

Frieden, Rob

Conference Paper

The Internet of Platforms and Two-Sided Markets: Implications for Competition and Consumers

22nd Biennial Conference of the International Telecommunications Society (ITS): "Beyond the Boundaries: Challenges for Business, Policy and Society", Seoul, Korea, 24th-27th June, 2018

Provided in Cooperation with:

International Telecommunications Society (ITS)

Suggested Citation: Frieden, Rob (2018) : The Internet of Platforms and Two-Sided Markets: Implications for Competition and Consumers, 22nd Biennial Conference of the International Telecommunications Society (ITS): "Beyond the Boundaries: Challenges for Business, Policy and Society", Seoul, Korea, 24th-27th June, 2018, International Telecommunications Society (ITS), Calgary

This Version is available at:

<https://hdl.handle.net/10419/190344>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

The Internet of Platforms and Two-Sided Markets: Implications for Competition and Consumers

Rob Frieden

Pioneers Chair and Professor of Telecommunications and Law

Penn State University

102 Carnegie Building

University Park, Pennsylvania 16802

(814) 863-7996; rmf5@psu.edu

web site: <http://www.personal.psu.edu/faculty/r/m/rmf5/>

I. Introduction

Consumers in both developed and developing nations increasingly rely on broadband networks to access content, applications and services.¹ Carriers providing the broadband link between subscribers and Internet cloud-based content and applications,² operate as intermediaries with the power to secure payment for services from both upstream sources, such as content creators, video programming aggregators and software vendors. As well as downstream subscribers.³ In most instances, wired and wireless carriers, providing the first and

¹ Broadband Commission for Sustainable Development, *The State of Broadband 2016: Broadband Catalyzing Sustainable Development* (September 2016); available at: <http://www.broadbandcommission.org/Documents/reports/bb-annualreport2016.pdf>; International Telecommunication Union, *Measuring the Information Society Report 2016*; available at: <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016.aspx>; Akamