequence, it represents an end run around constitutionally protected rights.

Opponents of the law also point out that the law falls particularly hard on traditionally marginalized communities such as people of color, LGBTQ groups, low-income people, and the disabled. Those able to “class pass,” as sex workers call it, are able to evade the law by advertising in more expensive venues and using language that evades detection. Additionally, the stereotypes associated with traditionally marginalized communities make it far more likely that their activities will be perceived as sexual and/or illegal even when they are not (Elliot and Gillula 2017).

A year, of course, is far too short a time in which to assess the law’s effectiveness at reducing sex trafficking, its primary purpose. But determining the appropriate cost/benefit

¹³³ The term “sex worker” and “sex work” can include a wide range of activities and is not limited to traditional prostitution, although it certainly includes traditional prostitution.

tradeoff is further complicated by the lack of any kind of reporting mechanism or indicator of what metrics constitute success or failure. Anecdotal evidence, however, underscores the hazards of imposing direct liability on platforms for third-party content without any consideration for the difficulties platforms will encounter when trying to pre-screen content that may incur liability.

ii. DMCA and NetzDG: Notice and Takedown and Safe Harbors.

Section 230 exempted violations of intellectual property law from its broad protection from third-party liability. Laws governing liability for copyright infringement, and in particular laws relating to liability by third parties or providers of new communications technologies, are more complicated and contentious than those governing defamation or libel. It would far exceed the scope of this paper to explain the complicated nature of copyright and the politics surrounding the passage of the Digital Millennium Copyright Act. Suffice it to say that each evolution of communications technology, such as the invention of movies, the development of broadcasting, and the advent of digital media, have all prompted a robust and contentious debate over how to balance the right of copyright holders to profit from their creations, the rights of readers or listeners or other “consumers” of copyrighted material, and the strong public interest in promoting new technologies and competition. The advent of the internet was no different. Congress passed the DMCA in 1998, creating (among other things) a new regime governing the liability of digital platforms and “transient networks” (ISPs and other providers of communications services that do not store copies).

The DMCA added a new section to the Copyright Act entitled “Limitations on Liability Relating to Material Online.”¹³⁴ Section 512 distinguishes between “transitory digital networks,” essentially communications networks, and digital networks that store content of any kind. For convenience, I’ll refer to these as digital platforms.

Section 512 provided that digital platforms could be liable for financial or injunctive relief if third parties used their services to store or exchange infringing content, unless the digital platform complied with the safe harbor. The provision requires the digital platform to have no knowledge of the infringing activity, to take steps to remove infringing material when discovered, and to remove allegedly infringing material if a rights holder provides notice containing the information dictated by the statute. The digital platform is then obligated to inform the alleged infringer of the takedown. The alleged infringer may then send a “counter-

¹³⁴ 17 U.S.C. § 512.

notice” to the digital platform challenging the allegation of infringement. The digital platform will then forward the counter-notice to the accuser, informing the accuser that it will restore the content in 10 days unless the accuser files a copyright-infringement action in federal court. Assuming no such action is filed, the digital platform is obligated to restore the challenged content in 10-14 days (Urban, Karaganis, and Schofield 2017).

I have deliberately elided numerous details in the statute that are highly relevant to DMCA practitioners, and thus potentially missed details relevant in assessing the DMCA’s overall costs and effectiveness. To reiterate, my purpose here is not to evaluate the DMCA or suggest any alteration, but to provide a basic understanding of the “notice and takedown” regime, which has been replicated in other countries and is being considered for other content moderation purposes in the EU. Although some stakeholders have criticized the DMCA as insufficient to prevent widespread infringement, and others believe it has imposed significant costs on individuals, businesses, and free expression (Urban and Quilter 2006), it has managed as a reasonably workable regime for 20 years. Section 512 was the first genuine effort to strike a balance recognizing on the one hand the limitations of technology for monitoring and making judgments in a universe where at any moment millions of users are uploading and downloading billions of bits of user-generated content, and on the other the urgency to injured parties of gaining quick relief. It also made some effort to protect the process from abuse by imposing potential penalties for false allegations of infringement and by providing for a counter-notice by which parties may have content restored that was wrongly alleged to be infringing. For this reason, the DMCA “notice and takedown” regime has become an attractive model for lawmakers considering other types of content that requires moderation.

In considering this balance, however, lawmakers should take several cautionary lessons. First and foremost, the statute contains no mandatory reporting or other metrics to ascertain whether the “notice and takedown” regime is effective, or whether it imposes significantly higher costs than anticipated (or necessary). There is no assessment of whether the DMCA has disproportionate impact on particular communities, whether DMCA is actively used to suppress speech, or whether it results in significant loss of opportunity for fair uses such as criticism or education. A number of reports and studies have suggested that platforms are often lax in complying with obligations to restore content subject to counter-notice, and that DMCA takedown notices are often employed as a weapon against critics and rivals (Urban, Karaganis, and Schofield 2017).

More importantly, lawmakers need to recognize that no matter how technically difficult it may be to use technological means to identify and/or filter infringing uses, or to assess

whether a particular use constitutes fair use, and no matter how complicated, difficult, and expensive it is to apply these standards globally, the problem of identifying and moderating hate speech or other harmful content is far worse. Sometimes harassing or deceptive speech is blatantly obvious, such as posting “revenge porn” or releasing someone’s personal information publicly without their consent and encouraging their mass targeting (a practice known as doxing). But it is far more common for harassment or deception to be context-dependent. To take a simple example, calling someone a Nazi may be a hurtful insult (especially if directed at a Holocaust survivor), overblown rhetoric, political commentary, or literal truth.

Germany’s NetzDG law attempts to address these concerns. The law imposes a “notice and takedown” provision for any “obviously illegal” content and refers to specific German laws under which the relevant content might be deemed “obviously illegal.” The statute only applies to platforms with 2 million or more users, so as to limit cost to smaller services. It requires takedown within one day (seven days if the “obviously illegal” content is sufficiently non-obvious to require consultation with legal experts) and mandates a right of appeal for anyone taken down. Finally, NetzDG requires platforms that receive complaints to publish a “transparency report” twice a year that must include quantitative metrics such as the number of complaints received, the average processing time, the number of takedowns in response to complaints, the number of appeals, and the ultimate resolutions of the complaints (Library of Congress 2017).

Despite this comprehensive effort to address the legitimate concerns of overreach while still providing meaningful relief, and despite the requirement for transparency reports, there is no consensus within Germany as to whether the law is effective and whether it is suppressing protected speech. Reporters Without Borders, for example, has argued that the first transparency reports issued in August of 2018 show that lawful content is being blocked (Reporters Without Borders 2018). Some controversial speakers have argued that their rights to free expression are being violated (Kintsler 2018). Others dispute this characterization. No one doubts, however, that hate speech and other types of harmful content remain a serious issue on digital platforms in Germany.

Taking all this together, lawmakers should be wary of the argument that the DMCA “notice and takedown” regime is easily exportable outside the realm of copyright infringement. While Section 512 provides many important lessons, positive and negative, it is by no means a comprehensive solution.

D. Specific Recommendations for Content Moderation Policies Designed to Maximize Effectiveness and Minimize Unintended Consequences.

1. Recommendation 1: A Mixed Model of Government Prohibition, Reporting Requirements, and Private Policing with Government Oversight.

No single model or set of rules can resolve the many problems associated with content moderation across the wide range of digital platforms. Manipulating reviews on Amazon or TripAdvisor for commercial advantage is very different from maintaining swarms of fake accounts on social media, which is very different from recruiting by terrorist organizations. This complexity argues for a multipronged approach that triages the nature of the problem and divides the type of content moderation into different categories.

First, there is conduct that falls into the long history of clearly criminal or harmful conduct. We should criminalize such conduct and subject it to civil penalty, just as we have done with harassment by telephone¹³⁵ and use of wire, radio, or television to commit fraud.¹³⁶ We have seen examples of such conduct that are unique to digital platforms and should be directly criminalized and made subject to civil penalty as well as private rights of action. These include doxing (publishing a person's personal information for the purpose of harassment), revenge porn (publishing sexually explicit photographs or video without consent), and manipulation of a digital platform through false reviews or false complaints.

Although these activities are clearly harmful in most cases, they do raise some potential First Amendment concerns. For example, exposing the name and home address of a public figure to organize political protests is a politically protected activity, very different from exposing a person's information for the purpose of encouraging harassment and death threats. Indeed, even the question of when a person becomes a public figure can be difficult to determine. As noted above, there are ways to address these concerns. The real world presents similar issues when addressing laws around harassment, hate speech and libel. The First Amendment must be respected, but it is not an excuse to do nothing.

Nevertheless, we must be conscious of the limitations of this first step. Because it criminalizes (or subjects to civil penalties) the conduct of users rather than the platform itself, it raises problems of enforcement, as we have already seen. Discovering the real identity of the party committing the alleged bad acts can be difficult. The proliferation of incidents makes enforcement

¹³⁵ 47 U.S.C. §223.

¹³⁶ 18 U.S.C. §1343.

by state or federal authorities challenging, and it is relatively easy for parties to return with new identities.

Means of addressing these problems have their own limitations. For example, civil penalties can provide an ability and incentive for individuals to punish bad actors. They also shift the enforcement burden to the injured individual. If penalties are too large, they may be used to deter legitimate speech or harass innocent speakers. If penalties are not large enough, there is no value in pursuing them. Platforms must be compelled to cooperate with investigations. This imposes expense on the platforms, and if poorly designed can become a tool of privacy violation and abuse.

One important means of mitigating these limitations is to provide an enforcement agency with power and resources to handle complaints. Properly designed agency processes can protect against abuses and are more likely to be responsive than state or federal law enforcement agencies. Additionally, administrative agencies are better suited to address bad conduct in the commercial sphere, including the ability to set rules governing commercial conduct and to enforce those rules. Such an agency can help relieve platforms of the responsibility for policing conduct by providing clear guidelines for appropriate policies, which will also facilitate enforcement by creating standard practices across the industry.

But what of more complicated conduct that has no clear analogy in the digital space or presents difficult First Amendment concerns? What about complicated schemes that may not be readily apparent to individual businesses but may be recognized by platforms? For example, the use of social media by Russia to influence elections was not readily apparent. It was only after the federal government began its investigation that social media platforms and researchers found patterns indicative of manipulation. Similarly, the use of bot armies or swarms of fake accounts is more readily detectable by the platform than by anyone else. Still, suspicious activity is not necessarily criminal or fraudulent activity.

The “know your customer” rules imposed on the financial industry to track money laundering by criminal or terrorist organizations provide a potentially useful model. Banks do not have an obligation to ferret out such criminals and deny them service — something they are wholly unsuited to doing. Instead, law enforcement and regulatory agencies have worked with financial institutions to develop a list of suspicious signs that trigger reporting requirements. It then falls to the relevant agency, which is subject to due process and is specifically designed to make such determinations, to investigate and take appropriate action.

Rather than impose a responsibility on platforms to make judgments about criminal or civil issues for which they are unsuited, the law can require digital platforms to work with law

enforcement on appropriate tools to detect suspicious activity and to report such activity to the appropriate agency. This might be in addition to a digital platform's own acceptable-use policies. Indeed, a hybrid model may be most effective. The platform is obligated to adopt certain best practices with regard to detecting suspicious activity. The platform is obligated to either report to the relevant agency (which then has responsibility to act) or take action directly. Where the platform takes action directly, the party protesting its innocence may appeal to the relevant agency to reverse the platform's actions. This would permit platforms to protect their users and the overall integrity of their business without putting them in the no-win position of arbitrating over-inclusiveness or under-inclusiveness. It would also provide to those cut off from the platforms a right to appeal to a government authority, mitigating concerns over private censorship of time-sensitive political speech.

This approach would also impose costs, but these could be scaled to the size and nature of the platform, and be made dependent on the nature of the concern, the conduct, and the context. It is certainly appropriate for a platform to decide that it will prohibit hate speech or erotic content. But the First Amendment requires that we tolerate such speech between willing participants. At the same time, it does not violate the First Amendment to obligate forums to cooperate with law enforcement to prevent real crimes when there is probable cause.

As an example, consider Gab, a social media platform designed for users seeking content deemed by Facebook, Twitter, and other social media platforms to violate its content policies on hate speech and harassment (Coaston 2018). It is the archetypal example of conflict between competing First Amendment concerns. Because of Gab's user base, its user-generated content is often vitriolic and racist, comparing Jews, immigrants, and people of color to animals or vermin and warning that white people need to defend themselves. The content often uses terms that may or may not cross the line from protected speech to steps in preparation for actual violence. Indeed, Robert Gregory Bowers, the man who killed 11 people at the Tree of Life Synagogue in Pittsburgh on October 27, 2018, posted on Gab just prior to the shooting his theory that Jews were assisting South and Central American immigrants to cross into the country illegally. He went on to say that he was "going in" to stop this "invasion" (Roose 2018b).

Some argue that the presence of forums such as Gab allows hate groups to recruit and radicalize individuals. Under this reasoning, Gab itself becomes a uniquely present danger and should fall outside First Amendment protections. Even if none of the speech on Gab or similar platforms constitutes an "imminent danger" in the abstract, the law should recognize that the nature of the technology and of the speech in question facilitates and incites violence in ways that traditional print and broadcasting do not (Sunstein 2018). The proper analogy is therefore not to a set of individual speakers making individual statements in isolation, but to an angry mob that needs

to be dispersed before it riots. Just as an angry mob threatening a targeted individual or group may be dispersed without offending the First Amendment's right of freedom of assembly, the law can impose limits on digital platforms to prevent the evolution of similar threats of violence.

Others argue that unpopular speech such as this is precisely when the First Amendment rights of freedom of speech and freedom of assembly are most critical. As we have seen throughout our history, organizations and causes we now take for granted as mainstream have been, and sometimes still are, prosecuted under laws designed to protect the public from harmful speech. Those engaged in organizing for labor rights and unions were prosecuted as anarchists or communists. Anti-war protesters in World War I and opponents of the draft were subject to criminal prosecution. Birth control literature was criminalized as immoral under the Comstock Act. Under this reasoning, even encouraging private censorship via the critical infrastructure necessary to operate a digital platform — such as domain hosting and electronic payment processing — creates a serious danger to robust debate and controversial content which may ultimately prevail in the marketplace of ideas.

How would a proposed mixed regime address Gab and similar sites? Certainly, they would be allowed to continue operation. However unwelcome and revolting many of us find such content, and even if we find there is an increased correlation between the availability of such forums and radicalization, the First Amendment does not permit us to ban “bad” ideas and “bad” speech on the grounds that it merely increases the likelihood that someone will commit a crime of violence. This is the risk that a free society requires.¹³⁷ Gab might not even be required to respond to complaints of harassment on its platform, as it is a small platform known for attracting users who engage in such behavior. Individual users therefore “assume the risk” of being targeted and attacked in ways that would be considered outrageous on other platforms. By contrast, a larger platform such as Facebook or YouTube might be required to have some anti-harassment policy in place.

This difference in obligation honors the Supreme Court's distinction between “intrusive” content and content that a person affirmatively seeks out. It also respects the increased harm to individuals who can't use a more important or dominant platform without subjecting themselves to harassing behavior. Where a platform is sufficiently large that exclusion from it would impose a persistent and not insignificant cost, the government has a legitimate interest in preserving access to that platform and in individuals not being required to subject themselves to harassment or even physical danger as the price of participation. In the same way that the federal government has a

¹³⁷ It is worth noting in this regard that other democracies that ban various sorts of “hate speech” do not ban an amorphous general category. Bans are quite specific, such as specific Nazi symbols. Speech that merely evokes such symbols to transmit the same ideology, such as the “quenelle” or “reverse Nazi salute” popularized by French comedian Dieudonné M'Bala M'Bala, are not subject to prosecution despite the deliberate invocation of the Nazi salute.

sufficient interest in preventing harassment by phone to require that telephone operators protect the telephone number and other personal information of subscribers,¹³⁸ the government can protect users of digital platforms from harassment.

But even recognizing that a platform like Gab may have greater leeway in light of its smaller size and clear warnings about the nature of the user base, it and platforms like it could still be required to prevent themselves from being used to engage in prohibited activity. For example, the law could require all platforms, even platforms like Gab, to create specific mechanisms for responding to complaints by non-users that users had posted personal information in order to organize harassment campaigns (i.e., doxing). Steps might include taking down such content and cooperating with any civil suit or investigation. All platforms could be required to report any illegal activity of which they have actual knowledge and could be required to monitor for specific types of activity associated with terrorist recruitment or organization of violent activities.¹³⁹

2 Recommendation 2: Distinguish Between the Broadcast/Many-to-Many Functions and Common Carrier/One-to-One; Distinguish Between Passive Listening and Active Participation; and Limit Penalties Imposed for Off-Platform Conduct.

Digital platforms combine, or potentially combine, functions that we have traditionally thought of as telecommunications, i.e., enabling transmission of information from one point to another at the direction of the user, typically in a one-to-one or one-to-few configuration. At other times, platforms replicate what we think of as more media-like functions, making content generated by users available to large numbers (sometimes millions) of people. When we consider the ways in which people use digital platforms, they include absorbing information as passive listeners, participating in online communities, or purchasing goods and services. Many of these activities are quite valuable, but do not involve any sort of content creation.

While digital platforms may not themselves create content, they do influence how easy or hard it is for users to find relevant content. Users themselves might limit access to the content or seek to promote it to a broader audience. At other times, users might seek out content through search engines or by following particular content creators or communities. Additionally, the platform

¹³⁸ *National Cable Television Association v. FCC*, 567 F.3d 659 (D.C. Cir. 2009).

¹³⁹ The use of artificial intelligence and data processing to predict behavior and determine the risk of illegal activity is highly controversial. It is sometimes called “*Minority Report* policing,” in reference to the movie *Minority Report*, in which a combination of technology and human “precogs” arrest people who are predicted to commit crimes before they happen. Numerous studies have shown that efforts to create such predictive-behavior programs typically incorporate the racial and social biases of the developers and of the existing data set (Clough 2018b). Any use of such programs must be subject to considerable scrutiny to ensure that racial profiling or other suspect analysis are not embedded into digital platforms — despite the fact that they are too often reflected in society generally.

itself may recommend particular content, either through its recommendation algorithms or because it was paid to advertise or promote the content. But despite these myriad ways in which users find, absorb, or respond to content, we still think of content moderation and penalties for violating content policies in simplistic terms. Generally, content is either banned or permitted. Similarly, users are either permitted on the platform or banned from the platform. While Facebook and YouTube have begun to experiment with ways to address “borderline” content (YouTube 2019; Zuckerberg 2018), the public debate still generally revolves around banning content or content creators, and whether to make such bans temporary or permanent.

As platforms have become increasingly central to our economic and social lives, we need to recognize that such draconian penalties are both increasingly difficult to enforce and increasingly harmful when misapplied. As we have acknowledged in the realm of economic regulation, we should likewise acknowledge in the realm of content moderation that participation on digital platforms — or, at least, on those platforms that we can classify as dominant in some way — is important for a wide variety of reasons that have nothing to do with speaking. In a world where officials hold debates and make announcements through platforms such as YouTube or WhatsApp, or where important messages about services or public safety are issued in real time through Facebook or Twitter, cutting off the ability of people to follow these developments or receive necessary information is far harsher a penalty than we would permit for comparable activities. A court may punish someone for harassing someone by phone and may issue an injunction to require an individual cease any communication with another specific person (or specific group). But courts do not issue injunctions preventing offenders from ever using a telephone again for any purpose. We recognize that the telephone has too many important uses to treat telephone use as a privilege rather than as a right.

We should therefore distinguish between the “broadcast” functions of digital platforms, the “communications functions” of digital platforms, and their passive information collection or marketplace functions unrelated to communications. We should require that platforms adjust their penalties according to the nature of the offense, as well as establish clear criteria by which a person can regain full privileges. Times and people change, and the greater the penalty the more reluctant we should be generally to impose it permanently.

The same is true for content. Content inappropriate for mass audiences may be permitted, or even protected, between willing adults. Erotic content may be offensive to many, including advertisers, but it is still protected by the First Amendment and welcome between willing speakers. Recently, Facebook announced that it would no longer treat content as simply prohibited or permissible. The more “borderline” the content, *i.e.*, the closer to violating Facebook’s content guidelines, the more Facebook will degrade the content in its search and recommendation

algorithms, making it harder to find for anyone who is not already aware of the content and actively seeking it (Zuckerberg 2018). YouTube has announced it will screen its recommendations to avoid recommending videos that promote conspiracy theories (YouTube 2019). This approach balances protecting users from unwanted content, and society generally from the promotion of harmful content, while still allowing speakers to speak and willing listeners to hear.

While these examples involve social media, we can apply them to other platforms, such as review sites. Parties can lose their privileges to post reviews for violating review guidelines (such as failure to disclose a financial interest) without losing the ability to read reviews or purchase products. Social media sites might also make exceptions for specific purposes, such as interactions with official accounts for government departments or officials, or to speak directly to public safety. Of course, these exceptions would also be subject to revocation in cases of abuse. False alarms spread through Twitter are no different from false fire alarms or false 911 calls. But we should be as reluctant to ban people from reaching out to public safety through social media as we are to prohibit people from using 911.

Finally, it is important to distinguish between actions on the digital platform and actions off the digital platform. As use of digital platforms becomes increasingly necessary to engage in society generally, it becomes increasingly inappropriate to regard participation as a reward for good behavior. It is appropriate to address the behavior of someone advocating violence and hate through their Instagram account. But if someone is a neo-Nazi in their offline time but uses their Instagram account purely to post pictures of puppies, there is no reason to treat their use of Instagram as a privilege to be revoked because they are a bad person. We do not ask mobile carriers to revoke the subscriptions of neo-Nazis simply because they are bad people and don't "deserve" to talk on the phone. We should similarly not require (or, in the case of dominant platforms, permit) platforms to make moral judgments about who is or is not intrinsically worthy to participate in digital society generally. To paraphrase Gilbert and Sullivan, our object should be to make the punishment fit the crime — no more, no less.

Taking this together, we may establish a simple hierarchy of rules, subject to rights of appeal within the platform and/or to an oversight agency. If the offensive speech is directed against individuals, such as repeated harassment of speakers, then the platform should revoke the ability of the harasser to reply to individuals, comment on content, or participate in public forums. The more egregious the conduct the broader the ban, until a bad actor may be reduced to a purely passive listener. Additionally, platforms should be required to give individuals the ability to block specific other individuals from commenting, as well as completely block them from seeing or being seen by the individual in question. Individuals should have the option to permit a racist relative or militant ideologue to continue to follow them but not but not be able to respond. But platforms themselves

(or an enforcement agency) should have the same ability to mute someone whose conduct is so toxic that it undermines the utility of the platform for others.

Similarly, the closer content comes to violating the platform’s standards of conduct, the harder it should become to promote such conduct. As discussed above, some content falls outside the scope of societal norms and protections and should be taken down, such as libelous or fraudulent content (including “fake news”). But we may anticipate many “borderline cases” involving protected content where violation of content standards is difficult to judge. Accusing someone of behaving like a jackal or a pig could simply be an insult to an individual for their specific behavior, or dehumanizing a group based on racist stereotypes. Understanding the nature and intent of speech requires context. Bad decisions have punished victims of dehumanizing content for responding while leaving the initial harassing content untouched (Jeong 2018; van Zuylen-Wood 2019). This is particularly true in the context of social media, where exchanges may be technically open to the general public but have the feel and quality of personal conversations.

It has proven unworkable and unsatisfying to ask platforms to decide whether to take down such content or leave it alone. Graduated response to both the content and the content creator moderates the danger of banning controversial but acceptable speech, while still permitting platforms to ban content or speakers who ultimately prove toxic.

Finally, we may require platforms to take steps to prevent conversion of applications intended for communications to more broadcast-like functions. To address the spread of false material designed to incite racial violence, WhatsApp limits the ability to forward a message to no more than five times. This does not ban any specific content, but introduces friction into the spread of content that may be deliberately calculated to foment violence or manipulate markets. This does impose a potential problem for emergency speech or other content that should spread as quickly as possible. But all moderation has tradeoffs. Providing platforms an incentive to differentiate clearly between their point-to-point communications services and broadcast-like services may help to prevent rapid proliferation of harmful content while minimizing the burden on non-harmful speech and innovation.

3 Recommendation 3: Determining the Goal of Regulation of Bad Content and Measuring Its Effectiveness.

As discussed above in the context of DMCA and NetzDG, society retains a strong interest in monitoring whether rules requiring content moderation achieve their goals, and at what cost. Often, however, we fail to articulate clearly which of many possible goals we are trying to achieve. Unsurprisingly, without an understanding of what we are trying to do, we cannot measure whether

we are, in fact, achieving it. To make matters worse, the metrics we select to measure the effects will drive behavior. If we prioritize speed of complaint-resolution, for example, we will prioritize resolving complaints quickly rather than correctly.

Content moderation regulations can have many different goals. If our primary concern is to avoid radicalization, that is different from detecting potential violent actors or protecting individuals from unwanted content or harassment. Of course, we often pass laws with more than one goal in mind. But whether we have a specific primary goal or multiple goals, we need to articulate them clearly and adopt proper metrics measuring success or collateral harm. For example, whether SESTA is intended to prevent sex trafficking, sex work generally, or both, is important for determining whether proponents or critics are correct about the law's effectiveness. If we intend to follow a specific model, we ought to have some notion of how it works.

So far, the evidence is mixed about the effectiveness of “deplatforming,” or depriving a user of a given platform, and about how to set realistic goals and expectations. Research shows that in the case of high-profile individuals like Alex Jones, banning them from popular platforms does deprive them of audience and reduces their impact (Koebler 2018). There is also, however, considerable evidence that speech bans by platforms are easily evaded and manipulated, with victims targeted as retaliation for effective reporting or whistleblowing — which suggests that existing policies may have significant costs even to people these policies are designed to protect (Jeong 2018; Maynes 2019). Deplatforming can also be disruptive to communities generally (Feld 2018d), though there is evidence that over time community members will seek new platforms on which to re-form their communities (Schwedel 2018). This is not necessarily a bad thing. When Facebook decided to ban nudity regardless of context, nudists migrated to Twitter to share non-sexual nude content related to nudism, nudist lifestyle, and nudist philosophy (Lorenz 2018). On the other hand, evidence also shows that the same is true for creators of racist content, violent content and other disturbing content (Lord and Murray 2019).

Designating an enforcement agency to track the effectiveness and unintended consequences of content moderation regulations is an important safety mechanism. Information collection can alert policymakers to the need to modify an initial policy or validate the success of a specific approach. While it may not be possible to consider all possible effects and therefore provide for metrics to answer all questions, empowering an agency to collect data and provide constant oversight is an important mechanism for such efforts.

CHAPTER VI: A BASIC FRAMEWORK FOR PROMOTING “GOOD” CONTENT AND EXPOSURE TO DIVERSE SOURCES OF NEWS AND VIEWPOINTS.

Beginning with the Founding Fathers, political theorists throughout American history have worried that unlimited freedom of speech combined with democratic forms of government could give way to demagoguery and mob rule. Alexander Hamilton famously inveighed against the more democratic elements at the Constitutional Convention, and Washington used his final address to warn against the dangers of factionalism and party loyalty. At the same time, the Founders were convinced that allowing government (or any outlet blessed by government) to have a monopoly over the dissemination of the news would create a gatekeeper with enormous power to drive opinion by silencing opposition and hiding malfeasance by the ruling party (Sunstein 2018).

Our history reflects this tension between a democratic vision that requires citizens have access to diverse perspectives and our fear that citizens will fail that trust. The development of electronic media, which concentrated power in a limited number of electronic voices, shifted our concern increasingly toward fear of gatekeepers. Particularly in the early days of the Communications Act, the ostensible focus of media policy was to create diverse content through strict limits on the number of broadcast licenses anyone could hold. Policy makers over the years created frequency set-asides for non-commercial broadcasters, created the Corporation for Public Broadcasting to provide a national radio network and a national television network dedicated to educational television, and banned ownership of a daily newspaper and a broadcast license in the same market. In the late 1960s and early 1970s, the FCC imposed numerous broadcast requirements to fight what critics perceived as an unhealthy focus on commercialism and concentration of power over news broadcasting in the hands of television and radio broadcasters. These measures included limits on ownership of content, requirements that some portion of prime time be reserved for non-network programming, and — for a brief time in the 1970s — a requirement that licensees assess the programming needs of the community to ensure adequate coverage on issues of local importance. When cable began to develop, the FCC and localities focused on creating opportunities for government and educational programming (called “PEG” channels) and a right for independent programmers to lease access time on local cable systems. Even the overall deregulatory Cable Act of 1984 retained these requirements as a means of fostering opportunities for diverse programming.

Even assuming multiple outlets offering diverse programming, nothing ensures that people will take advantage of the opportunity. As the 20th century closed, consolidation created the curious phenomenon of homogenization on the one hand and segmented marketing on the other. Cable created the opportunity for a network devoted to African-American interests, while ownership consolidation ensured that there would be precisely one such network available to a growing

number of cable households served by a shrinking set of ever-larger cable systems. At first, the birth of the internet seemed tailor-made to break the increasing homogeneity of mass media by giving everyone an unfettered opportunity to publish on apparently equal footing. In those heady days, the Supreme Court declared in *Reno v. ACLU* that the “internet is as diverse as human thought.” Proponents predicted a world in which a transparent and diverse internet would enable widespread democratic engagement, moving the balance of power away from concentrated gatekeepers toward citizen reporters and activists (Wu 2016).

It quickly became apparent that while the internet offered an unparalleled opportunity to find diverse opinions and perspectives, nothing guaranteed that people would avail themselves of this opportunity to inform themselves. In a prescient 1994 article, legal scholar Cass Sunstein warned that the ability of people to filter their content was rising in parallel with the availability of greater potential sources of content (Sunstein 1994). As the new millennium wore on and the internet continued to grow and mature, the problems with abundance would quickly become as apparent as the previous problems with scarcity. It was not that optimists were wrong about the potential for the internet to provide unparalleled opportunities for news and diversity of views. But just as the early developers of the internet had emphasized the power of interconnection but failed to anticipate the opportunity this created for bad actors to penetrate systems, the promoters of the internet as a machine for citizen journalism and public accountability failed to consider the ability of bad actors to manipulate these capabilities to undermine faith in journalism and promote factionalism and hyper-partisanship (Farrell and Schneier 2018).

These concerns assume human agency, either from internet users preferring to create their own echo chambers by actively screening out contrary views, or from assaults on democracy by bad actors deliberately trying to divide and deceive and thus render democracy dysfunctional. Digital platforms introduce a new player into the mix: the platform itself. As explained by Eli Pariser in 2010, the algorithms that govern digital platforms such as search or social media create their own “filter bubbles” (Pariser 2010). Unlike a consciously constructed echo chamber, a filter bubble is the product of an algorithm designed by a platform to give its users more of the same. As a user, I don’t even know what possible views or perspectives are excluded. As the algorithm provides me with steady recommendations of more of the same, my perspective unconsciously narrows. The algorithm narrows the vast world of diverse perspectives to what it believes I and people like me want to see next. I never leave the filter bubble — not because I am afraid to be challenged, but because I am not even aware it exists.

Others, such as Zeynep Tufekci, have argued that this warping tendency of the algorithm directly contributes to increased radicalization by favoring not merely similar content, but content the algorithm predicts will increase “engagement” (Tufekci 2016). This introduces a bias in favor of

content that is more extreme or that has more extreme reviews, comments, and shares. As Tim Wu warns in his history of advertising and the rise of the “attention economy,” our general vulnerability to certain attention triggers drives advertisers and others competing for our attention to push their techniques further and further until a backlash occurs (Wu 2016). Tufekci and others document that this drive to capture our attention creates a feedback loop when combined with recommendations based on our search history (and the search history of similarly situated others), offering similar content charged with superlatives and extremes; in the worst cases, it all culminates in conspiracy theories peddled by extremist hate groups (Tufekci 2017). Without the intent of those designing these algorithms, digital platforms can become engines of radicalization and division on a scale beyond the worst nightmares of Washington and Hamilton.

The regulatory history of electronic media offers important lessons for regulators trying to break the cycle of filter bubbles and algorithm-driven radicalization. In addition to the policies of content moderation discussed above, we can use policy choices to promote exposure to diverse content that does not mindlessly incite extremism. While we cannot force those who, like the mythological Narcissus, choose to gaze vacantly at their own reflection while an admiring Echo repeats their own words back to them, we can take steps to prevent algorithmic filter bubbles from transforming us without our knowledge or consent. Additionally, as we have done for decades, we can use limitations on consolidation to promote a robust marketplace of ideas.

A. The Marketplace of Ideas and the “Diversity Principle” In Electronic Media versus the Individual Speaker Right in Common Carriage.

The right to speak and publish freely has formed a fundamental part of the “American Experiment” in self-governance from the beginning. It is no coincidence that the First Amendment contains as the first prohibition on federal power the freedom of speech — or that freedom of the press is considered sufficiently important to be listed as a separate freedom. It was not until the 20th century, however, with the rise of capitalism and the belief in competition as a necessary check on the evils of monopoly, that the idea of free speech and a free press became linked to the concept of the “marketplace of ideas.”¹⁴⁰ As First Amendment jurisprudence evolved in the first half of the 20th century, the concept of economic competition and the purpose of the First Amendment as a cornerstone of self-governance became closely related. In *Associated Press v. United States*, the Supreme Court directly linked the exercise of antitrust laws to protect competition in the news business with the concepts of free speech and freedom of the press:¹⁴¹

¹⁴⁰ See, e.g., *Abrams v. United States*, 250 U.S. 616 (1919) (Holmes, J., dissenting).

¹⁴¹ 326 U.S. 1, 20 (1945).

It would be strange indeed, however, if the grave concern for freedom of the press which prompted adoption of the First Amendment should be read as a command that the government was without power to protect that freedom.... That Amendment rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public, that a free press is a condition of a free society.... Freedom to publish means freedom for all and not for some. Freedom to publish is guaranteed by the Constitution, but freedom to combine to keep others from publishing is not. Freedom of the press from governmental interference under the First Amendment does not sanction repression of that freedom by private interests.

The Supreme Court would build on this “diversity principle” — the need for antagonistic and diverse voices to preserve our democracy — over the next five decades of regulation of electronic media. Even before the decision in *Associated Press*, the Supreme Court upheld as a proper exercise of its “public interest” the FCC’s decision to limit assignment of broadcast licenses and regulate the practice of national networks in order to protect the independence of local broadcast affiliates.¹⁴² In *Red Lion Broadcasting Co. v. FCC*,¹⁴³ the idea of government regulation of the electronic media to facilitate a robust “marketplace of ideas” reached its apex in Supreme Court jurisprudence. Upholding the FCC’s regulatory requirement that broadcasters provide a “right of reply” to political candidates subject to personal attack or to respond to editorial views, the Supreme Court found that:

It is the purpose of the First Amendment to preserve an uninhibited market-place of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market, whether it be by the Government itself or a private licensee. Speech concerning public affairs is more than self-expression; it is the essence of self-government. It is the right of the public to receive suitable access to social, political, esthetic, moral, and other ideas and experiences which is crucial here. That right may not constitutionally be abridged either by Congress or by the FCC.¹⁴⁴

The Supreme Court would gradually retreat from this apex, in part due to the rise of the doctrine of commercial speech, which framed the First Amendment obligation of the government to protect the marketplace of ideas as a “compelling government interest” balanced against commercial speech rights.¹⁴⁵ Nevertheless, the concept of the “diversity principle” as animating our

¹⁴² *NBC v. U.S.*, 319 U.S. 190 (1943).

¹⁴³ 395 U.S. 367 (1969).

¹⁴⁴ *Idem.* at 391 (citations and quotation marks omitted).

¹⁴⁵ It did so in *Turner I* and in *Greater New Orleans Bcsting Assoc., Inc. v. United States*, 527 U.S. 173 (1999)

modern media policy remains strong. Concern for a healthy media landscape as a necessary predicate to self-governance and a functioning democratic society animates the current discussion on how to arrest the decline of the news industry as advertising revenue (the primary source of revenue for print journalism) shifts to online advertising through digital platforms such as search and social media.

Running closely with this “diversity principle” is the concept of “representational diversity.” We all want to see ourselves, and people like us, represented in the picture of the world painted by the mass media. This applies not simply to news, but to entertainment as well. When Nichelle Nichols, who played Lieutenant Uhura on *Star Trek*, intended to leave after the first season, Martin Luther King, Jr. persuaded her to stay in the role as vital to inspiring African Americans and educating white Americans that people of color could live and work together as equals. As Nichols would later recall King telling her:

‘Nichelle, whether you like it or not, you have become a symbol. If you leave, they can replace you with a blonde-haired white girl, and it will be like you were never there. What you’ve accomplished, for all of us, will only be real if you stay.’ That got me thinking about how it would look for fans of color around the country if they saw me leave. I saw that this was bigger than just me. (Ohlheiser 2015)

This may seem over the top for a supporting role often limited to “hailing frequencies open, Captain.” But MLK and Nichols were hardly the only African Americans to feel that way in 1966, when the show first aired and African Americans were either non-existent on television or confined to roles clearly subordinate to whites. Whoopi Goldberg has described her reaction to seeing *Star Trek* as a nine-year old when it first aired:

I looked at it and I went screaming through the house, “Come here, mum, everybody, come quick, come quick, there's a black lady on television and she ain't no maid!” I knew right then and there I could be anything I wanted to be. (Star Trek 2019)

Such is the power of mass media and representation — and a hopeful tale of positive change that what was considered progressive, even revolutionary, in 1966 is considered inadequate today. Nor is it only members of traditionally marginalized communities who benefit from seeing themselves reflected in the mass media, or having their perspectives reflected in the news. Society at large also benefits enormously. We absorb a great deal of our information about others from their portrayal in mass media. Although former Vice President Joe Biden was roundly mocked for crediting the sitcom *Will & Grace* with increasing tolerance for LGBTQs, media scholars and social critics have made precisely this connection not only for *Will & Grace* but with regard to acceptance

of the changing role of women in society and acceptance of people of color generally (Borden 2017).

At first glance, it would appear that the issue of representation on digital platforms is a non-problem. Unlike the world of broadcast or cable, digital platforms enable nearly everyone to participate as a creator as well as a viewer. But it is one thing to create content, it is another for it to compete on equal footing in the marketplace of ideas. We have strong evidence that platforms sell advertising based on racial and gender stereotypes, effectively recreating the segregated world of broadcasting and cable with “urban” (read African-American) programming and programming (and advertisements) targeted at male or female demographics. Even where platforms do not consciously try to create segregated programming, filter bubbles create the same effect over time. While algorithms carry the veneer of scientific accuracy, they “learn” based on the underlying assumptions programmed into them by their developers and from the surrounding environment — which reflects the less-than ideal world in which we live. One of the oldest clichés in programming is GIGO: garbage in, garbage out. Algorithms function on a principle of RIRO: racism in, racism out (Clough 2018b).

Policy designed to address the “diversity principle” must therefore address the traditional problems of stereotypes and representation. In addressing the problem of filter bubbles, we must be conscious of the tendency to filter by race, gender, and sexual orientation. We must address how filters reflect systemic biases and assumptions based on stereotypes in a way that reinforces marginalization, and consider how to promote diversity effectively and within the limits of the First Amendment.

Finally, it is important to recognize that we have treated the First Amendment differently in the context of common carrier one-to-one communications than in the mass media. Whereas we have recognized a compelling government interest in structuring and regulating mass media to promote the diversity concept, we have regarded common carriage as sufficient regulation to protect freedom of speech by the individuals at either end of the “dumb pipe.” In the world of common carriage communications, First Amendment protections lie with the speakers on either end and government regulation is limited to ensuring that such communications capabilities are available to everyone.

This point is relevant here for two reasons. First, it tends to get blurred when discussing regulation of the internet. As discussed at length in Chapter V above, the nature of the First Amendment inquiry depends on a wide range of factors. *Reno v. ACLU*, the 1997 Supreme Court decision striking down the indecency restriction of the Communications Decency Act as a “content-based” prohibition, does not stand for the proposition that any regulation of any part of the internet

ecosystem must survive strict scrutiny. Nor does the First Amendment reduce the obligation not to discriminate or prevent imposition of common carrier obligations when applicable. Particularly in light of the longstanding fight over “net neutrality” and common carriage obligations for broadband access providers, with the constant effort by opponents of net neutrality to blur the distinction between access to the internet and the commerce and content provided by digital platforms delivered through these access providers, it is important to stress the difference between traditional common carrier point-to-point communication and electronic media.

More importantly, as discussed numerous times above, digital platforms often combine features associated with common carriage with features associated with electronic media. This combination can make it complicated to apply policies to promote diversity. To be clear, the interrelationship of common carrier and content has been the subject of antitrust concern since the early days of electronic communications. Even prior to the Communications Act, the Department of Justice prevented collusion between RCA and AT&T to use AT&T’s control over the telephone lines to share network programming (known at the time as “chain broadcasting”) (Wu 2010). The prohibition on common carrier communications providers entering into the electronic media business, for fear their pre-existing vast network and control of the “pipe” would allow them to dominate the industry, continued in many forms until the Communications Act of 1996 eliminated these restrictions and encouraged telephone companies to compete with incumbent cable operators (Bresnahan 1995).

Nothing in the history of promoting diversity justifies interfering with direct communications between individuals. But where a platform is being used to amplify particular news stories or to drive particular narratives, users move from the realm of common carriage into the realm of electronic media. While the ability to forward a story multiple times in WhatsApp may in some ways be no different from the traditional “telephone chain,” the ease with which this is accomplished and the demonstrated ability of individuals and organizations to manipulate these features to achieve the effects of mass communication make them different (Kastrenakes 2019). As with content moderation to police harmful content, application of the “diversity principle” in these contexts will require careful line-drawing.

B. Specific Recommendations to Promote a Robust Marketplace of Ideas.

What we need is what law scholar Cass Sunstein calls an “architecture of serendipity.” As explained by Sunstein, many human beings naturally congregate with similar people who hold similar views — a phenomenon known as “homophily.” At the same time, many people also have an interest in learning about people who are different from themselves, and in trying to understand different perspectives and opinions. Serendipity, exposure to things we did not consciously seek

out, helps to counteract the trend to homophily. This, argues Sunstein, is critical in a diverse democracy to avoid hyper-partisanship and societal fragmentation (Sunstein 2018).

At present, the underlying architecture of digital platforms deliberately selects for homophily. People who read this book also read and enjoyed these other books. People who watched this video also liked these other videos. But just as the current architecture of digital platforms selects for homophily, and therefore creates and reinforces filter bubbles, we can alter the underlying algorithms to create an architecture of serendipity.

This does not, of course, mean simply giving people the opposite of what they want. Such a course of action would prove useless, or even worse than useless. When radio listeners or television viewers had relatively limited choices, it was perhaps possible to force people to sit through presentation of an opposing point of view in the same way they sit through commercial advertising to watch the programs they do enjoy. Even if we could overcome the constitutional and technical problems, psychologists have demonstrated that when people are exposed to points of view that directly challenge their underlying opinion, they tend to respond by doubling down on those opinions rather than considering that their deeply held beliefs and comfortable certainties might be wrong (Klein 2018). Forcing people to watch the polar opposite of what they want to watch, even if it were possible, would likely reinforce rather than solve the problems associated with filter bubbles and echo chambers.

Fortunately, existing technology permits a more nuanced architecture of serendipity.

1. Recommendation 1: The Wobbly Algorithm.

Behavioral economists and product designers both are aware of the power of “nudge” and “nudging.” (Thaler and Sunstein 2008; Candeub 2014) Rather than dictate specific content to a user, certain elements of design make it easier for a user to choose one action or harder to choose another. It takes surprisingly little additional “friction” to have a statistically significant impact on user behavior. This is why targeted advertising charges a premium. In theory, targeted advertising permits advertising to the most receptive audience at the most receptive time.

Platforms often use this power of the nudge to drive users toward content and deepen engagement with the platform. Whether it is Amazon recommending similar products, YouTube recommending videos, or Facebook organizing your news feed, platform operators collect a wide range of information based on your past history and the history of similarly situated people to make predictions as to what content will most likely encourage further engagement. Their algorithms do not produce a single perfect result, or even a set of perfect results. Rather, they make predictions

that fall along the lines of a probability curve, from most likely to be relevant to least likely to be relevant. The algorithm then serves the selections that are at the center of the probability curve. Because people tend to like content described in extremes (“best” or “worst” rather than “OK” or “enjoyable”), and generally like more of what they have liked in the past, the algorithmic filter bubble selects for content that is more homogenous in perspective and more extreme in nature (or has triggered more extreme reactions from other users).

What of the discarded results? These cover a wider range of possible content that is still similar enough that it might engage the user. It simply is not judged by the algorithm to be as likely to be engaging, because it is less like the most recently viewed content, because it generates less-extreme responses from users, or both. Nothing stops the algorithm from selecting content from lower down the probability curve — from the “shoulders” of the curve rather than from the top of the curve.

Requiring algorithms to include somewhat lower-ranked content in recommended content would at least slow the drive toward homogeneity and would nudge users toward more diverse content. Critics might argue that this ensures that the “diversity” of the content will still be fairly close to the most recently viewed content. True. But if the offered content is radically different from what users like or expect, they will reject it. This phenomenon of rejecting information people find too challenging to their beliefs, called the “backlash effect,” tends to reinforce core beliefs rather than open people to new perspectives. This is why proposed diverse content should be similar enough to be acceptable. Over time, the introduction of more diverse content may stimulate users to look at more content like the diverse content, encouraging exposure to new inputs over time. As marketers and product designers have long understood, a nudge can be far more effective than a sledgehammer.

2. Recommendation 2: Eliminate Suspect Classifications, or Actively Reverse Them, at Random Intervals.

Advertisers have always used racial and gender stereotypes when placing advertisement. Anyone who listens to an “urban format” radio station will hear very different advertisements than on a classical music or “classic rock” station. Similarly, advertisements broadcast in association with most professional or college sports games emphasize cars, beer, and erectile dysfunction/male “enhancement” remedies on the assumption that the primary audiences are men and that men who like sports are also most likely to buy beer, purchase the latest-model SUV, and show an interest in other products designed for a male audience.

Digital platforms take this a step further, and not simply for advertising. Algorithms do not teach themselves from nowhere. To the extent that stereotypical assumptions about sex or race drive programming and advertising choices, the algorithm will learn these patterns and replicate them. Worse, to the extent that developers harbor implicit or explicit biases, these are also likely to be incorporated into the algorithm. Algorithms, even self-teaching ones, start by examining a basic set of data. If those designing the algorithm consider race or sex important criteria for determining things like credit worthiness or interest in science or sports, then the algorithm will seek that data and include it in its calculations.

It would be nice to declare that algorithms should simply ignore certain suspect criteria. But that has not worked even in the world of human judgment. For decades, human beings have used proxies such as address or speech pattern to determine race or sex when the law prohibits asking about these characteristics. Additionally, using race or sex is not always irrelevant or pernicious. To take a simple example, we wish to prevent the use of race as a factor in sentencing. Studies have repeatedly shown that African Americans, particularly African-American men, receive harsher sentences than whites who commit comparable offenses. An algorithm that studies this pattern to learn what sentences to recommend will reinforce this racial inequality. On the other hand, we want to analyze arrest and sentencing records precisely so that we can find such patterns of discrimination and address them.

This paper cannot even begin to address this issue. I will therefore limit myself to a single suggestion for modifying the algorithms used to screen or promote content. At random intervals, the algorithm should make its selection with certain criteria blank, and on other random occasions actually reverse or alter the criteria. Imagine as an example a platform that has created a detailed picture of a user. On every fifth run of the algorithm, it assumes I am a woman rather than a man, but holds all else equal. Does it yield different recommendations? If so, the platform should make that result visible in the name of promoting diversity.

3. Recommendation 3: Encourage Development of New Tools to Identify Reliable Sources of Information.

The “diversity principle” in communications focuses in large part on the production of news necessary for self-governance. It is well beyond the scope of this paper to tackle the role of digital platforms in shaping the business of news and the evolution of journalism — two very different things. In the section on content moderation above, I describe steps that the law should require of platforms to determine when bad actors are deliberately seeking to spread misinformation and manipulate users for commercial or political gain. But platforms, as intermediaries in distributing news, can also assist in developing and distributing tools that enhance trust.

We must first distinguish between the problem of misinformation and the question of trust. There are many things that can be proven true or false. Then there are statements of opinion or belief that may be accurate but are not amenable to proof — either because they represent a balancing of factors on which reasonable minds may disagree, or because they rest on values that are simply not amenable to rational proof. As an example, I can determine by consulting the IRS code the current tax rate for personal or corporate income. But whether that rate is too high or too low is a statement that requires complicated factual analysis balancing multiple factors, as well as assumptions about the purpose of taxes and the impact of tax rates on things such as economic productivity.

In the past, news outlets and others have focused on “fact checkers” to analyze news and opinion statements with ratings on some sort of truth scale from literal truth to utter falsehood. But only a relatively small percentage of news stories fall easily into such a neat dichotomy. Worse, journalists may have excellent reason to report a story, only to alter their understanding of events after more facts are brought to light (sometimes in response to the original story). Conversely, a journalist may recklessly report something that ultimately turns out to be true, despite the lack of evidence when the story was first reported. Fact checkers’ ratings are not only useless in these situations, but counterproductive. To rate a story “true” based on the known facts, and then reclassify it as wrong (or worse, “false”) when new facts are discovered undermines trust in even reliable reporting.

Accordingly, platforms should help to develop and deploy tools that do not seek to be final arbiters of truth or falsehood, but do help to evaluate the reliability of the news source. A source that applies good journalistic practices is more reliable than one that simply runs the most outrageous rumors possible — or actively promotes stories long disproven. Additionally, while factors such as ideological alignment or financial interest do not determine whether something is true, they are relevant to assessing the reliability of the source material. Tools can provide those interested with such information, and thus enhance overall trust in the news.

Policy can encourage the development of such tools, rather than require them to be proscriptive. Additionally, disinterested regulators can promote the development and distribution of such tools. Regulators can also provide opportunities for platforms and tool developers to share information necessary to develop such tools without exposing trade secrets and can ensure a competitive market in the development of such tools. Finally, regulators can serve as vetting authorities, testing the reliability tools to ensure that they do not favor a particular perspective or financial interest.

4. Recommendation 4: Use Traditional Safeguards of Structural Regulation to Promote Competition.

We should recall that specific policies designed to promote diversity are most effective when used in conjunction with policies designed to foster economic competition. These recommendations are complements to, not substitutes for, the recommendations discussed above to ensure robust economic competition. The history of FCC regulation to promote diversity of voices includes rigorous ownership limits, as well as behavioral regulations on national programming networks to ensure the independence of independently owned network affiliate stations.¹⁴⁶ It also includes extensive cross-ownership limits, such as the prohibition on owning a broadcast station and a daily newspaper, or a broadcast station and a cable system in the same geographic market.¹⁴⁷ Indeed, in the realm of speech, such structural regulation is critical. Neither Congress nor enforcement agencies can legislate specific content or perspectives. Using independent ownership and/or removal of editorial control is a content-neutral means of encouraging the development of a diverse and robust marketplace of ideas.

5. Recommendation 5: Promote News and Media Literacy as a Component of Education.

Finally, we should recognize that one way to encourage users to actively seek out diverse content and avoid echo chambers and filter bubbles is by teaching basic media literacy skills. For all that we depend on an informed electorate as a necessary predicate to democracy, we do little as a society to provide our citizens with the skills needed to achieve this end. As a result, Americans have enormous difficulty holding media accountable or selecting reliable media sources, which contributes to the corrosive distrust of news and the attraction of filtering out uncomfortable opinions and perspectives. To take just one example, a recent Pew survey found that a significant number of Americans, when presented with a mixture of statements of fact (e.g., “the sun rises in the East”) and statements of opinion (e.g., “the weather was pleasant yesterday”) had difficulty distinguishing which were statements of fact and which were statements of opinion (Mitchell *et al.* 2018).

¹⁴⁶ *National Broadcasting Corp. v. United States*, 319 U.S. 190 (1943).

¹⁴⁷ This later prohibition was eliminated by judicial fiat in 2002, in *Fox Television Stations v. FCC*. The role of an overactive judiciary in shaping telecommunications regulation is often overlooked and underappreciated. As an advocate, I have observed the FCC staff or commissioners refuse to consider policies that clearly lie within the law but which they believed the D.C. Circuit would reverse as contrary to the deregulatory agenda of its more activist conservative judges. For this reason, Congress needs to describe clearly, unambiguously, and emphatically the authority it entrusts to enforcement agencies, authorizing numerous tools so as to emphasize that choice of appropriate remedy is delegated to the judgment of the enforcement agency, not the preferences of judges.

To enhance the robust marketplace of ideas and foster greater civic engagement and self-governance, we should consider funding basic media-literacy programs as part of our overall education system. To be clear, the point is not to foster any particular point of view. Rather, it is to focus on such basics as distinguishing statements of fact from statements of opinion, or advertisements from actual news.

CHAPTER VII: PUBLIC SAFETY, DISABILITY ACCESS, AND CONSUMER PROTECTION.

For reasons discussed in Chapter IV, any comprehensive regulation of digital platforms should include both a consumer protection component and a public safety component. In this context, “public safety” is not a euphemism for surveillance or cooperation with law enforcement. Rather, it means the use of digital platforms for communications in times of emergency by authorized local, state, and federal officials. Already, first responders and authorized officials are working voluntarily with social media to spread information in times of crisis. The statute should encourage these efforts and authorize the enforcing agency to consider how best to integrate the evolving capabilities of digital platforms with the existing Emergency Alert System.

Disability access deserves separate comprehensive treatment that cannot be addressed here. But I would be remiss if I failed to emphasize the importance of disability access given the centrality of digital platforms to our economy and our daily lives. The important role digital platforms increasingly play in our lives means they need to be accessible to all Americans. As more economic and social activity migrates to digital platforms, we must ensure that Americans with disabilities are not cut off and can actively and fully participate in the use of digital platforms. Although Congress has empowered the FCC to address this in a limited way,¹⁴⁸ Congress must provide broad authority to ensure that American with disabilities may participate fully in our digital future.

A. Consumer Protection and the Importance of Rulemaking Authority.

The role of any digital platform statute in protecting consumers and the role of an enforcement agency as a consumer protection agency require further elaboration. As discussed below in Chapter VIII, the recommendation that the designated oversight agency be given specific and general consumer protection authority does not displace the FTC’s existing general consumer protection authority, the authority held by existing specific consumer protection agencies such as the Consumer Financial Protection Bureau (CFPB), or concurrent state authority. To the contrary, these sources of consumer protection are both necessary and complementary to one another. My purpose in this section is to outline the consumer protection structure needed by a statute designed to provide comprehensive oversight of digital platforms. I will also touch on the necessity of including private rights of action.

Including consumer protection in comprehensive sector regulation is a reflection of fundamental values. But it does more than that. It recognizes that when a sector of the economy is important enough to require comprehensive regulation, the potential for consumer harm is

¹⁴⁸ Twenty-First Century Communications and Video Accessibility Act (CVAA) Pub. L. 111-260 (2010).

significantly greater than for other services. In the case of digital platforms, we have reached the point where consumers interact daily with multiple digital platforms, increasing these users' exposure to potential harm. Their activities on these platforms include important services and expose sensitive personal information, so the capacity of digital platforms to harm consumers can be severe. Finally, because several of these digital platforms operate in ways that are not transparent to consumers, platforms have the capacity to engage in harmful practices that only an expert agency with broad oversight of the industry can adequately detect, investigate, and remedy.

For similar reasons, the relevant oversight agency requires rulemaking authority. Particularly in a field marked by rapid growth and innovation, consumers and digital platforms must have clear "rules of the road" that establish rights and responsibilities. All consumers are painfully aware that virtually every digital platform reserves the right to change its terms of service at any moment. In such an environment, *post hoc* enforcement provides little stability or reassurance for consumers. A digital platform need only tweak its terms in response to an enforcement action to create a new cycle of uncertainty and litigation. By contrast, an agency empowered to make prophylactic rules can provide clear and enforceable rights that remain stable over time, enhancing consumer confidence and providing certainty to platforms.

Finally, as the industry evolves and new forms of consumer abuse become possible, an agency empowered to make prophylactic rules can address new concerns. The FTC's experience trying to cope with the emergence of digital privacy issues provides a cautionary tale. Since the mid-1990s, the FTC has struggled to overcome the limitations of its generic statute (Feld 2017c). While it does have some rulemaking authority under specialized and cumbersome procedures, unlike the (relatively) simple procedures generally available to federal agencies, the FTC abandoned efforts to use these procedures after a series of mostly unsuccessful and politically contentious attempts to adopt consumer protection rules in the 1970s and 1980s. The FTC has even found, in the absence of rules, that enforcement of privacy regulation may be impossible unless it can trace specific harms to the privacy breach and circumscribe specific conduct.¹⁴⁹ The emergence of an entire "surveillance economy" starkly demonstrates the inadequacies of this approach.

Looking again to the Communications Act as a model, we can identify three types of consumer harm the relevant oversight agency should address: typical consumer harms; typical consumer harms that are uniquely amplified or difficult to discover because of the nature of the sector; and harms unique to the nature of the sector.

¹⁴⁹ *LabMD, Inc. v. FTC*, 678 F. App'x 816 (11th Cir. 2016) (finding that LabMD satisfied request for stay because of "serious question" whether privacy violation due to security breach could constitute "unfair practice" without tracing specific harms).

B. Typical Consumer Harms.

Any business can engage in anti-consumer conduct. Examples include billing for services or goods not received, providing defective products, and deceptive sales practices. For this reason, the statute must include a general prohibition on such conduct. In the Communications Act, several statutes provide the FCC with generic authority to protect the public from anti-consumer practices. In the case of wireline services, which are a public utility and where the primary concern for the first several decades involved rates for services, Sections 201(b) and 202(a)¹⁵⁰ prohibit any “unjust or unreasonable” rates and practices and any “unjust or unreasonable” discrimination. For wireless services, which include a diversity of services from broadcasting to mobile broadband, Section 303(r)¹⁵¹ permits the FCC to make rules necessary to protect “the public interest, convenience and necessity.” Section 628(b)¹⁵² prohibits cable operators from engaging in “unfair methods of competition or unfair or deceptive acts or practices.”

Importantly, the statutory language in all cases makes these acts *per se* illegal. It falls to the agency (or the courts) to define which acts fall into the prohibited category. Congress should incorporate similar language into the proposed Digital Platform Act. Of these choices, the “unfair and deceptive practices” (UDAP) language likely works best. Because the DPA does not include any sort of price control mechanism such as traditional telephone tariffs, language regarding “rates and practices” is not a neat fit. Language authorizing rules that serve the public interest is more applicable in the context of licensing, which is the subject of Section 303 of the Communications Act.

But while UDAP language may be most applicable, the FTC experience also demonstrates its limitations. Congress should make clear that the agency is empowered, through rulemaking and enforcement, to define what constitutes an unfair or deceptive practice, and that the agency may enforce its UDAP provision without a showing of specific harm. When operating through rulemaking, courts must defer to the agency’s expert judgment pursuant to the authority delegated by Congress.¹⁵³ Additionally, Congress must clarify that the term “unfair” is not limited to exercises of market power or violations of the antitrust laws. The FTC’s authority to find a practice intrinsically unfair to consumers in the absence of an antitrust violation has been severely hobbled by both Congress and the courts (Feld 2017c). If the DPA includes UDAP language to provide general

¹⁵⁰ 47 U.S.C. §§201(b), 202(a).

¹⁵¹ 47 U.S.C. 303(r).

¹⁵² 47 U.S.C. §548(b).

¹⁵³ In administrative law this is referred to as the *Chevron* doctrine or *Chevron* deference, after the case which defined the relevant standard: *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837 (1984). By contrast, when the FTC enforces the “unfair and deceptive” language of Section 5 of the FTCA through an enforcement action, the FTC bears the burden of proof in court to show a violation.

protection to consumers, Congress must make clear that the restrictions on the FTC's unfairness authority do not apply to the DPA.

C. Harms Uniquely Amplified by The Nature of the Sector.

In the context of a specific industry sector, certain harmful conduct has more severe repercussions than in the economy as a whole. For example, defects in products designed for infants and toddlers create concern above and beyond our ordinary concern about defective products.¹⁵⁴ The Communications Act has multiple provisions governing privacy, recognizing the critical importance of protecting the confidentiality of communications and viewing habits (Feld *et al.* 2016). The nature of digital platforms similarly acts to amplify the harm to consumers in certain specific instances.

Most obviously, while privacy law in the United States desperately needs comprehensive reform, the nature and history of digital platforms makes privacy a unique concern in this context. Given that digital platforms by definition operate in cyberspace and constantly share information with users, securing digital platforms from hacking and malware takes on greater importance than in most other businesses. Accordingly, the relevant oversight agency should be specifically empowered to address privacy and cybersecurity above and beyond any existing or future generally applicable laws. Where existing specialized agencies already have jurisdiction that includes certain types of digital platforms (e.g., medical services), or certain activities on digital platforms (e.g., electronic payment processing), this jurisdiction should run concurrent with the DPA.

Explicit direction from Congress in the DPA with regard to such harms is important for several reasons. It highlights an area of specific concern and pressing urgency, and thus provides immediate protection without specific agency rulemaking to identify the concern. It also allows Congress to more precisely direct the agency, and, where necessary, limit the agency's discretion. Congress can use this to create minimum standards and focus on specific acts that it concludes are clearly abusive to consumers, rather than leaving it to the agency or courts to make such a determination. Congress can also conduct its own balancing of stakeholder interests and create necessary exceptions. For example, although the Communications Act includes a general provision protecting privacy of communications, it contains detailed provisions protecting privacy of telecommunications¹⁵⁵ and cable subscribers,¹⁵⁶ including notification obligations and exceptions that allow use of personal information without consent.

¹⁵⁴ Consumer Product Safety Improvement Act of 2008, Pub. L. 110-314 (2008).

¹⁵⁵ 47 U.S.C. §222.

¹⁵⁶ 47 U.S.C. §551.

At the same time, crafting a specific and detailed list of concerns runs the risk that emerging and rapidly evolving technologies will create new abuses not expressly predicted by Congress, which the enforcing agency or a reviewing court might deem outside the scope of enforcement authority. This reading derives from the legal principle of “*expressio unius est exclusio alterius*” (that which is not expressly included is excluded). For example, the program access provision of the 1992 Cable Act (the provision designed to ensure that dominant MVPDs cannot withhold programming from competitors)¹⁵⁷ declares in Section 628(b) a general prohibition on using “unfair or deceptive practices” to block or “significantly hinder” competition in video program distribution. Section 628(c) contains a set of requirements for rules designed to address specific conduct identified by Congress. For over a decade, the FCC stubbornly maintained that Section 628(b) was not an express grant of general authority but was limited to the specific list in Section 628(c). This allowed cable operators to develop new means of leveraging their ownership of local sports programming and otherwise leverage their existing market power to disadvantage competitors. It was not until *Cablevision Systems Corp. v. FCC* in 2007 that the FCC finally determined that Section 628(b) provided a general grant of authority to address other “unfair or deceptive” practices. Similar arguments are consistently raised against FCC authority with regard to other statutory provisions that provide a general grant of authority followed by specific instructions to address specified practices.

To some extent, Congress can do little about an agency determined to ignore its own authority or activist judges determined to thwart statutory language and the clear intent of Congress. To adapt Friedrich Schiller, “Against deliberate stupidity, the gods themselves rail in vain.” Nevertheless, Congress can at least delegate the agency sufficient flexibility to expand the list of consumer harms and prohibited conduct by using clear and express language that the agency has the power to identify additional consumer harms and to create new regulations to address these harms.

It is beyond the scope of this paper to examine every possible existing harm and determine whether it requires explicit direction from Congress in the DPA. Suffice it to say that as part of drafting the DPA, Congress should carefully consider whether consumer harms covered generally by the statement of general consumer protection authority require additional language to protect consumers and direct the agency. This certainly includes privacy and cybersecurity, but consideration may highlight other issues as well.

¹⁵⁷ Section 628 of the Communications Act, codified at 47 U.S.C. §548.

1. Harms Unique to the Nature of the Sector.

One element of complicated industry sectors is that they create unique opportunities for consumer abuse. In telecommunications, for example, this ranges from such trivial historic wrongs as rigging game shows¹⁵⁸ to more serious concerns, such as using information from telecommunications providers for stalking and harassment.¹⁵⁹ Sometimes new concerns arise from regulations that are otherwise pro-consumer and/or pro-competition but have unintended consequences. For example, the Telecommunications Act of 1996 required the FCC develop rules to require telephone providers to transfer phone numbers to rival carriers when requested by the customer. While this proved enormously successful in stimulating competition (and thus benefiting consumers), it introduced an entirely new form of consumer abuse — unauthorized transfer of phone contracts from one carrier to another, *aka* “slamming.” (FCC 2018) As the capability to engage in this harmful conduct did not exist until after the 1996 Act was adopted and implemented, no previous rule or act of Congress addressed it. Similarly, the introduction of internet-protocol-based telephone calls, *aka* “voice over IP” or “VOIP,” has created opportunities to forge caller ID information (Blanco 2019). This “number spoofing” permits a range of harms, from unwanted robocalls disguised as calls from friends to false 911 calls apparently originating from the victim’s home. Even without the intent to deliberately cause harm, the evolution of the telephone system to an all-IP platform has downgraded the quality of rural phone calls, rendering some parts of America at times virtually unreachable (Feld 2013).

In all these cases, Congress eventually amended the Communications Act to give the FCC specific authority to address these problems. But that amendment process took years. In the interim, the FCC’s broad statutory authority to address unjust or unreasonable practices and unjust or unreasonable discrimination allowed it to act to remedy the situation. For example, the rural call-completion problem first surfaced around 2010, but Congress did not pass a law explicitly directing the FCC to address rural call completion until 2018.¹⁶⁰ In the interim, the FCC proceeded — with increasingly strenuous urging from individual members of Congress — under its general authority. Had the FCC been constrained to address only previously known harms, rural America would have been effectively cut off from the national phone network for years.

Sometimes, however, Congress does not act, and agency action can resolve controversy and provide guidance. For example, in 1974 the FCC issued public notice of a policy statement on the use of subliminal messages in advertising. This addressed public concern without imposing significant new regulations on broadcasters. The idea that words and phrases flashing on television

¹⁵⁸ 47 U.S.C. §509.

¹⁵⁹ 47 U.S.C. §223.

¹⁶⁰ Improving Rural Call Quality and Reliability Act of 2017, Pub. L. 115-129.

or movie screens faster than human beings could perceive consciously could influence people's behavior without their knowledge, a technique dubbed subliminal messaging, became popular in the mid-1950s after a movie-theater owner claimed subliminal messaging had increased popcorn and soda sales. Despite the lack of scientific evidence supporting these claims, widespread popular concern arose that the movie or television industry could use these technologies to influence viewers without their knowledge. In 1974, the idea surfaced again, with an advertising agency purchasing television advertising time for commercials containing the subliminal message "Get it!" embedded in the product ad. The FCC issued a public notice to address public concern and prevent broadcasters from broadcasting any future use of subliminal messaging in advertising (FCC 1974). As the 1974 public notice pointed out, it did not matter if subliminal messaging actually worked or not. The intent of subliminal messaging was deceptive, and therefore "inconsistent" with the public-interest responsibilities of broadcast licensees.

It is unsurprising that no one anticipated this possible issue when Congress created the Communications Act in 1934, or that Congress failed to pass legislation even after the issue of subliminal advertising first emerged in the 1950s. This is the value of an administrative agency with general oversight. A single public notice calmed public hysteria and prevented a practice which — whether it worked or not — was designed to be manipulative.

Generally, the same technological evolution that enables new services loved by consumers opens the door to potential abuses they hate. For this reason, Congress must empower the relevant oversight agency to identify and address new forms of abusive conduct. While Congress can subsequently act to amend the statute to address emerging harms (as it has done with the Communications Act), this process frequently takes years. The oversight agency sits in the best position both to discover emerging harms and to address them in the first instance. In drafting the DPA, Congress must use language that makes it clear to reviewing courts that it intends the relevant oversight agency to identify and address new harms as they emerge — and that courts should defer to the agency's judgment in these matters.

We have already seen allegations that raise public concern about deceptive, manipulative conduct by digital platforms, even if there is little scientific proof that the conduct actually affects people's behavior. For example, numerous critics of Facebook and other social media platforms have accused these platforms of "designing for addiction." That is, they use known cognitive behavior theories to manipulate users to remain psychologically engaged with the platform, to the detriment of other more important activities such as work or family (O'Brien 2018; Wu 2016). Facebook has admitted to experimenting with news feed inputs without the user's knowledge or consent, to see if they can reliably manipulate people's moods without their knowledge (Goel 2014). Fraudsters have learned how to manipulate platform advertising technology to find targets

particularly susceptible to their scams, despite efforts by platforms to root out such abuses (Faux 2018).

These are certainly novel claims of harms, uniquely enabled as a consequence of platform technology and its role in our lives. Whether or not existing law reaches any of the above conduct, there is no doubt that the majority of people view even the attempt to manipulate them as deceptive and wrong. Congress cannot possibly anticipate these types of behavior, nor can it respond with new legislation every time a new public outcry occurs. The only way to effectively counter such conduct and preserve public trust in the sector is to empower an agency to act broadly against unfair, deceptive, or otherwise harmful conduct.¹⁶¹

D. Enforcement Powers and Private Rights of Action.

Justice delayed is justice denied. This is particularly so for consumers, who often face enormous disparity of power when seeking remedies from abusive practices. Particularly when individuals are “nickel and dimed” so that no single individual feels strongly enough to pursue action, bad actors have an incentive to act unless countered by risk of penalties strong enough to outweigh the potential financial advantage. The same is true for cases that do not involve explicit intent to harm consumers, but result from providers’ lack of incentive to take the precautions needed to prevent harm.

The Story of the Plastic Owl

When I began my career over 20 years ago, my workplace had a pigeon problem. Pigeons would congregate around the courtyard, creating messes and being a general nuisance. My employer purchased some plastic owls, believing that the pigeons would recognize its traditional predator and go elsewhere.

During the winter, this worked reasonably well. But then spring came and the pigeon population multiplied. People started eating outside again, creating all manner of tempting pigeon

¹⁶¹ Opponents of regulation invariably argue that fear of public backlash will prevent deceptive conduct. It is difficult to take seriously an argument so regularly contradicted by daily life, but it arises frequently enough that I provide a few basic answers to this knee-jerk objection in this footnote. 1) Vigilante justice, even internet vigilante justice, is generally considered the antithesis of a prosperous, orderly society and the rule of law. To police an entire sector of commerce and social activity through roving mobs of internet trolls surely meets Hobbes’s definition of “nasty, brutish and short.” 2) As discussed in Chapter I, massive information asymmetry is an outcome of the way in which digital platforms operate. This creates a “Market for Lemons” problem (Akerlof 1970), which is only resolvable by providing a suitable remedy for discovery of the harm *post hoc*. 3) As we have seen from constant new revelations, the bad conduct can go on for years without being detected. This is a high social cost to ask users to bear on the off chance that the harm can be discovered and proven without the power to subpoena evidence or compel a company to cooperate in an investigation. To the extent this is insufficient, other reasons can certainly be provided to rebut this tired Libertarian cliché.

treats in the form of food scraps and wrappers. The pigeons crowded around the courtyard at the edge of whatever their pigeon senses told them was the threat radius of the plastic owl. Eventually, the circle of pigeons got so crowded that one of the pigeons hopped or was pushed closer to the plastic owl.

Nothing happened.

After a suitable period of observation, the circle of pigeons contracted. Soon, another pigeon decided to test the limit on the “owl” and hopped forward. Again, nothing happened. Several repetitions later, the pigeons realized the owls were no threat. Not only did the pigeons once again re-infest the courtyard, they could be seen perching and doing their “pigeon business” on the plastic owls. While I cannot claim to be an expert in pigeon psychology, I suspect the pigeons enjoyed doing their “business” on this helpless representation of their natural predator.

When an agency lacks the authority or willingness to act, it becomes a plastic owl. Eventually the industry realizes that the agency presents no threat and cheerfully does its “business” all over consumers. Agencies therefore need authority to act swiftly to address consumer complaints. This process must be sufficiently easy for consumers to use that they will not find the complaint process itself a deterrent. The agency must resolve the complaint in a reasonable time and inform the complainant of the result. The agency should also have express power to order remediation to consumers rather than simply authorizing the agency to issue fines and forfeitures. The primary object of consumer protection is to make consumers whole, not simply to punish bad actors.

For consumers, it is far better that abuse not happen at all than to have it happen and remediate it. It is better to resolve the problem directly with the provider than to resort to a complaint to the agency or to a lawsuit. Additionally, businesses far prefer to know in advance what to do to limit liability. For this reason, the agency should have clear authority to create rules designed to avoid confusion and unreasonable practices and to facilitate resolution between consumers and digital platforms. For example, many digital platforms have no clear means by which consumers can contact someone to voice complaints or ask questions about fees or terms of service. A rule requiring a provider (or provider above a specific size) to create a process for addressing consumer concerns would clearly be valuable. Additionally, the agency itself might act as an ombudsman between consumers and digital platforms, resolving disputes through non-adversarial processes. Congress should make clear that the relevant enforcement agency has authority to create rules governing transparency and standards of conduct necessary to protect consumers, and has authority to use informal mechanisms where appropriate.

Because agencies' resources are limited, and because agency enforcement is subject to the shifting winds of political will, Congress should include the opportunity for private rights of action and the right to bring class-action lawsuits against providers. The law should allow for actual damages, as well as liquidated damages where actual damages may be difficult or impossible to prove.¹⁶² For example, the Communications Act allows a private right of action for actual damages against any telecommunications carrier. It also provides a private right of action with a liquidated damages clause of \$1,000 per day per violation for violations of the cable privacy statute. Similarly, Congress should consider which circumstances would permit a general private right of action, and when to include provisions for liquidated damages.

A potential problem with authorizing private rights of action — and especially class actions — is the widespread use of “forced arbitration clauses.” Under the terms of service, consumers must waive their rights to sue or join a class action lawsuit and must agree to resolve any and all disputes with the provider through an arbitration process dictated by the provider. Such clauses would render any private right of action granted by Congress meaningless. Congress should therefore make clear that the right to sue or join a class-action lawsuit over violations of the DPA is not waivable.

1. Costs to Stakeholders Are Not Irrelevant, but Are Not Determinative and Are Often Over-Exaggerated.

Whenever the question of consumer protection arises, there are complaints that it will raise the cost of doing business and therefore drive up the cost to consumers generally or even dissuade potential providers from offering services.¹⁶³ The short answer is that any business model that depends on exploiting consumers is not a good business model. Someone must bear the cost of defective products or deceptive practices, either the consumer or the provider. For reasons that have held true since Brandeis wrote in support of creating the Federal Trade Commission, public policy should act to protect consumers from the disparity in bargaining power and the inability to detect defects or deceptive practices.

The cost of compliance tends to be exaggerated by providers. But this does not mean that consumer protection regulation, particularly proactive regulation, is entirely without cost. As noted

¹⁶² “Liquidated damages” is a legal term meaning a set minimum monetary amount paid in damages for a violation. Liquidated damages are used in private contracts and in statutes when actual damages are either difficult to compute or are insufficient to deter violations.

¹⁶³ The argument that businesses have no “incentive” to harm customers is also frequently raised, displaying both an astonishing ignorance of basic economics and a willful blindness to reality. Let us assume away all actual malevolent actors. Profit-maximizing firms may have no incentive to harm their customers, but they have every incentive to cut costs and charge “all the traffic will bear.” Our experience in the real world confirms this empirical reality over the wishful thinking of economists bandying about phrases such as “reputational harm.”

numerous times above, the potential tradeoff in benefits as against the costs to providers and opportunity cost to consumers is part of the calculus. There are occasions when it is appropriate to require the consumer to bear the risk of potential defects — provided the risk is clearly explained. Similarly, compliance costs that can easily be absorbed by large businesses may be overwhelming for new entrants and smaller businesses. In these cases, the benefits of imposing consumer protections must be balanced against the advantages of permitting new entry and enabling small businesses to function. Regulators in such instances should reject simplistic “level playing field” arguments that equate small firms or new entrants to large firms that are capable of causing greater harm to larger numbers. Industry advocates cannot simultaneously plead the case for the small business or new entrant as too weak to bear the cost of compliance, and claim that exempting these businesses gives them an unbeatable advantage over well-funded incumbents.

Finally, consumers should not be asked to bear certain risks, even if precautions raise costs and create barriers to entry. Restaurants and food trucks are often small businesses and are often started by immigrants and other traditionally economically disadvantaged individuals. Health codes to ensure that the food does not make people sick undoubtedly raise the cost of doing business, as does compliance with inspection rules. Some individuals who would otherwise start restaurants or food trucks cannot afford to do so as a result of the added expense. Nevertheless, as a society we decide that this cost and the resulting barrier to entry are preferable to making consumers bear the risk of eating contaminated food, even though restaurant and food-truck operators have an incentive to avoid poisoning their customers.

E. Application to All Platforms versus Application to Platforms with Market Power.

Not all proposed provisions of the DPA — including the consumer protection provisions and subsequent regulations — need apply equally to all digital platforms. The Communications Act has often distinguished between dominant and non-dominant firms, applying greater regulatory scrutiny and more vigorous enforcement in the case of dominant firms where the primary concern is limiting market power. For example, at the heart of the Telecommunications Act of 1996 were provisions designed to open existing incumbent local voice loops to competition.¹⁶⁴ These provisions included incentives for local loop providers to open their networks by allowing them to enter the long-distance market once pro-competitive provisions of the statute had been satisfied.¹⁶⁵ Other provisions, such as rate regulation of the cable basic tier, were to be phased out once the FCC found that a dominant incumbent provider faced “effective competition.”¹⁶⁶ Similarly, the FCC has

¹⁶⁴ Telecommunications Act of 1996, Title I.

¹⁶⁵ See 47 U.S.C. §§271-72.

¹⁶⁶ See Telecommunications Act of 1996 §301.

often exempted or modified the obligations of small providers when the cost of compliance would impose significant burdens on provision of service.

1. Why Sector-Specific Regulation Frequently Distinguishes Between Dominant and Non-Dominant Firms.

This approach to regulating dominant firms rests on a policy preference for competition. Imposing limitations and obligations that were designed for massive firms with market power on startups and potential competitors may entrench dominant firms by driving up the cost of market entry or otherwise making market disruption more difficult. At the same time, incumbents often seek to confuse the issue by arguing that treating new entrants or smaller providers differently from dominant providers “picks winners and losers.” Rather than actually creating a competitive marketplace, incumbents argue that regulators should create a “level playing field” by exempting the very incumbents the regulation targets, or by applying the same level of regulation to the competitors whom the regulation seeks to foster (Del Priore 2018). This, of course, ignores the entire reason for regulatory action in the first place: to **create** competition, not maintain the status quo.

As the mixed success of these provisions demonstrates, it is difficult to find the proper balance between limiting market power and encouraging the emergence of new firms. Political pressure may push regulators to find that firms are non-dominant too soon. Additionally, many regulations promoting competition or protecting consumers may need to apply to all market participants to achieve the desired effect. For example, the Communications Act imposes an obligation on all telecommunications service providers, not simply incumbent or large providers, to interconnect.¹⁶⁷ Without such a requirement, the public switched network — the “network of networks” that makes it possible to call anyone anywhere using a standard 10-digit phone number — simply would not work. Only where all networks reliably interconnect with one another can the entire network be reliable.

In considering the proposals set forth in this paper, I have on some occasions indicated that it would prove easier to apply specific proposals to dominant firms. But I do not propose any strict conclusion at this preliminary stage of debate. While the general guiding principles of consumer protection, economic competition, and competition in the marketplace of ideas are universally applicable, implementing these recommendations will require careful consideration of how to balance the tension between curbing market power, protecting consumers, and promoting competition.

¹⁶⁷ 47 U.S.C. §251(a).

2. Important Differences Between Regulatory Determinations of Dominance and Antitrust Determination of Dominance.

The word “dominance” does not appear in the antitrust statutes. Indeed, many of the words we routinely associate with antitrust — such as “market power,” “monopsony,” and “consumer welfare” — appear nowhere in the statutory language or the legislative history. They have emerged over time as interpretations of the harm antitrust is designed to avert. This flows from the nature of antitrust enforcement in the United States. The antitrust statutes impose civil or criminal liability for specific behaviors — the laws usually speak of “agreements” or “acts” or other specific things — that “restrain trade,” “monopolize,” or “lessen competition.” The system proceeds from the assumption that commerce as a whole works well, and that specific acts that threaten competition should be prohibited. Notably, as currently understood by the courts,¹⁶⁸ antitrust does not even prohibit monopoly or monopsony if obtained through legal means. Rather, as the D.C. Circuit has explained, “[w]hile merely possessing monopoly power is not itself a violation of antitrust law, it is a necessary element of a monopolization charge.”¹⁶⁹

Two consequences flow from this. First, the government always bears the burden of proof when seeking a new remedy under the antitrust laws. Second, each time the government brings a case against a company for a new violation, it must establish the same elements of (a) monopoly or monopsony power; and, (b) enhancement or protection of that power through illegitimate means. No matter that the government previously proved that the firm has monopoly or monopsony power in a similar action under similar circumstances last month. The government must once again prove all the elements of a monopolization claim — including once again showing the existence of market power.¹⁷⁰ Certainly previous convictions and settlement decrees establishing market power are part of that evidence. But the government must still show both the continued presence of market power *and* new conduct that seeks to enhance or defend existing market power through illegitimate means.

A finding of dominance in the context of sector-specific regulation, however, serves a different purpose. Unlike antitrust, sector-specific regulation generally seeks to moderate the market power of dominant firms no matter how obtained, and to promote competition for the express purpose of eliminating dominance. It therefore looks to structural evidence of a firm’s ability

¹⁶⁸ I am aware that current judicial interpretations of antitrust law have come under fierce criticism in a number of quarters. This includes arguments that the existing antitrust laws support the elimination of monopoly in all circumstances, regardless of how obtained. I do not seek here to enter into that debate. But whatever the law *should* mean, courts today require antitrust enforcers and private litigants to show both market power and abuse of market power to support an antitrust action.

¹⁶⁹ *United States v. Microsoft op.cit.*

¹⁷⁰ The situation is different when an antitrust agency seeks a penalty for violation of an existing consent decree. The burden of proof in that case is to show that the party violated the consent decree, rather than to prove again the facts of the complaint admitted to in the consent decree.

to exercise market power regardless of the means by which the firm obtained its market power. Where antitrust law today considers acquiring a monopoly through product superiority or other “legitimate” means an acceptable outcome that enhances “consumer welfare,” sector-specific regulation reflects a judgment by Congress — enforced through a regulatory agency — that factors unique to the designated sector make dominance (however defined) on the part of any firm contrary to the public interest, at least absent regulation to prevent abuse before it occurs. Where antitrust offers a *post hoc* (“after the fact”) remedy to harms already committed, sector-specific regulation offers an *ex ante* (“before the fact”) safeguard to prevent potential harm from occurring.

Because of this difference, a finding of dominance by a regulator is not a one-time event, repeated on every occasion the agency creates rules or tries to enforce them. Generally, agencies define what constitutes a “dominant” firm in terms of some objective set of market criteria, and then determine whether a specific firm does or does not meet that definition. Once the regulator determines that a firm is dominant, the burden shifts to the dominant firm. To avoid regulation as a dominant firm, the firm must show that it no longer can exercise market power.

The difference between antitrust and a regulatory finding of dominance is illustrated by the long history of regulation of telecommunications networks. From the beginning of the 20th century until the break-up of AT&T in 1982, the Department of Justice sued AT&T multiple times for various antitrust violations (Wu 2010; Wu 2018). On each occasion, the department was required to establish the same elements of both the existence of monopoly power and an illegal abuse of that power. It also had the burden in each case to detail the appropriate remedies based on the specific facts proved at trial.

By contrast, when the FCC began to shift from a regulated monopoly framework to an effort to introduce competition in the various segments of the telecommunications market in the 1970s and 1980s (Cannon 2003; Wu 2010), it decided to distinguish between dominant and non-dominant firms for regulatory purposes. As the FCC explained in what would become known as the “First Competitive Carrier Order,” (FCC 1980) Congress required the FCC to ensure that rates were “just and reasonable.” Setting rates by traditional principles of rate regulation imposes significant costs on carriers, which carriers then pass on to customers. Furthermore, many potential competitors cannot afford to go through the rate-making process, especially because the rate-setting process happens before the would-be carrier can even offer service and acquire customers. The FCC reasoned that if market competition could achieve the desired outcome — just and reasonable rates — without expensive rate regulation, this would serve the public interest by lowering costs and encouraging new entrants.

At the same time, the FCC recognized that when a carrier had sufficient power in the market to control its prices and outputs regardless of market demand — *i.e.*, the carrier had market power — it still required close supervision and traditional rate regulation. “A firm with market power is able to engage in conduct that may be anticompetitive or otherwise inconsistent with the public interest. This may entail setting price above competitive costs in order to earn supranormal profits, or setting price below competitive costs to forestall entry by new competitors or to eliminate existing competitors.” To determine whether a carrier could exercise market power, the FCC would focus “on clearly identifiable market features.” (FCC 1980) This included not merely the number of competitors at any given moment, but features of the market such as “barriers to entry” and “control of bottleneck facilities.” As the FCC recognized, these features in particular might allow a firm to exercise market power without regard to the number of competitors or availability of potentially competing services.¹⁷¹

Critically, the FCC did not simply look at a single snapshot in time or count the number of competitors in the market at the moment. Instead, it looked to the overall structure of the market, including difficulty of entry and how easily the allegedly dominant firm could raise the cost of doing business to potential rivals through control of essential facilities. If control of an essential facility meant that a deregulated carrier could strangle competitors tomorrow, the firm retained its designation as a dominant firm. Nor did it matter that dominant carriers acquired their dominance legally — in fact with the government’s affirmative blessing. The point of designating dominant carriers was not to “punish” carriers, but to describe accurately a market structure where some firms could — absent regulation — exercise market power. For the same reason, it was not “unfair” to allow competitors to operate under a different set of regulations. Unlike antitrust, which presumes that high market share is the result of consumer choice unless demonstrated otherwise, the FCC was looking at competition as a form of regulation to accomplish a specific goal — ensuring that rates remained just and reasonable. But price regulation through competition rather than traditional government-managed rate-setting only works when the market is actually, not just theoretically, competitive.

Where Congress or the FCC have relied on the number of competitors rather than on market structure analysis, the results have proven extremely unsatisfactory. For example, although the Cable Act of 1992 required rate regulation for cable operators to protect against unjust and unreasonable rates, the Telecommunications Act of 1996 eliminated rate regulation for cable systems subject to “effective competition.” The 1996 act defined “effective competition” as the

¹⁷¹ For example, if there are significant barriers to entry, an existing dominant carrier will have significant warning of the arrival of a potential competitor and may engage in “predatory pricing,” pricing their services so low that the new entrant cannot compete without taking a loss. After the competitor is driven out of business, the carrier can return to charging prices well above the competitive level.

presence of two comparable MVPDs serving at least 50 percent of the franchise area, with at least 15 percent of the households in the franchise area subscribing to a rival MVPD. The Telecommunications Act of 1996 made no reference to barriers to entry, control of bottleneck facilities, or any other structural elements that might permit an incumbent cable operator to exercise market power despite the presence of two comparable competitors.

Nearly every cable system in the United States has been found to be subject to “effective competition” under this definition, yet deregulated cable rates have climbed at rates consistent with market power rather than with competitive markets (Kimmelman and Cooper 2017). Although there are multiple explanations offered for why cable prices have consistently risen at rates far exceeding inflation for nearly two decades, one thing is clear: Simply taking a snapshot in time and counting the number of potential competitors in the marketplace does not ensure that the market will effectively regulate rates as predicted. A determination of “effective competition” (or, more accurately, a determination that the market will remain competitive for the long term and therefore keep prices reasonable) must consider the underlying structure of the market.

Application of the Telecommunications Act of 1996 to telecommunications provides another important lesson. Because its drafters were eager to replace direct regulation with market competition and regulation only of essential facilities and dominant firms, they created processes for removing regulation of dominant firms. These included a statutory pathway for ILECs to enter the long-distance market, a right to petition the FCC to “forbear” from applying any statute or regulation on a finding that enforcement was “no longer necessary as a result of competition,”¹⁷² and “regulatory reviews” every few years to determine whether the existing rules remained necessary.¹⁷³ This created a lever for political pressure, where ILECs could repeatedly challenge continued regulation as dominant firms and then complain to Congress and the courts that the FCC was refusing to declare them non-dominant — despite the fact that little had actually changed in the marketplace.

Congress created these mechanisms based on its adherence to public choice theory rather than actual market-based economic analysis. History and economics demonstrate that market structure is difficult to change, and that some regulatory oversight remains necessary in specific sectors, both to counteract market forces that create market power rather than competition and to correct premature judgments as to the durability of competition absent regulatory intervention. But Congress chose instead to rely on the ideological belief that agencies always strive to maximize regulation for its own sake. As the last two decades have shown, reliance on “policy with cynicism in place of romance” results in highly concentrated markets and their attendant evils for consumers,

¹⁷² 47 U.S.C. §160.

¹⁷³ 47 U.S.C. §161.

rather than a competitive nirvana where the state has withered away and capitalism assures “to each according to his ability.”

Applying these lessons to the proposed Digital Platform Act, Congress should provide guidance to the enforcing agency on which criteria to consider when declaring a firm dominant or non-dominant for any particular regulatory purpose. As noted in Chapter I, I believe that the “cost of exclusion” (COE) is the appropriate metric for determining dominance. But whichever metrics Congress and the enforcing agency use, Congress should make it clear that a finding of dominance lasts until the dominant firm can prove that the market has changed sufficiently. Congress should also trust the agency to assess honestly the relevant market conditions to determine whether a firm is no longer dominant, and/or that the elements of industry structure that drive the market toward monopoly or oligopoly have changed.

CHAPTER VIII: WHO WILL BELL THE CAT? DESIGNATION OF A FEDERAL OVERSIGHT AGENCY AND CONSIDERATIONS WITH REGARD TO PREEMPTION.

Unless Congress intends the public to enforce the new statute purely through private rights of action, the statute must designate an enforcement agency. This presents a choice. Congress could rely on the Federal Trade Commission as the general enforcer of competition and consumer protection law (and as the agency that currently polices digital platforms under its generic consumer protection and competition authority). Congress could expand the jurisdiction of an existing specialized agency, most likely the Federal Communications Commission. Or it could create an entirely new agency as a uniquely focused and specialized agency. Each approach has advantages and disadvantages, which I outline below.

Congress has generally created a new agency when new technology creates a new industry whose complexity requires specialization. Examples include the Federal Power Commission (now the Federal Energy Regulatory Commission) and the Federal Radio Commission (now the Federal Communications Commission). Congress has also created new agencies when experience shows that necessary and existing jurisdiction is divided among agencies, when the regulation required is not a good match with the general nature and practice of an existing agency, or when functions of that agency create internal conflict. For example, Congress created the Consumer Financial Protection Bureau (CFPB) in response to criticism that the diffusion of consumer protection authority for various forms of financial authority among the FTC and multiple regulators of financial institutions created confusion for consumers and enforcers. No single agency had sufficient authority or enforcement ability to curb widespread consumer harms across a wide variety of lending institutions. Additionally, traditional banking and finance agencies regarded their mission as promoting the health of the financial sector rather than protecting consumers. Institutional limits on FTC authority, as well as a lack of resources, undermined the FTC's ability as the country's general consumer protection agency to provide adequate protection for consumers from a wide variety of sophisticated abuses. Creation of a single agency charged exclusively with protecting consumers provided a way to move forward on a wide variety of problems that had plagued the consumer finance industry for years.

The history of the FCC provides another example of how Congress may revisit the need for an independent agency and the appropriate scope of that agency's authority. Congress originally assigned jurisdiction over wireline telecommunications regulation to the Interstate Commerce Commission under the Mann-Elkins Act of 1910, on a theory that it shared similar characteristics with railroads and other national networked industries operated on a common carrier basis. For a variety of reasons, however, this arrangement proved unsatisfactory over time. Advocates argued that the

ICC focused primarily on railroads, providing little oversight to the telecommunications industry (Paglin 1989).

Meanwhile, Congress first addressed radio broadcasting in 1912. Initially, Congress saw the problem as one of registration to prevent amateur radio operators from interfering with official communications or spreading “fake news.” The Radio Act of 1912 therefore contained relatively few regulations, simply requiring those wishing to communicate by radio to fill out a form (so they could be held accountable for any violation), use designated frequencies (to avoid interfering with federal communications), and give priority to emergency communications (Lasar 2011b). Notably, while mass radio broadcasting was in its infancy, the primary use of radio in 1912 was for personal communication. The matter was sufficiently ministerial as to be delegated to the Department of Commerce.¹⁷⁴

The rise of commercial broadcasting dramatically altered every aspect of the regulation of radio. Rather like the transition of digital platforms from spunky start-ups to corporate titans, radio transformed from being primarily about amateurs and direct communications to being primarily about the ever bigger and ever more important business of commercial radio broadcasting. Congress completely altered the existing regime for radio licensing and created the Federal Radio Commission in 1927. As explained by the Supreme Court, “Congress moved under the spur of a widespread fear that, in the absence of governmental control, the public interest might be subordinated to monopolistic domination in the broadcasting field.”¹⁷⁵ This allowed “Congress to maintain, through appropriate administrative control, a grip on the dynamic aspects of radio transmission.”

Over the next seven years, it became increasingly clear that while different in many ways, radio broadcasting (more specifically, comprehensive control of all uses of spectrum for communications) and telecommunications shared sufficient similarities and interrelated sufficiently to require combining the regulation of all non-federal communications into a single agency. Following the recommendation of a White House committee examining the regulation of telecommunications, President Roosevelt sent a message to Congress urging the creation of a new “Federal Communications Commission,” combining the authority vested in the Federal Radio Commission and the telecommunications jurisdiction of the ICC (Paglin 1989). Roosevelt’s reasoning

¹⁷⁴ As Lasar points out, the early pioneers of radio communication and the popular culture around wireless shared many of the same aspects as the rise of the technology sector today. That includes forgetting that the early stage of innovation was not at all focused on broadcasting, which would ultimately become the primary purpose of radio frequencies in the popular culture for the first two decades of the 20th century. Indeed, radio culture for communications was so embedded in popular culture that L. Frank Baum used it as his fictional means of communicating with Dorothy in *Oz* (Baum 1913).

¹⁷⁵ *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134 (1940).

flowed from rethinking the relationship between government and sector-specific industries. As Roosevelt explained in his message to Congress:

I have long felt that, for the sake of clarity and effectiveness the relationship of the Federal Government to certain services known as utilities should be divided into three fields: Transportation, power, and communications. (Paglin 1989)

As this history illustrates, the decision on whether to create a new agency or expand the jurisdiction of an existing agency will depend on multiple factors — including the perceived nature of the industry and the intent of the sector-specific regulation. This understanding may also evolve over time. Initially, Congress conceived of telecommunications as similar to railroads and other common carriers. By 1934, the President and Congress viewed telecommunications as part of a specific economic sector that rose to the level of “utility” and required unified federal regulation to ensure that the sector functioned in accordance with the public interest. This shift in thinking meant that telegraph, telephone, and other telecommunications services were now perceived as having more in common with radio broadcasting than with traditional common carriers. It may seem obvious today that our integrated data networks have more in common with each other, whether or not they include a wireless or wireline component, than with railroads and shipping companies. But this convergence of technologies into a “communications” sector was not obvious in 1910 when Congress first addressed the question of regulating telecommunications, or in 1912 when Congress first delegated regulation of radio to the Commerce Department, or even in 1927 when Congress formed the Federal Radio Commission.

This is another factor to bear in mind when considering the appropriate enforcement agency for the proposed Digital Platform Act. The shape of the sector may not become clear for some time, and Congress may need to revisit its initial decision. Congress took four tries to come up with the basic framework of the Communications Act of 1934. But the evolution and convergence of communications policies since then has validated the basic framework Congress ultimately adopted.

A. The FTC: *Pro and Con.*

There are two substantive arguments advanced in favor of designating the FTC as the primary enforcement agency for regulation of digital platforms.¹⁷⁶ The first is that the entire premise

¹⁷⁶ Arguments about a “level playing field” with other sectors (such as network access providers, or other “edge providers” which do not meet the definition of digital platform) should be rejected without serious consideration. As discussed above, sector-specific regulation is premised on the idea that the sector has unique characteristics that differentiate it from other lines of commerce. This is like arguing that football and baseball need to be conducted under the same rules when the entire point is they are not the same game.

of the argument is wrong. Digital platforms do not form a distinct sector of the economy, and the aspects identified at the beginning of this paper as defining digital platforms — accessed using the internet, multi-sided platforms with one side open to the public, and enjoying sufficiently strong network effects — are merely aspects of a business model rather than features that define a sector in need of sector-specific supervision. While certain aspects may require more targeted remedies, this is still sufficiently generic to maintain the general supervision shared by other businesses. To use an analogy, if the FTC is the “cop on the beat,” then all that is needed is the equivalent of a homicide division rather than creation of a new and independent enforcement agency.

The second argument is almost the mirror image of the first. To the extent digital platforms are regulated, it has been by the FTC pursuant to Section 5 of the FTC Act. The FTC has consent decrees in place with the major platforms, notably Google and Facebook, entered into as a precondition of merger approval, to settle antitrust investigations, or to settle complaints of “unfair and deceptive practices” under Section 5. This, proponents of the FTC argue, gives the FTC unique institutional expertise on par with an expert agency regulating a specific sector.

The counter-argument to both of these is essentially the same. Digital platforms are now a distinct sector of the economy that impinges on nearly every aspect of our lives. The existence of a handful of dominant firms, and the economic features of digital platforms that create and support their enduring market power, require more than a few tweaks to existing FTC authority. In the market generally, competition can usually be achieved by breaking up bigger companies into smaller competing companies. If a merger would produce too few grocery stores or funeral homes in a market, requiring sufficient divestitures reestablishes competition without further intervention. As discussed at length above, it is neither clear how to physically break up digital platforms nor clear that breaking up these platforms would automatically produce competition. Nor does the FTC have expertise in the equally important area of content moderation. Nothing in the FTC’s jurisdiction or experience relates to the problems of online harassment, deliberate disinformation campaigns for political (rather than commercial) purposes, or how to promote exposure to diverse sources of news and entertainment. Nor does the FTC have any experience with public safety.

The proposed Digital Platform Act employs an approach utterly contrary to FTC practice, and implementation would require an entirely different set of skills than those used by the FTC under Section 5. It takes a proactive *ex ante* regulatory approach to aggressively promote competition, rather than a *post hoc* approach designed to preserve existing levels of competition. It requires the FTC to constantly monitor areas and practices utterly unfamiliar to it. True the FTC could, with sufficient investment of resources by Congress, acquire such expertise and create an entirely separate sub-agency devoted to digital platforms. But it would be cheaper and more effective to create a new agency from scratch (or to expand the FCC, which has more experience in the relevant

areas). In any event, doing so would negate the value of any previous experience, and the need to undertake a radical restructuring of the FTC to implement the proposed DPA demonstrates why it is not merely a new business model or product.

B. The FCC: *Pro and Con.*

If Congress wishes to build upon existing agencies, the logical choice is the FCC. As discussed above, there are sufficient similarities between communications and digital platforms, especially in network economics and social goals, to use the Communications Act as a model for comprehensive legislation. Nor would this be the first time Congress has dramatically expanded the FCC's authority to reflect the evolution of communications technologies. For example, the 1984 Cable Act added Title VI to the Communications Act on the regulation of cable services. Congress significantly modified the FCC's wireless authority in 1993 to address the introduction of mobile services. Given that the essential quality of digital platforms is their distribution over the internet and their status as self-organizing "virtual networks" that perform similar functions to traditional telecommunications and media networks, the FCC seems the logical regulator of digital platforms. Furthermore, the FCC has vast institutional experience with proactive rulemaking as well with consumer protection and public safety. This institutional experience seems relevant when implementing a statute such as the DPA.

There are several concerns with expanding the jurisdiction of the FCC to include the proposed DPA. The most important is an existential one. The FCC has had responsibility for promoting diverse content, requiring transparency in advertising and content sponsorship, and implementing content moderation schemes such as the Children's Television Act and parental controls. Yet Congress has been very careful to prevent the FCC from regulating the actual producers of content as distinct from the licensees who carry the programming. It has done this deliberately to minimize the influence of government over content. Furthermore, the broad authority and discretion delegated (at least in theory) to the FCC is made tolerable by the fact that it is strictly tied to the physical networks over which communications travel. Expanding the FCC's jurisdiction to include digital platforms potentially erodes this structural firewall between the regulation of physical networks and the regulation of communications and content.

This brings up the second concern. Given the multitude of public interest goals Congress has already entrusted to the FCC, there is a danger that the FCC may see its role as balancing the interests of physical networks with those of digital platforms. While the FCC has on occasion handled the introduction of new competing technologies well, its track record is mixed. The FCC delayed the rollout of television in a manner clearly designed to avoid disruption of incumbent radio broadcasters (Wu 2010). Likewise, before Congress passed the 1984 Cable Act, FCC regulation was

designed to prevent cable operators from competing directly with television broadcasters. Prior to the passage of the 1993 amendments to the Communications Act, the FCC limited the rollout of mobile services to avoid disrupting the incumbent wireline services. On the other hand, when given explicit direction by Congress, the FCC has proven more willing and able to promote new entry and competition. The wireless industry grew rapidly as a result of the implementation of the 1993 amendments, and — despite a significant rise in concentration in the last two decades — wireless remains the most competitive sector of the communications ecosystem.

This outcome should not be surprising. Like other institutions, agencies have their biases. Even without resorting to some of the more pessimistic aspects of public choice theory, it is easy to see how an existing agency charged with promoting the health of a particular industry will continue to do so unless something shifts its institutional momentum. This is especially true if authority is expanded without sufficient increase in funding and resources. It would be odd indeed if the FCC could set aside its 85-year focus on maintaining the stability of communications networks and embrace the potentially disruptive effects of “virtual networks.” And while the agency would have responsibility to ensure the health of the entire ecosystem, it would not be surprising for the FCC to gravitate to the arguments in favor of the networks it has traditionally regulated, and whose lobbyists have considerable experience with the institution.

Finally, while many digital platforms — such as social networks — bear close resemblance to traditional telecommunications or media and replicate many of the same features, others do not. Online shopping, for example, does not easily fit into the traditional jurisdiction of the FCC. Of course, nothing prevents the FCC from acquiring new expertise as needed, and any agency — whether existing or created for the purpose of implementing and enforcing the DPA — will need to hire new staff and acquire new skills. There is precedent for the FCC adding entirely new fields of expertise. In 1982, Congress expanded the FCC’s jurisdiction to include certification of all electronic devices that emit radio frequencies as incidental to their operation, such as computers.¹⁷⁷ This required the FCC to acquire expertise in engineering outside its traditional scope. Similarly, when Congress authorized the FCC to assign spectrum licenses by auction in 1993,¹⁷⁸ it required the FCC to expand its expertise in auction theory and hire new staff to build the necessary software to conduct auctions.

Nevertheless, it is reasonable to worry that the overall institutional tilt of the FCC toward a communications worldview might create challenges when applying its new authority to digital platforms that are less like traditional communications services and much more like traditional brick-and-mortar businesses. On the one hand, the FCC might simply neglect oversight of these

¹⁷⁷ 47 U.S.C. §302a.

¹⁷⁸ 47 U.S.C. §309(j).

platforms, in the way the ICC neglected oversight of telecommunications a century ago in favor of its primary focus on transportation. On the other hand, the FCC might apply policies and approaches that work for communications but are inappropriate for platforms primarily providing non-communications services.

All this suggests that while committing implementation of the DPA to the FCC could be workable, and might even have positive benefits by simplifying enforcement of certain aspects of the DPA that overlap with existing FCC responsibilities, Congress must proceed with care. As with the 1993 amendments and the 1992 Cable Act, Congress must give explicit guidance to the FCC (along with the necessary resources) to shift its the natural momentum and keep it from either neglecting its new responsibilities or favoring traditional networks over digital platforms when assessing competing public interest goals.

C. The “Digital Platform Commission”: *Pro and Con.*

In many ways, the cleanest solution to the question of implementation is to start fresh. Passing the DPA would create a new and comprehensive set of rules on a segment of the economy that has, until now, enjoyed comparatively little oversight. While this sector shares many characteristics with traditional electronic communications networks, it combines them in new ways that may make traditional experience unhelpful or even a hindrance, if lessons from traditional network regulation are inapplicable. A new agency also can view with fresh eyes the characteristics common to businesses within the sector that are not common in traditional communications networks or among businesses as a whole.

Most importantly, an agency dedicated exclusively to digital platforms will have no distractions from this increasingly important sector of our society. As with telecommunications and the ICC, we should not let surface similarities — however instructive — lead to grouping a unique sector of the economy with an entirely different sector. There is already more than enough work to justify creation of a separate agency. Moreover, variations among platforms require the kind of careful judgment that a separate agency dedicated entirely to digital platforms and enforcing a comprehensive digital platform act would be suited to carry out.

The chief barriers to creating a new agency are political. New agencies invariably require greater expense than simply expanding an existing agency. Additionally, accusations that Congress is needlessly expanding the federal bureaucracy by creating another regulatory agency may impede adoption of the DPA as a whole. At the same time, however, expanding the jurisdiction of an existing agency would also require massive investment of resources and incur restructuring costs, since regulation of digital platforms would differ markedly from its existing mission.

That these objections are political makes them no less real. Congress will need to weigh whether the advantages of creating a new agency are sufficiently compelling to warrant creating a new agency over these objections.

Finally, creating a new agency might blur traditional lines of authority and make overall enforcement more difficult. These problems, while real, should not be overestimated. The FTC has concurrent jurisdiction with a number of other agencies, such as the Department of Justice (for antitrust), the Food and Drug Administration (over advertising of food, drugs, and cosmetics), and the FCC (over robocalls and non-common carrier services such as cable). Agencies must work proactively to avoid allowing businesses to fall between the cracks between the two agencies, but the relevant agencies have years of experience resolving precisely these kinds of jurisdictional issues.

Of relevance, the UK House of Lords' recent report on regulating platforms examined this question and could not decide whether to create an entirely new agency or regulate through multiple existing agencies (House of Lords 2019). The report recommends forming a coordinating committee composed of members of relevant agencies (such as the Competition and Markets Authority and the Office of Communications) to ensure that the myriad of concerns that arise from digital platforms are properly addressed and matters are referred to agencies with proper jurisdiction. It remains to be seen whether this arrangement is workable, or whether this coordinating committee will ultimately evolve into a sector regulator.

This raises one last question. To what extent should generally applicable laws such as antitrust or state consumer protection laws apply to digital platforms? I discuss this in the final section.

D. Continued Need for Traditional Antitrust Enforcement and Consumer Protection by Federal and State Agencies.

Laws of general applicability are valuable because they are generally applicable. In the early and mid-20th century, Congress exempted certain regulated industries from generally applicable antitrust law or consumer law on the theory of “natural monopoly.” The trend over the last 50 or so years has been to reverse this trend. There are many reasons why generally applicable federal law — particularly antitrust — remains important despite adoption of comprehensive sector-specific regulation.

Antitrust and generally applicable federal consumer protection supplement comprehensive sector-specific regulation in several important ways. First, no single federal agency can cover the entire scope of an industry sector unless that sector is concentrated to the point of “natural monopoly.” Antitrust agencies, with their specialized knowledge of antitrust, continue to serve a valuable role in protecting competition broadly even as the agency charged with sector-specific enforcement promotes competition within the relevant industry sector. Likewise, no industry-specific agency can hope to catch every case of consumer abuse. It is not a question of whether we have a single “cop on the beat.” History shows competition and consumer protection need as many cops on the beat as necessary. Where agencies have experience enforcing laws of general applicability, their additional oversight enhances the public interest.

This is particularly true during those periods when specialized agencies choose to pursue other goals besides competition or consumer protection. Throughout most of the 20th century the FCC emphasized the stability of the telecommunications network and universal access to telecommunications services rather than competition.¹⁷⁹ It was the Department of Justice that repeatedly brought antitrust actions against AT&T for its anticompetitive practices in related markets (such as control of the customer equipment market), and then ultimately in the long-distance market. The FCC did not seriously seek to promote competition in telecommunications until the late 1960s and 1970s (Wu 2010; Wu 2018).

This conflict between the Justice Department and the FCC flowed from the FCC’s mandate to ensure universal access to all Americans at just and reasonable rates. This prompted the FCC to emphasize certain aspects of its jurisdiction, such as stability, and it deliberately permitted higher monopoly rates in urban areas to subsidize rates in rural areas. It was the Justice Department, with its general mandate to prevent anticompetitive conduct, that pushed back on AT&T’s assertion that it needed to control related markets to meet these statutory goals. It is difficult to imagine how the modern telecommunications market could have evolved without the break-up of AT&T, and it is difficult to imagine how that could have come about without an independent antitrust enforcer willing to go where the sector-specific regulator would not.

To ensure that antitrust agencies can continue to play this important role, the DPA must explicitly reverse the application of recent Supreme Court decisions limiting the power of antitrust where Congress has entrusted overall regulation of the industry sector to a specific regulator. In *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLC*,¹⁸⁰ the Supreme Court held that once the FCC determined that a carrier no longer had a regulatory “duty to deal” with rivals, then

¹⁷⁹ Indeed, Congress did not remove the authority of the FCC to immunize telecommunications providers from antitrust until the Telecommunications Act of 1996. Pub. L. 104-104.

¹⁸⁰ 540 U.S. 398 (2004).

such a duty could not exist under antitrust law. Essentially, the FCC determination that Verizon did not need to offer certain products at wholesale to competitors as a regulatory matter served to insulate Verizon from any antitrust claim that would mimic the previous regulatory condition. In *Credit Suisse Securities (USA) LLC v. Billing*,¹⁸¹ the Supreme Court extended this rationale to the securities market. Despite the statutory language referencing existing antitrust law, the Supreme Court reasoned that by committing regulation of the securities market to the Securities and Exchange Commission (SEC), Congress had implicitly immunized the securities market against certain types of antitrust enforcement that would be “repugnant” to the overall scheme of federal securities regulation.

Antitrust scholars and courts have debated the full scope of the impact of these decisions for the last decade. But even using the narrowest reading, the *Trinko* and *Credit Suisse* decisions greatly expanded the industries and conduct that were, for practical purposes, exempt from antitrust scrutiny.¹⁸² Antitrust enforcement agencies have understandably been reluctant to expend limited resources bringing cases that risk being thrown out due to *Trinko* concerns — and confirming for specific industries that, for them at least, generic antitrust has become dead-letter law.

In creating statutes to regulate digital platforms, it’s important that *Trinko* not be used to create a no-man’s land where neither regulation nor antitrust are applied to harmful behavior. A traditional antitrust savings clause can no longer be relied upon, as the clause in the 1996 Telecommunications Act was found insufficient to protect antitrust enforcement in *Trinko*. So were references to existing antitrust law in the Securities and Exchange Commission Act. Legislation creating regulation and antitrust enforcement for digital businesses should address this concern head on. The statute must be extremely specific, explaining for each tool and goal whether it is intended to supersede antitrust or not. Antitrust enforcers and other agencies can share dual authority with different review standards and goals. They can account for one another’s determinations in a manner that will

¹⁸¹ 551 U.S. 64 (2007).

¹⁸² Howard Shelanski, at the time the FTC’s top antitrust economist, testified in Congress on behalf of the commission a few years after the *Credit Suisse* decision. He argued that a narrow interpretation of *Trinko* was possible. The key facts in *Trinko* were that the legislation at issue, the 1996 Telecommunications Act, went further than antitrust law; an agency, the FCC, had issued rules directly regulating the conduct at issue; and the FCC actively administered those rules. Shelanski said in 2010, “Where a competent agency actively administers a rule whose standard for the competitive conduct at issue in litigation is more demanding on the defendant than antitrust law, the Court was right to find it relevant whether the marginal gains outweigh the potential costs of antitrust enforcement against the same conduct.” Yet he expressed concern that courts may use much broader interpretations of the line of cases. The Court in *Trinko* expressed concern about misuse of antitrust law by impudent plaintiffs, so some preemption could be limited to private plaintiffs, with expert agencies being given greater leeway.

minimize inconsistencies without having one always take priority over the other. Antitrust must remain in full force, except where Congress explicitly says otherwise.

Regulated industries frequently complain that having “two regulators” — a sector-specific regulator and the regulator for generally applicable laws, such as the FTC — creates confusion and potentially subjects regulated industries to contradictory and competing mandates. Examples of this confusion, however, are scant or non-existent. Consumers, certainly, do not object to having multiple agencies capable of addressing their complaints. It is far more difficult and confusing for consumers to try to determine whether to bring a complaint to one agency or the other than to bring a complaint to both. Agencies can, and generally do, resolve the question of overlapping jurisdictions with memorandums of understanding to delineate shared responsibilities.

Sector-specific regulation, even comprehensive sector-specific regulation such as the proposed DPA, does not warrant preemption of federal antitrust law or consumer protection law. Sector-specific regulation and laws of general applicability happily co-exist, and their co-existence serves the broader public interest.

1. The More Complicated Question of Preempting State Law.

Whether or not to preempt state law, however, poses a more complicated question. The Constitution gives authority over interstate commerce to the federal government. When the Constitution was written, the distinction between interstate and foreign commerce on the one hand, and purely intrastate commerce on the other, was fairly clear and straightforward. Over time, the economy has grown increasingly complicated and these components have become intertwined. At first glance, the digital economy appears quintessentially interstate, if not entirely global in nature. We have seen historically how local protectionist interests may give an advantage to incumbents and commercial rivals who fear disruptive technology despite the benefits to consumers and to society as a whole. The creation of a vast internal market relatively free of commercial friction has allowed the United States to become an economic and industrial superpower. Opponents of continued state authority over internet services frequently argue that the need to comply with “50 different sets of regulation” imposes significant cost, making it more expensive to provide new and innovative services.

Nevertheless, states remain the first layer of defense against harms done to their residents. Additionally, as the layers of government closest to the people and most accountable to them, state and local governments are uniquely situated to act to protect residents and preserve competition locally. Federal agencies may have no means to become aware of emerging problems on the ground. The Administrative Procedure Act imposes limitations on the ability of agencies to act

quickly. While these limitations are an important part of the checks and balances on federal action, they come at a cost. By contrast, the value in our federalist system with its “50 laboratories of democracy” is that it allows states and localities to take measures that are sensible based on the evidence before them, but which may not be ready for national implementation.

Additionally, the structure of federal oversight and federal rulemaking favors national actors and national interests. This is precisely why federalism remains important. There are often situations where the unique circumstances of a local community or a state require an approach suited to the specific local circumstances. Allowing states to respond to local needs ensures that these communities will have the power to protect themselves.

Accordingly, any sector-specific regulation must strike the appropriate balance between preemption and maintaining local authority. This is, of course, easier said than done. In the 20th century it was relatively straightforward for the Communications Act to distinguish between interstate communication and intrastate communication, or for the Federal Power Act to distinguish between wholesale distribution of power and retail distribution of power. A platform such as Facebook or eBay has its share of intrastate commerce and effects, but these are much more difficult to distinguish from the interstate or international aspects. Cyberbullying in a high school may be a local matter, but it can also cross state lines or even national borders.

It seems logical to insulate state antitrust laws and traditional state consumer protection laws from preemption. As discussed above with regard to federal laws of general applicability, having a broad base for enforcement of these general laws has historically proven beneficial to society. Permitting state-based sector-specific laws, however, is more problematic. Here, the possibility of manipulation by incumbent rivals and concern about additional friction that impedes innovations benefitting consumers has more historic support. But even here, the case for preemption is hardly clear-cut. As noted above, state action is often a necessary precursor to federal action.

Rather than make an immediate decision on which sector-specific regulation to prohibit, Congress should presume that states are in the best position to judge how to protect their residents and how to evaluate the necessary tradeoffs. The DPA should empower the enforcement agency to preempt state law it finds inconsistent with the goals and regulations adopted by the DPA. As an added protection, however, the DPA should not permit blanket preemption, but should require that the agency justify preemption on a record reviewable by a federal court. Additionally, the DPA should clearly authorize states and localities to pass laws or adopt regulations that are consistent with the DPA.

In short, the approach of the DPA to the states should be to view them as valuable partners in protecting the public interest, rather than as obstacles to a flourishing and innovative industry sector. Only when there is clear evidence that a national policy is needed, or that a specific state practice undermines the goals of the DPA, should the enforcing agency preempt state or local law.

CONCLUSION

At the beginning of 2019, tech reporter Kashmir Hill published a series of articles called “Life Without the Tech Giants.” Each week, with the help of a network engineer, she tried to block traffic from one of the top five “tech giants” dominant in the modern digital economy: Amazon, Facebook, Google, Microsoft, and Apple. After blocking each one sequentially, she spent the final week blocking all five. As she described in her articles, although blocking some of these platforms created more difficulties than others, blocking each one created unanticipated difficulties in accessing online services or using applications that had become part of her regular routine and on which she had come to rely for everything from talking to family to financial planning. During week six, when she simultaneously blocked all five of these “tech giants,” her digital life became virtually unusable (Hill 2019d).

While we should not act precipitously, we also cannot wait for absolute certainty. Nor should we delay obvious and necessary reforms while designing a comprehensive system of sector-specific regulation. In complex areas of our economy and society, Congress often proceeds by stages, sometimes substantially rewriting statutes when initial reforms prove ineffective. Congress enacted multiple precursors for regulating electronic communications and mass media before settling on the Communications Act of 1934. Although the overall structure of the Communications Act has proven remarkably effective and durable over its 85 years of existence, Congress has, when necessary, comprehensively amended it to reflect changes in our society as well as changes in technology.

While I expect that we will need to debate the points raised in this book for some time to come, I remain hopeful that Congress and the states will move quickly to stabilize the digital platform market and arrest what feels like the strong tide pulling toward concentration of economic power and manipulation by increasingly opaque and hidden algorithms that mediate our daily lives. As a society, we should not want our choices limited to which of four or five major platforms ultimately controls our home network (with its army of networked devices listening and recording everything to “serve us better”), or provides our news, or determines which jobs or goods and services to offer us. But such a future seems eminently possible, even likely, if we continue to do nothing.

The concluding chapter of the biblical Book of Ecclesiastes includes the following warning: “Take warning my son, for to the making of books there is no end, and too much discussion is a weariness of flesh.”¹⁸³ I stated at the beginning that I intended this book to begin the substantive

¹⁸³ Ecclesiastes 12:12.

debate on regulation of digital platforms as a distinct sector of the economy. I will conclude with a warning against overlong delay. Too many scholars, pundits and legislators have observed that unregulated digital platforms have created unprecedented concentration of wealth and power to dismiss these concerns as the alarmist fantasies of disengaged academics or complaints from competitors defeated in a competitive marketplace. While this sector has undoubtedly created enormous benefits for society as a whole, these benefits are unequally distributed, concentrating control over our daily lives in a manner that undermines fundamental values of our democratic society. We must move quickly to arrest these developments, or risk having the fundamental decisions in our lives increasingly made for us.

BIBLIOGRAPHY/REFERENCES

- Akerlof, George A. 1970. "The Market for 'Lemons': Quality uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* Vol. 84 No. 3 (August).
- Alexander, Julia. 2018. "YouTube's New Monetization Rules Are Controversial, Painful and Necessary." *Polygon*, January 18, 2018. <https://www.polygon.com/2018/1/18/16906036/youtube-monetization-small-creators-top-creators-changes>
- Allcott, Hunt, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow. 2019. "The Welfare Effects of Social Media." <http://web.stanford.edu/~gentzkow/research/facebook.pdf>
- Anderson, Chris. 2008. *The Long Tail: Why the Future of Business is Selling Less of More*. New York: Hyperion.
- Baker, Jonathan B. 2015. "Taking the Error Out of 'Error Cost' Analysis: What's Wrong with Antitrust's Right?" *Antitrust Law Journal* 80, no.1.
- Baker, Jonathan B., Nancy L. Rose, Steven C. Salop, and Fiona Scott Morton. 2019. "Five Principles for Vertical Merger Enforcement Policy." *Georgetown Law Faculty Publications and Other Works*, 2148. <https://scholarship.law.georgetown.edu/facpub/2148/>
- Balkin, Jack M. 2018a. "Fixing Social Media's Grand Bargain." Hoover Institution. <https://www.hoover.org/research/fixing-social-medias-grand-bargain>
- Balkin, Jack M. 2018b. "Free Speech Is a Triangle." 118 *Columbia L. Rev.* 2011.
- Bauder, David. 2019. "Facebook Says Service Hindered by Lack of Local News." *Associated Press*, March 18, 2019. <https://apnews.com/790d194cbec347149be8b598009ad1c4>
- Baum, L. Frank. 1913. *The Patchwork Girl of Oz*. New York: Reilly and Britton.
- Benkler, Yochai. 2010. "Next Generation Connectivity: A Review of Broadband Internet Transitions and Policy from Around the World." Berkman Klein Center for Internet and Society at Harvard University (February).
- Benkler, Yochai, Robert Farris, and Hal Roberts. 2018. *Propaganda, Manipulation, and Radicalization in American Politics*. New York: Oxford University Press.
- Bergmayer, John. 2007. "Cable Wants to Colonize Your TV: Consumer Groups Ask FCC for Help." Public Knowledge Blog (June 12). <https://www.publicknowledge.org/news-blog/blogs/cable-wants-colonize-your-tv-consumer-groups>
- Bergmayer, John. 2018. "Even Under Kind Masters: A Proposal to Require that Dominant Platforms Accord Their Users Due Process." Public Knowledge (May). https://www.publicknowledge.org/assets/uploads/blog/Even_Under_Kind_Masters.pdf
- Berman, Mark. 2017. "FCC To Investigate National 911 Outage." *Washington Post* (March 9, 2017). <https://www.washingtonpost.com/news/post-nation/wp/2017/03/09/fcc-to-investigate-nationwide-911-outage>
- Beauchamp, Zack. 2018. "Social Media Is Rotting Democracy from Within." *Vox* (January 22, 2019). <https://www.vox.com/policy-and-politics/2019/1/22/18177076/social-media-facebook-far-right-authoritarian-populism>
- Blanco, Octavio. 2019. "Mad About Robocalls?" *Consumer Reports* (April 2, 2019). <https://www.consumerreports.org/robocalls/mad-about-robocalls/>
- Blevins, John. 2009. "A Fragile Foundation — The Role of 'Intermodal' and 'Facilities Based' Competition in Communications Policy." 60 *Alabama L. Rev.* 241.
- Bode, Karl. 2018. "The Future of American Broadband is a Comcast Monopoly." *Motherboard* (December 14, 2018). https://motherboard.vice.com/en_us/article/yw7e7g/the-future-of-american-broadband-is-a-comcast-monopoly

- Borden, Jane. 2017. "Will & Grace' Reduced Homophobia, But Can It Still Have an Impact Today?" *Washington Post* (September 15, 2017). https://www.washingtonpost.com/entertainment/will-and-grace-reduced-homophobia-but-can-it-still-have-an-impact-today/2017/09/14/0e6b0994-9704-11e7-82e4-f1076f6d6152_story.html?utm_term=.227618e31f52
- Borgogno, Oscar and Giuseppe Colangelo. 2019. "Antitrust Analysis of Two-Sided Markets After *Amex*: A Transatlantic View." Stanford-Vienna Transatlantic Technology Law Forum (TTLF) Working Paper No. 41.
- Bracha, Oren and Frank Pasquale. 2008. "Federal Search Commission? Access, Fairness and Accountability in the Law of Search." 93 *Cornell L. Rev.* 1149.
- Bresnahan, Arthur. 1995. "The (Unconstitutional) Telco-Cable Cross-Ownership Ban: It Seemed Like a Good Idea At the Time." 1 *Mich. Telecomm. Tech L. Rev.* 79 (1995).
- Business for Social Responsibility (BSR). 2018. "Human Rights Impact Assessment: Facebook in Myanmar."
- Buchanan, James M. 1984. "Politics Without Romance: A Sketch of Positive Public Choice Theory and Its Normative Implications" in *The Theory of Public Choice — II*, Buchanan, James and R. Tollison, eds. Ann Arbor: University of Michigan Press.
- Burdick, Charles K. 1911. "The Origins of the Peculiar Duties of Public Service Companies, Part I." 11 *Columbia L. Rev.* 514 (Burdick 1911a).
- Burdick, Charles K. 1911. "The Origins of the Peculiar Duties of Public Service Companies, Part II." 11 *Columbia L. Rev.* 616 (Burdick 1911b).
- Burdick, Charles K. 1911. "The Origins of the Peculiar Duties of Public Service Companies, Part III." 11 *Columbia L. Rev.* 743 (Burdick 1911c).
- Campbell, John. 2013. "Unprotected Class: Five Decisions, Five Justices, and Wholesale Change to Class Action Law." 13 *Wyoming L. Rev.* 463.
- Candeub, Adam. 2004. "Network Interconnection and Takings." 54 *Syracuse L. Rev.* 369.
- Candeub, Adam. 2014. "Behavioral Economics, Internet Search and Antitrust." Michigan State University College of Law, Legal Studies Research Paper Series, Research Paper No. 12-03.
- Candeub, Adam. 2018. "The Common Carrier Privacy Model." 41 *U.C. Davis L. Rev.* 805.
- Cannon, Robert. 2003. "The Legacy of the Federal Communications Commission's Computer Inquiries." 55 *Fed. Comm. L. Jnl.* 167.
- Caves, Kevin W. and Hal J. Singer. 2018. "When the Econometrician Shrugged: Identifying and Plugging Gaps in the Consumer Welfare Standard." (June 29, 2018). *George Mason Law Review* (2018). <https://ssrn.com/abstract=3205518>
- Cherry, Barbara A. 2003. "Utilizing 'Essentiality of Access' Analysis to Mitigate Risky, Costly and Untimely Government Interventions in Converging Telecommunications Markets and Technologies and Markets." 11 *ComLaw Conspectus* 251.
- Cherry, Barbara A. 2006. "Misusing Network Neutrality to Eliminate Common Carriage Threatens Free Speech and the Postal System." 33 *N. Ky. L. Rev.* 483.
- Cherry, Barbara A., Julien Mailland, and Matt Pierce. 2014. "Exposing and Correcting Mischaracterizations of the Law in the Debate on Network Openness." Presented to the staff of the Federal Communications Commission. <https://ecfsapi.fcc.gov/file/7522905306.pdf>
- Cherry, Barbara A. 2016. "Historical Distortion: How Misuse of 'Public Utility' and 'Natural Monopoly' Misdirects U.S. Telecommunications Policy Development." Colloquium presentation (February 1, 2016). https://iu.mediaspace.kaltura.com/media/02+01+2016+-+Colloquium+Presentation%2C+Barbara+CherryA+Historical+DistortionA+How+Misuse+of+%E2%80%9CPublic+Utility+and+%E2%80%9CNatural+Monopoly%E2%80%9D+Misdirects+U.S.+Telecommunications+Policy+Development/1_gof

- Clough, Ryan. 2018a. Letter to Speaker Paul Ryan and Minority Leader Nancy Pelosi. (February 26, 2018). https://www.publicknowledge.org/assets/uploads/blog/PK_House_FOSTA_letter_2-26-18.pdf
- Clough, Ryan. 2018b. "The Inevitability of AI Law and Policy: Preparing Government for the Era of Autonomous Machines." Public Knowledge (October).
- Coaston, Jane. 2018. "Gab, the Social Media Platform Favored by the Alleged Pittsburgh Shooter, Explained." Vox (October 29, 2018). <https://www.vox.com/policy-and-politics/2018/10/29/18033006/gab-social-media-anti-semitism-neo-nazis-twitter-facebook>
- Coaston, Jane. 2019. "Rep. Devin Nunes's Bizarre \$250 Million Lawsuit Against Twitter, Explained." Vox (March 20, 2019). <https://www.vox.com/policy-and-politics/2019/3/20/18272786/devin-nunes-twitter-lawsuit-trump-social-media-law>
- Cole, Samantha. 2017. "AI-Assisted Fake Porn Is Here and We're All Fucked." *Motherboard* (December 11, 2017). https://motherboard.vice.com/en_us/article/gydydm/gal-gadot-fake-ai-porn
- Cole, Samantha. 2018. "Federal Court Rules Trump Can't Block People on Twitter." *Motherboard* (May 23, 2018). https://motherboard.vice.com/en_us/article/9k8a7d/trump-cant-block-people-on-twitter-court-ruling
- Columbia Law Review*. 1939. "Radio Censorship and the Federal Communications Commission." 39 *Columbia L. Rev.* 447.
- Confessore, Nicholas, Gabriel J.X. Dance, Richard Harris, and Mark Hansen. 2018. "The Follower Factory." *New York Times* (January 27, 2018). <https://www.nytimes.com/interactive/2018/01/27/technology/social-media-bots.html>
- Conger, Kate. 2017. "Cloudflare CEO on Terminating Service to Neo-Nazi Site: 'The Daily Stormer are Assholes.'" *Gizmodo* (August 16, 2017). <https://gizmodo.com/cloudflare-ceo-on-terminating-service-to-neo-nazi-site-1797915295>
- Cooper, Mark. 2013. "Why Growing Up Is Hard To Do: Institutional Challenges in Internet Governance in the 'Quarter Life Crisis' of the Digital Revolution." *Journal on Telecommunications and High Technology Law* 11(1).
- Cooper, Mark. 2014. "The Long History and Increasing Importance of Public-Service Principles for 21st Century Public Digital Communications Networks." *J. Telecomm. and High Tech. L.* 12 (1).
- Cooper, Mark. 2015. "The Future of the Internet as a Dominant Means of Communications and Commerce: Building Blocks of Past Success; Principles and Policies for the 21st Century." Submitted to the House Energy and Commerce Committee, Hearing on the Uncertain Future of the Internet (February 25, 2015).
- Cresswell, Julie. 2018. "How Amazon Steers Shoppers to Its Own Product." *New York Times* (June 23, 2018).
- Data Transfer Project. 2018. "About Us." <https://datatransferproject.dev/dtp-overview.pdf>
- Dastin, Jeffrey. 2018. "Amazon Scraps Secret AI Recruiting Tool That Shows Bias Against Women." Reuters (October 9, 2018). <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G>
- Del Priore, Michael. 2018. "The Trope of Parity." 36 *Cardozo Arts and Ent. L.Jnl.* 181.
- DeMers, Jayson. 2016. "The SEO Industry is Worth \$65 Billion; Will It Ever Stop Growing?" *Search Engine Land* (May 9, 2016). <https://searchengineland.com/seo-industry-worth-65-billion-will-ever-stop-growing-248559>
- Duhigg, Charles. 2018. "The Case Against Google." *The New York Times Magazine* (February 20, 2018). <https://www.nytimes.com/2018/02/20/magazine/the-case-against-google.html>
- Dunne, Brian J. 2008. "Compatibility Requirements, Systems Competition and Copyright." 39 *U. Tol. L. Rev.* 813.

- Dzieza, Josh. 2018. "Prime and Punishment, Dirty Dealing in the \$175 Billion Amazon Marketplace." *The Verge* (December 19, 2018). <https://www.theverge.com/2018/12/19/18140799/amazon-marketplace-scams-seller-court-appeal-reinstatement>
- Edlin, Aaron S. and Robert G. Harris. 2012. "The Role of Switching Cost in Antitrust Analysis: A Comparison of Microsoft and Google." 15 *Yale J. of L. and Tech.* 169.
- Emerson, Sarah. 2018. "How Real Activists Learned Facebook Was Deleting Their Protest Page for 'Inauthentic Behavior.'" *Motherboard* (August 3, 2018). https://motherboard.vice.com/en_us/article/d3e49j/how-real-activists-learned-facebook-was-deleting-their-protest-page-for-inauthentic-behavior-russia-unite-the-right
- European Commission (EC). 2017. "Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service." Press Release (June 27, 2017). http://europa.eu/rapid/press-release_IP-17-1784_en.htm
- Farrell, Henry and Bruce Schneier. 2018. "Common-Knowledge Attacks on Democracy." Berkman Klein Center For Internet and Society at Harvard University (October).
- Farrell, Joseph and Paul Klemperer. 2006. "Coordination and Lock-in: Competition with Switching Costs and Network Effects." Working Paper (May, 2006). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=917785
- Farrell, Joseph and Phil Weiser 2003. "Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age." 17 *Harv. J.L. and Tech.* 85.
- Faux, Zeke. 2018. "How Facebook Helps Shady Advertisers Pollute the Internet." *Bloomberg* (March 27, 2018).
- Federal Communications Commission (FCC). 1974. "Public Notice Concerning the Broadcast of Information by Means of 'Subliminal Perception' Techniques." FCC 74-78, 44 FCC 2d 1016, 1017 (1974)
- Federal Communications Commission (FCC). 1980. "In the Matter of Policies and Rules Concerning Rates for Competitive Carrier Services and Facilities Authorizations Thereof." *Report and Order*, 85 F.C.C. 2nd 1 (1980).
- Federal Communications Commission (FCC). 1995. "In re: Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier." *Order*, FCC 95-427 11 FCC Rcd 3271 (1995).
- Federal Communications Commission (FCC). 2007. "Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information." *Report and Order and Further Notice of Proposed Rulemaking*, FCC 07-22, 22 FCC Rcd 6927 (2007).
- Federal Communications Commission (FCC). 2011. "Application of Comcast Corporation, General Electric Co., and NBC Universal, Inc., for Consent to Assign Licenses and Transfer Control of Licensees." *Report and Order*, FCC 11-4, 26 FCC Rcd 4238 (2011).
- Federal Communications Commission (FCC). 2012. "Application of Cellco Partnership, d/b/a/ Verizon Wireless, and SpectrumCo LLC, and Cox TMI LLC for Consent to Assign AWS-1 Licenses." *Memorandum Report and Order and Declaratory Ruling*, FCC 12-95, 27 FCC Rcd 10698 (2012).
- Federal Communications Commission (FCC). 2012a. "Revision of the Commission's Program Access Rules," *Report and Order*, 27 FCC Rcd 12605 (2012).
- Federal Communications Commission (FCC). 2016. "Expanding Consumer Video Navigation Choices; Commercial Availability of Navigation Devices." *Notice of Proposed Rulemaking and Report and Order*, FCC 16-18 (February 18, 2016).
- Federal Communications Commission (FCC). 2017. "Elimination of the Main Studio Rule." *Report and Order*, FCC 17-137 (October 24, 2017).

- Federal Communications Commission (FCC). 2018. “Protecting Consumer From Unauthorized Carrier Changes and Related Unauthorized Changes.” *Report and Order*, FCC 18-78 33 FCC Rcd 5773 (June 8, 2018).
- Federal Trade Commission (FTC) Enforcement Bureau Staff. 2012. Memorandum on Google, Inc. File No. 111-0163 Recommending Issuance of Attached Complaint. (FTC Staff Memo 2012).
- Feld, Harold. 2006a. “Adelphia Decided.” *Tales of the Sausage Factory* (July 14, 2006). <https://wetmachine.com/tales-of-the-sausage-factory/adelphia-decided/>
- Feld, Harold. 2006b. “Enforcement Staff Respond to Application of Clue-By-Four to Head.” *Tales of the Sausage Factory* (August 1, 2006). <https://wetmachine.com/tales-of-the-sausage-factory/enforcement-staff-respond-to-application-of-clue-by-four-to-head/>
- Feld, Harold. 2009. “MLB Network Pays to Play to Get on Cable — Dumb NFL Stupidly Relies on FCC To Enforce Federal Law. Suckers.” *Tales of the Sausage Factory* (January 15, 2009). <https://wetmachine.com/tales-of-the-sausage-factory/mlb-network-pays-to-play-to-get-on-cable-dumb-nfl-stupidly-relies-on-fcc-to-enforce-federal-law-suckers/>
- Feld, Harold. 2010. “Sky Angel Files Program Access Complaint — Has Media Bureau Really Changed, Or Will They Sit on the Sidelines?” *Tales of the Sausage Factory* (April 11, 2010). <https://wetmachine.com/tales-of-the-sausage-factory/skyangel-files-program-access-complaint-has-media-bureau-really-changed-or-will-they-again-sit-on-sidelines/>
- Feld, Harold. 2013. “Rural Call Completion and the Problem of Network Neuropathy.” *Tales of the Sausage Factory* (April 3, 2013). <https://wetmachine.com/tales-of-the-sausage-factory/rural-call-completion-and-the-problem-of-network-neuropathy/>
- Feld, Harold. 2015. “Broadband Access as Public Utility — My Speech at the Personal Democracy Forum.” *Tales of the Sausage Factory* (June). <https://wetmachine.com/tales-of-the-sausage-factory/broadband-access-as-public-utility-my-speech-at-personal-democracy-forum/>
- Feld, Harold. 2017a. “My Insanely Long Field Guide to Common Carriage, Public Utility and Public Forum — And Why the Differences Matter.” *Tales of the Sausage Factory* (September). <https://wetmachine.com/tales-of-the-sausage-factory/my-insanely-long-field-guide-to-common-carriage-public-utility-public-forum-and-why-the-differences-matter/>
- Feld, Harold. 2017b. “The DoJ’s Case Against AT&T Is Stronger Than You Think.” *Tales of the Sausage Factory* (November 9, 2017). <https://wetmachine.com/tales-of-the-sausage-factory/the-doj-s-case-against-att-is-stronger-than-you-think-again/>
- Feld, Harold. 2017c. “Principles for Privacy Information: Putting People Back in Control of Their Information,” Public Knowledge (December). https://www.publicknowledge.org/assets/uploads/documents/Principles_for_Privacy_Legislation_Public_Knowledge_Paper_12.8.17.pdf
- Feld, Harold. 2018. “What Would Real Platform CPNI Look Like?” Public Knowledge (July 30, 2018). <https://www.publicknowledge.org/news-blog/blogs/part-iv-what-would-real-platform-cpni-look-like>
- Feld, Harold. 2018a. “We Need to Fix News Media, Not Just Social Media: Part 1.” Public Knowledge Blog (August 6, 2018). <https://www.publicknowledge.org/news-blog/blogs/part-v-we-need-to-fix-the-news-media-not-just-social-media-1>
- Feld, Harold. 2018b. “Why We Need a Moderate Approach to Moderating Online Content.” World Economic Forum (September). <https://www.weforum.org/agenda/2018/09/moderate-approach-moderation/>
- Feld, Harold. 2018c. “We Need to Fix News Media, Not Just Social Media: Part 2,” Public Knowledge Blog (October 25, 2018) <https://www.publicknowledge.org/news-blog/blogs/part-v-fix-media-not-social-media-part-2>
- Feld, Harold. 2018d. “Tumblr, Consolidation and the Gentrification of the Internet,” *Tales of the Sausage Factory* (December 6, 2018). <https://wetmachine.com/tales-of-the-sausage-factory/tumblr-consolidation-and-the-gentrification-of-internet/>

- Feld, Harold, Charles Duan, John Gasparini, Tennyson Holloway and Meredith Rose. 2016. "Protecting Privacy, Promoting Competition: A Framework for Updating the Federal Communications Commission Privacy Rules for the Digital World. Public Knowledge." <https://www.publicknowledge.org/assets/uploads/blog/article-cpni-whitepaper.pdf>
- Freelon, Deen, Lori Lopez, Meredith D. Clark, and Sarah J. Jackson. 2018. "How Black Twitter and Other Social Media Communities Interact with Mainstream News." Knight Foundation Report (Feb. 27, 2018).
- Frieden, Rob. 2003. "Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach." 55 *Fed. Comm. L.J.* 207.
- Future of Music Coalition (FMC). 2016. "The ASCAP-BMI Consent Decrees." <https://futureofmusic.org/article/fact-sheet/ascap-bmi-consent-decrees>
- Galston, William A. and Clara Hendrickson. 2018. "A Policy at Peace with Itself: Antitrust Remedies for Our Concentrated, Uncompetitive Economy." Brookings Institution (January 5, 2018).
- Garrod, Luke, Morten Hviid, Graham Loomes, and Catherine Waddams Price. 2009. "Competition Remedies in Consumer Markets." 21 *Loy. Consumer L. Rev.* 439.
- Geffs, Jacob. 1937. "Statutory Definitions of Public Utilities and Carriers." 12 *Notre Dame L. Rev.* 246.
- Gibbs, Colin. 2016. "Comcast to Launch Wireless Service in 2017 With Verizon MVNO, 15M Wi-Fi Hotspots." *Fierce Wireless* (September 20, 2016). <https://www.fiercewireless.com/wireless/comcast-to-launch-wireless-service-2017-verizon-mvno-15m-wi-fi-hotspots>
- Goel, Vindu. 2014. "Facebook Tinkers with Users' Emotions, Stirring Outcry." *New York Times* (June 29, 2014). <https://www.nytimes.com/2014/06/30/technology/facebook-tinkers-with-users-emotions-in-news-feed-experiment-stirring-outcry.html>
- Goldsmith, Jack. 2018. "Emerging Threats: The Failure of Internet Freedom." Knight First Amendment Foundation (June). <https://knightcolumbia.org/content/failure-internet-freedom>
- Griffin, Jodie and Harold Feld. 2013. "Five Fundamentals for the Phone Network Transition." Public Knowledge (July).
- Gullo, Karen and David Greene. 2019. "With FOSTA Already Leading to Censorship, Plaintiffs Are Seeking Reinstatement of Their Lawsuit Challenging the Law's Constitutionality." Electronic Frontier Foundation Blog (March 1, 2019). <https://www.eff.org/deeplinks/2019/02/fosta-already-leading-censorship-we-are-seeking-reinstatement-our-lawsuit>
- Harmon, Elliot and Jeremy Gillula. 2017. "Stop SESTA: Whose Voices Will SESTA Silence?" Electronic Frontier Foundation Blog (September 13, 2017). <https://www.eff.org/deeplinks/2017/09/stop-sesta-whose-voices-will-sesta-silence>
- Harvard Law Review*. 2017. "First Amendment — Freedom of Speech — Public Forum Doctrine — *Packingham v. North Carolina*." 131 *Harvard L. Rev.* 233 (November). https://harvardlawreview.org/wp-content/uploads/2017/10/233-242_Online.pdf
- Hassen, Richard L. 2018. "Cheap Speech and What It Has Done (To American Democracy)." 16 *First Amendment L. Rev.* 200.
- Hawley, Josh. 2019. Letter of Sen. Josh Hawley (R-MO) to Joseph Simmons, Chairman, Federal Trade Commission. (March 11, 2019).
- Hazon, Yoram. 2018. "Why Does Facebook think I'm 'Political?'" *The Wall Street Journal* (July 25, 2018). <https://www.wsj.com/articles/why-does-facebook-think-im-political-1532559704>
- Hein, Jonas. 2013. "The Recent DOJ and FTC Suggestions for Standard Setting Organizations — The Way Out of Standard-Essential Patent Hold-Up." 2 *NYU J. Intell. Prop. and Ent. L.* 339.
- Heins, Marjorie. 2019. "The Brave New World of Social Media Censorship." 127 *Harvard L. Rev. Forum* 325.

- Hill, Kashmir. 2019a. "I tried to Block Amazon from My Life. It Was Impossible." *Gizmodo* (January 22, 2019). <https://gizmodo.com/i-tried-to-block-amazon-from-my-life-it-was-impossible-1830565336>
- Hill, Kashmir. 2019b. "I Cut Facebook Out of My Life. Surprisingly, I Missed It." *Gizmodo* (January 24, 2019). <https://gizmodo.com/i-cut-facebook-out-of-my-life-surprisingly-i-missed-i-1830565456>
- Hill, Kashmir. 2019c. "I Cut Google Out of My Life. It Screwed Everything Up." *Gizmodo* (January 29, 2019). <https://gizmodo.com/i-cut-google-out-of-my-life-it-screwed-up-everything-1830565500>
- Hill, Kashmir. 2019d. "I Cut the 'Big 5' Tech Giants Out of My Life. It Was Hell." *Gizmodo* (February 7, 2019). <https://gizmodo.com/i-cut-the-big-five-tech-giants-from-my-life-it-was-hel-1831304194>
- Hiltzik, Michael. 2019. "AT&T Raises DirecTV Now Prices, Making Chumps of Those Who Backed Time Warner Merger." *Los Angeles Times* (March 18, 2019). <https://www.latimes.com/business/hiltzik/la-fi-hiltzik-att-price-rise-20190318-story.html>
- Holcomb, Jesse. 2014. "Where Was Ferguson in My Facebook Feed?" Pew Research Center (August 25, 2014). <https://www.pewresearch.org/fact-tank/2014/08/25/where-was-ferguson-in-my-facebook-feed-2/>
- House of Commons. 2018. "Oral Evidence: Disinformation and 'Fake News.'" Digital, Culture, Media, and Sport Committee. HC 363. <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/disinformation-and-fake-news/oral/92924.html>
- House of Lords. 2016. "Online Platforms and the Digital Single Market." Select Committee on European Union. *10th Report of Session 2015-16* (April).
- House of Lords. 2019. "Regulating in a Digital World." Select Committee on Communications. *2d Report of Session 2017-19* (March).
- Huffington Post. 2013. "Oreo's Super Bowl Tweet: 'You Can Still Dunk in the Dark.'" (February 4, 2013) https://www.huffingtonpost.com/2013/02/04/oreos-super-bowl-tweet-dunk-dark_n_2615333.html
- Ip, Greg. 2018. "The Antitrust Case Against Facebook, Google and Amazon." *The Wall Street Journal* (January 16, 2018).
- Jan, Tracy and Elizabeth Dwoskin. 2019. "HUD Is Reviewing Twitter and Google's Ad Practices As Part of Housing Discrimination Probe." *Washington Post* (March 28, 2019). <https://www.washingtonpost.com/business/2019/03/28/hud-charges-facebook-with-housing-discrimination>
- Jeong, Sarah. 2018. *The Internet of Garbage*. New York: Vox Media.
- Kahn, Lina M. 2017. "Amazon's Antitrust Paradox." 126 *Yale L. J.* 710.
- Kallas, Priit. 2018. "Top 10 Social Networking Sites by Market Share Statistics [July 2018]," Dreamgrow (August 3, 2018). <https://www.dreamgrow.com/top-10-social-networking-sites-market-share-of-visits/>
- Kane, Brian P. 2017. "Social Media Is the New Town Square: The Difficulty in Blocking Access to Public Official Accounts." 60 *Advocate* 31 (October, 2017).
- Kastrenakes, Jacob. 2019. "WhatsApp Limits Message Forwarding in Fight Against Misinformation." *The Verge* (January 21, 2019). <https://www.theverge.com/2019/1/21/18191455/whatsapp-forwarding-limit-five-messages-misinformation-battle>
- Kearney, Joseph D. and Thomas W. Merrill. 1998. "The Great Transformation of Regulated Industries Law." 98 *Columbia L. Rev.* 1323.
- Keller, Daphne. 2019. "Who Do You Sue? State and Platform Hybrid Power Over Online Speech." Hoover Institution (January). <https://www.hoover.org/research/who-do-you-sue>

- Kellogg, Carolyn. 2014. "Amazon and Hachette, the Dispute in 13 Easy Steps." *Los Angeles Times* (June 3, 2014). <https://www.latimes.com/books/jacketcopy/la-et-jc-amazon-and-hachette-explained-20140602-story.html>
- Kim, Hyunjin and Michael Luca. 2018. "Product Tying and Entering Through Tying: Experimental Evidence." Harvard Business School Working Paper 19-045.
- Kimmelman, Gene and Mark Cooper. 2017. "A Communications Oligopoly on Steroids. Why Antitrust Enforcement and Regulatory Oversight in Digital Communications Matter." Washington Center for Equitable Growth (July, 2017).
- Kinstler, Linda. 2018. "Germany's Attempt to Fix Facebook Is Backfiring." *The Atlantic* (May 18, 2018). <https://www.theatlantic.com/international/archive/2018/05/germany-facebook-afd/560435/>
- Klein, Ezra. 2018. "When Twitter Users Hear Out the Other Side, They Become More Polarized." *Vox* (October 18, 2018). <https://www.vox.com/policy-and-politics/2018/10/18/17989856/twitter-polarization-echo-chambers-social-media>
- Klonick, Kate. 2018. "The New Governors: The People, Rules and Processes Governing Online Speech." 131 *Harvard L. Rev.* 1598.
- Koebler, Jason. 2018. "Deplatforming Works." *Motherboard* (August 10, 2018). https://motherboard.vice.com/en_us/article/bjbp9d/do-social-media-bans-work
- Kwoka, John E. 2017. "Mergers, Merger Control, and Remedies: A Response to the FTC Critique." (March 31, 2017). <https://ssrn.com/abstract=2947814>
- Lasar, Matthew. 2011a. "How Robber Barons Hijacked the 'Victorian Internet.'" *Ars Technica* (May 13, 2011). <https://arstechnica.com/tech-policy/2011/05/how-the-robber-barons-hijacked-the-victorian-internet/>
- Lasar, Matthew. 2011b. "How the Titanic Disaster Pushed Uncle Sam To Rule the Air," *Ars Technica* (July 7, 2011). <https://arstechnica.com/tech-policy/2011/07/did-the-titanic-disaster-let-uncle-sam-take-over-the-airwaves/>
- Leanza, Cheryl A. 2007. "Heckler's Veto Case Law as a Resource for Democratic Discourse." 35 *Hofstra L. Rev.* 1305.
- Lemley, Mark A., Kent Richardson, and Erik Oliver. 2017. "The Patent Enforcement Iceberg." Stanford Public Law Working Paper (December 13, 2017). <https://ssrn.com/abstract=3087573> or <http://dx.doi.org/10.2139/ssrn.3087573>
- Levin, Blair and Larry Downes. 2018. "Why Google Fiber is High-Speed Internet's Most Successful Failure." *Harvard Business Review* (September 7, 2018). <https://hbr.org/2018/09/why-google-fiber-is-high-speed-internets-most-successful-failure>
- Lewis, Paul. 2018. "'Utterly Horrifying': Ex-Facebook Insider Says Covert Data Harvesting Was Routine." *The Guardian* (March 20, 2018). <https://www.theguardian.com/news/2018/mar/20/facebook-data-cambridge-analytica-sandy-parakilas>
- Li, Benjamin C. 2016. "The Global Convergence of FRAND Licensing Practices: Towards 'Interoperable' Legal Standards." 31 *Berkley Tech. L. J.* 429.
- Library of Congress. 2017. "Germany: Social Media Platforms to Be Held Accountable for Hosted Content Under 'Facebook Act.'" *Global Legal Monitor* (July 11, 2017). <http://www.loc.gov/law/foreign-news/article/germany-social-media-platforms-to-be-held-accountable-for-hosted-content-under-facebook-act/>
- Lidsky, Lyrissa. 2011. "Public Forum 2.0." 91 *B.U. L. Rev.* 1975.
- Lord, Rich and Ashley Murray. 2019. "Report: When Twitter Bans, Gab Grows." *Pittsburgh Post-Gazette* (March 12, 2019). <https://www.post-gazette.com/local/region/2019/03/12/Twitter-bans-Gab-tree-of-life-robert-bowers-social-media-extremist-adl/stories/201903120123>

- Lorenz, Taylor. 2018. "How Twitter Became the Number One Social Network for Nudists." *The Atlantic* (July 13, 2018). <https://www.theatlantic.com/technology/archive/2018/07/how-twitter-became-the-number-one-social-network-for-nudists/565085/>
- Luca, Michael, Timothy Wu, Sebastien Couvidat, Daniel Frank and William Seltzer. 2015. "Does Google Content Degrade Google Search? Experimental Evidence." Harvard Business School Working Paper 16-035. <http://people.hbs.edu/mluca/SearchDegradation.pdf>
- Martinez, Antonio Garcia. 2018. "How Trump Conquered Facebook Without Russian Ads." *Wired* (February 23, 2018). <https://www.wired.com/story/how-trump-conquered-facebookwithout-russian-ads/>
- Masnick, Mike. 2018. "More Police Admitting That FOSTA/SESTA Has Made It Much More Difficult To Catch Pimps And Traffickers." *techdirt* (July 9, 2018). <https://www.techdirt.com/articles/20180705/01033440176/more-police-admitting-that-fosta-sesta-has-made-it-much-more-difficult-to-catch-pimps-traffickers.shtml>
- Matsa, Katerina Eva and Elisa Shearer. 2018. "News Use Across Social Media Platforms 2018." Pew Research Center (September 10, 2018). <http://www.journalism.org/2018/09/10/news-use-across-social-media-platforms-2018/>
- Maynes, Charles. 2019. "A Russian 'Troll Slayer' Went Undercover at a Troll Factory and Found That Hundreds of Russians Were Working as Paid Trolls in Rotating Shifts." *Business Insider* (March 18, 2019). <https://www.businessinsider.com/russian-troll-slayer-went-undercover-at-a-troll-factory-2019-3>
- Mays, Lisa. 2015. "The Consequences of Search Bias: How Application of the Essential Facilities Doctrine Remedies Google's Unrestricted Monopoly on Search in the United States and Europe." 83 *Geo. Wash. L. Rev.* 721.
- McCombs, Emily. 2018. "This Bill Is Killing Us: 9 Sex Workers on Their Lives in the Wake of FOSTA." *Huffpost* (May 11, 2018). https://www.huffingtonpost.com/entry/sex-workers-sesta-fosta_us_5ad0d7d0e4b0edca2cb964d9
- Miller, Ron. 2016. "How AWS Came to Be." *TechCrunch* (July 2, 2016). <https://techcrunch.com/2016/07/02/andy-jassys-brief-history-of-the-genesis-of-aws/>
- Minnesota Public Utilities Commission. 2019. "In the Matter of a Commission Inquiry into the Service Quality, Customer Service, and Billing Practices of Frontier Communications." P407, 405/CI-18-122. <http://mn.gov/commerce-stat/pdfs/frontier-service-quality-report-final.pdf>
- Mitchell, Amy, Jeffrey Gottfried, Michael Barthel, and Nami Sumida. 2018. "Distinguishing Between Factual and Opinion Statements in News." Pew Research Center (June 18, 2018). <https://www.journalism.org/2018/06/18/distinguishing-between-factual-and-opinion-statements-in-the-news/>
- Morgans, Julian. 2017. "Your Addiction to Social Media Is No Accident." *Vice Media* (May 19, 2017). https://www.vice.com/en_us/article/vv5jkb/the-secret-ways-social-media-is-built-for-addiction
- Nadler, Anthony, Matthew Crane and Joan Donovan. 2018. "Weaponizing the Digital Influence Machine: The Political Perils of Online Ad Tech." *Data and Society* (October). <https://datasociety.net/output/weaponizing-the-digital-influence-machine/>
- National Digital Inclusion Alliance (NDIA). 2017. "AT&T's Digital Redlining of Cleveland." (March 10, 2017). <https://www.digitalinclusion.org/blog/2017/03/10/atts-digital-redlining-of-cleveland/>
- NBC News. 2018. "Senator Lindsey Graham to Mark Zuckerberg: 'You Don't Think You Have a Monopoly?'" Filmed April 10, 2018 in Washington D.C. for NBC News. <https://www.youtube.com/watch?v=VbjC4uKXbvE>
- The Nielsen Company. 2018. "From Consumers to Creators: The Digital Lives of Black Consumers." (September 13, 2018). <https://www.nielsen.com/us/en/insights/reports/2018/from-consumers-to-creators.html>

- Noam, Eli M. 1994. "Beyond Liberalization II: The Impending Doom of Common Carriage." Columbia Institute for Tele-Information (March, 1994). <http://www.columbia.edu/dlc/wp/citi/citinoam11.html>
- Norcie, Greg and L. Jean Camp. 2015. "The Price of Privacy: An Examination of the Economic Cost of Abstention from Social Media." Presented at the Amsterdam Privacy Conference (October, 2015). <http://www.ljean.com/files/abstain.pdf>
- O'Brien, Sara Ashley. 2018. "Silicon Valley Employees Launch Campaign to Combat Tech Addiction." *CNN Business* (February 6, 2018). <https://money.cnn.com/2018/02/05/technology/truth-about-tech-campaign/index.html>
- O'Donovan, Caroline. 2018. "Facebook Played a Pivotal Role in the West Virginia Teacher Strike." *Buzzfeed News* (March 7, 2018). <https://www.buzzfeed.com/carolineodonovan/facebook-group-west-virginia-teachers-strike>
- Ohlheiser, Abby. 2015. "How Martin Luther King, Jr. Convinced Star Trek's Lieutenant Uhura to Stay on the Show." *Washington Post* (July 31, 2015)
- O'Reilly, Tim. 2019. "Blitzscaling: The Fundamental Problem with Silicon Valley's Favorite Growth Strategy." *Quartz* (February 5, 2019). <https://qz.com/1540608/the-problem-with-silicon-valleys-obsession-with-blitzscaling-growth>
- Oremus, Will. 2018. "The Great Facebook Crash." *Slate* (June 27, 2018). <https://slate.com/technology/2018/06/facebooks-retreat-from-the-news-has-painful-for-publishers-including-slate.html>
- Paglin, Max D., ed. 1989. *A Legislative History of the Communications Act of 1934*. New York: Oxford University Press.
- Palfrey, John and Urs Gasser. 2012. *Interop: The Promise and Perils of Highly Interconnected Systems*. New York: Basic Books.
- Pariser, Eli. 2011. "Beware Online Filter Bubbles." Filmed February, 2011 in Long Beach, CA for TED Video, 8:41. https://www.ted.com/talks/eli_pariser_beware_online_filter_bubbles/transcript#t-525329
- Pasquale, Frank. 2018. "Tech Platforms and the Knowledge Problem." *American Affairs Journal* (Summer, 2018). <https://americanaffairsjournal.org/2018/05/tech-platforms-and-the-knowledge-problem/>
- Pearson, Alexander. 2018. "German opposition parties call to replace online hate speech law." *Deutsche Welle* (January 8, 2018). <https://www.dw.com/en/german-opposition-parties-call-to-replace-online-hate-speech-law/a-42058030>
- Phillips, Kristine. 2018. "'Racism is not a known side effect,' Ambien maker says after Roseanne Barr blames it for tweets." *Washington Post* (May 30, 2018). https://www.washingtonpost.com/news/business/wp/2018/05/30/racism-is-not-a-known-side-effect-ambien-maker-says-after-roseanne-barr-blames-it-for-tweets/?utm_term=.0eb862dfac3
- Prince, Matthew. 2017. "Why We Terminated Daily Stormer," *Cloudflare Blog* (August 16, 2017). <https://blog.cloudflare.com/why-we-terminated-daily-stormer/>
- Rahman, K. Sabeel. 2018. "The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept." 39 *Cardozo L. Rev.* 101.
- Reporters Without Borders. 2018. "The Network Enforcement Act Apparently Leads to Excessive Blocking of Content," *Reporters Without Borders Blog* (August 3, 2018). <https://rsf.org/en/news/network-enforcement-act-apparently-leads-excessive-blocking-content>
- Rieke, Aaron, Miranda Bogen, and David G. Robinson. 2018. "Public Scrutiny of Automated Decisions: Early Lessons and Emerging Methods." *Upturn and Omidyar Network* (February, 2018). <https://www.omidyar.com/insights/public-scrutiny-automated-decisions-early-lessons-and-emerging-methods>
- Riley, Chris. 2017. "Competition Through Interoperability." *Medium* (October, 2017). <https://medium.com/@mchririley/competition-through-interoperability-3ed34a5c55f1>

- Riley, Chris. 2018. "Interoperability: Questions of Principle and Principal." Medium (April, 2017). <https://medium.com/@mchr isriley/interoperability-questions-of-principle-and-principal-6eeb8b4ff2a2>
- Rochet, Jean-Charles and Jean Tirole. 2003. "Platform Competition in Two-Sided Markets." 1(4) *Journal of the European Economic Association* 990.
- Romano, Aja. 2018a. "A New Law Intended to Curb Sex Trafficking Threatens the Future of the Internet as We Know It." Vox (July 2, 2018). <https://www.vox.com/culture/2018/4/13/17172762/fosta-sesta-backpage-230-internet-freedom>
- Romano, Aja. 2018b. "How Facebook Made It Impossible to Quit Facebook." Vox (December 20, 2018). <https://www.vox.com/culture/2018/3/22/17146776/delete-facebook-how-to-quit-difficult>
- Roose, Kevin. 2018a. "Can Social Media Be Saved." *New York Times* (March 28, 2018). <https://www.nytimes.com/2018/03/28/technology/social-media-privacy.html>
- Roose, Kevin. 2018b. "On Gab, An Extremist-Friendly Site, Pittsburgh Shooting Suspect Aired His Hatred in Full." *New York Times* (October 28, 2018). <https://www.nytimes.com/2018/10/28/us/gab-robert-bowers-pittsburgh-synagogue-shootings.html>
- Ruane, Kathleen Ann. 2017. "Pre-Merger Review and Challenges Under the Clayton Act and the Federal Trade Commission Act." Congressional Research Service (September 27, 2017). <https://fas.org/sqp/crs/misc/R44971.pdf>
- Rysman, Marc. 2009. "The Economics of Two-Sided Markets," 23 *J. of Economic Perspectives* 125-143 (Summer).
- Sallet, Jonathan. 2018. "Louis Brandeis: A Man for This Season." 16 *Colo. Tech. L.J.* 365.
- Salop, Steven C. 2018. "Invigorating Vertical Merger Enforcement." 127 *Yale L.J.* 1962.
- Schrager, Allison. 2018. "A Nobel Winning Economist's Guide to Taming Tech Monopolies." *Quartz* (June 27, 2018). <https://qz.com/1310266/nobel-winning-economist-jean-tirole-on-how-to-regulate-tech-monopolies/>
- Schwedel, Heather. 2018. "Why Did Fans Flee LiveJournal and Where Will They Go After Tumblr?" *Slate* (March 29, 2018). <https://slate.com/technology/2018/03/why-did-fans-leave-livejournal-and-where-will-they-go-after-tumblr.html>
- Seipp, David J. 2011. "Trust and Fiduciary Duty in the Early Common Law." 91 *B.U. L. Rev.* 1011.
- Shapiro, Carl. 2017. "Antitrust in a Time of Populism." *International Journal of Industrial Organization* (available online February 27, 2018). <http://faculty.haas.berkeley.edu/shapiro/antitrustpopulism.pdf>.
- Shearer, Elisa. 2018. "Social Media Outpaces Print Newspapers in the U.S. As News Source." Pew Research Center (December 10, 2018). <http://www.pewresearch.org/fact-tank/2018/12/10/social-media-outpaces-print-newspapers-in-the-u-s-as-a-news-source/>
- Sicha, Choire. 2009. "What Were Black People Talking About on Twitter Last Night?" *Medium* (November 11, 2009). <https://medium.com/the-awl/what-were-black-people-talking-about-on-twitter-last-night-4408ca0ba3d6>
- Smith, Adam. 2003. *The Wealth of Nations with Introduction by Alan B. Krueger*. New York: Bantam Classic.
- Smith, Brad. 2018. "The Rural Digital Divide: An Urgent National Problem We Can Solve." Microsoft (December 3, 2018). <https://blogs.microsoft.com/on-the-issues/2018/12/03/the-rural-broadband-divide-an-urgent-national-problem-that-we-can-solve/>
- Social Media Collective. 2016. "Facebook Trending: It's Made of People!! (But We Should Have Already Known That)." (May 9, 2016). <https://socialmediacollective.org/2016/05/09/facebook-trending-its-made-of-people-but-we-should-have-already-known-that/>

- Stacey, Kiran. 2019. "Senior Democrat Suggests 'Glass-Steagall' Law for Tech Companies." *Financial Times* (March 5, 2019). <https://www.ft.com/content/561b8546-355c-11e9-bd3a-8b2a211d90d5#>
- Standage, Tom. 1998. *The Victorian Internet: The Remarkable Story of the Telegraph and the Nineteenth Century's Online Pioneers*. New York: Walker and Co.
- Star Trek. 2019. "Goldberg, Whoopi," Startrek.com. https://www.startrek.com/database_article/goldberg-whoopi
- Steimle, Susie. 2019. "New Laws Forced Sex Workers Back On SF Streets, Caused 170% Spike In Human Trafficking." KPIX 5 (aired February 3, 2019). <https://sanfrancisco.cbslocal.com/2019/02/03/new-laws-forced-sex-workers-back-on-sf-streets-caused-170-spike-in-human-trafficking/>
- Steinbaum, Marshall and Maurice E. Stucke 2018. "The Effective Competition Standard: A New Standard for Antitrust." Roosevelt Institute (September, 2018).
- Streitfield, David. 2014. "Amazon and Hachette Resolve Dispute." *New York Times* (November 13, 2014). <https://www.nytimes.com/2014/11/14/technology/amazon-hachette-ebook-dispute.html>
- Stevens, Laura and Jon Emont. 2018. "How Sellers Trick Amazon to Boost Sales." *Wall Street Journal* (July 28, 2018). <https://www.wsj.com/articles/how-sellers-trick-amazon-to-boost-sales-1532750493>
- Sunstein, Cass R. 1994. "The First Amendment in Cyberspace." 104 *Yale L.J.* 1757.
- Sunstein, Cass R. 1995. *Democracy and the Problem of Free Speech*. New York: The Free Press.
- Sunstein, Cass R. 2018. *#Republic: Divided Democracy in the Age of Social Media*. Princeton, NJ: Princeton University Press. (Paperback edition)
- Tessier, Marc, Judith Herzog and Lofred Madzou 2017. "Regulation at the Age of Online Platform-Based Economy: Accountability, User Empowerment and Responsiveness." In Belli, Luca and Nicolo Zingales, eds., *Platform Regulations: How Platforms Are Regulated and How They Regulate Us*. Geneva, Switzerland: United Nations Governance Forum.
- Thaler, Richard H. and Cass R. Sunstein. 2008. *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven, CT: Yale University Press.
- Tongia, Rahul and Ernest J. Wilson III. 2011. "The Flip Side of Metcalfe's Law." 5 *Int'l J. of Communications* 665-681.
- Tucker, Catherine. 2018. "Network Effects and Market Power: What Have We Learned in the Last Decade?" *Antitrust* (Spring, 2018). <http://sites.bu.edu/tpri/files/2018/07/tucker-network-effects-antitrust2018.pdf>
- Tufekci, Zeynep. 2014. "What Happens to #Ferguson Affects Ferguson: Net Neutrality, Algorithmic Filtering and Ferguson." *Medium* (August 14, 2014). <https://medium.com/message/ferguson-is-also-a-net-neutrality-issue-6d2f3db51eb0>
- Tufekci, Zeynep. 2016. "The Real Bias at Facebook." *New York Times* (May 19, 2016). <https://www.nytimes.com/2016/05/19/opinion/the-real-bias-built-in-at-facebook.html>
- Tufekci, Zeynep. 2017. "We're Building a Dystopia Just to Make People Click on Ads." Filmed September 17, 2017 in New York for TEDGlobal. https://www.ted.com/talks/zeynep_tufekci_we_re_building_a_dystopia_just_to_make_people_click_on_ads/transcript?language=en
- United States Department of Justice and Federal Trade Commission. 2010. "Horizontal Merger Guidelines" (DOJ FTC 2010).
- Urban, Jennifer M. and Laura Quilter. 2006. "Efficient Process or Chilling Effects — Takedown Notices Under Section 512 of the Digital Millennium Copyright Act." 22 *Santa Clara High Tech. L.J.* 621.

- Urban, Jennifer M., Joe Karaganis and Brianna L. Schofield. 2017. "Notice and Takedown in Everyday Practice." UC Berkeley Public Law Research Paper No. 2755628. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2755628
- USA.gov. 2019. "Credit Reports and Scores." <https://www.usa.gov/credit-reports>
- van Zuylen-Wood, Simon. 2019. "'Men Are Scum': Inside Facebook's War On Hate Speech." *Vanity Fair* (March, 2019).
- Verveer, Philip. 2018. "Platform Accountability and Contemporary Competition Law: Practical Considerations." Harvard Kennedy School Shorenstein Center on Media, Politics and Public Policy (November, 2018). <https://shorensteincenter.org/platform-accountability-contemporary-competition-law-practical-considerations/>
- Walker, Kent. 2019. "Smart Regulation for Combating Illegal Content." *Google Policy Blog* (February 14, 2019). <https://www.blog.google/perspectives/kent-walker-perspectives/principles-evolving-technology-policy-2019/smart-regulation-combating-illegal-content/amp/>
- Wheeler, Tom. 2008. *Mr. Lincoln's T-Mails: How Abraham Lincoln Used the Telegraph to Win the Civil War*. New York: Harper Collins.
- Wheeler, Tom. 2014. *NET EFFECTS: The Past, Present and Future Impact of Our Networks*. Self-Published, Amazon Digital Services, 2013, Kindle.
- Wheeler, Tom. 2018. "The Root of the Matter: Data and Duty." Harvard Kennedy School Shorenstein Center on Media, Politics and Public Policy and Harvard Kennedy School Mossavar-Rahmani Center for Business and Government (November, 2018).
- Wheeler, Tom. 2019. *From Gutenberg to Google: The History of Our Future*. Washington: Brookings Institution Press.
- White, Aoife. 2018. "Amazon Probed by EU on Data Collection from Rival Retailers." Bloomberg (September 19, 2018). <https://www.bloomberg.com/news/articles/2018-09-19/amazon-probed-by-eu-on-data-collection-from-rival-retailers>
- Whitt, Richard. 2018. "Hiding in the Open: How Network Policies Can Inform Openness by Design (and Vice Versa)." 3 *Geo. L. Tech. Rev.* 28 (Fall).
- Wilson, Jodi. 2012. "How the Supreme Court Thwarted the Purpose of the Federal Arbitration Act." 63 *Case Western Reserve L. Rev.* 91.
- Woodcock, Ramsi. 2017. "Per se In Itself: How Bans Reduce Error in Antitrust." Working Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2896453
- World Wide Web Foundation. 2018. "The Invisible Curation of Content: Facebook's News Feed and Our Information Diets," (April 22, 2018). <https://webfoundation.org/research/the-invisible-curation-of-content-facebooks-news-feed-and-our-information-diets/>
- Wu, Tim. 2010. *The Master Switch: The Rise and Fall of Information Empires*. New York: Alfred A. Knopf.
- Wu, Tim. 2016. *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*. New York: Vintage Books.
- Wu, Tim. 2017a. "Is the First Amendment Obsolete?" Knight First Amendment Institute (September, 2017). <https://knightcolumbia.org/content/tim-wu-first-amendment-obsolete>
- Wu, Tim. 2017b. "Antitrust Via Rulemaking: Competition Catalysts." 16 *Colo. Tech. L.J.* 33.
- Wu, Tim. 2018. *The Curse of Bigness*. New York: Columbia Global Reports.
- YouTube. 2019. "Continuing Our Work to Improve Recommendations on YouTube." *YouTube Official Blog* (January 25, 2019). <https://youtube.googleblog.com/2019/01/continuing-our-work-to-improve.html>

Zuckerberg, Mark. 2018. "A Blueprint for Content Governance and Enforcement." *Facebook Blog* (November 15, 2018). <https://www.facebook.com/notes/mark-zuckerberg/a-blueprint-for-content-governance-and-enforcement/10156443129621634/>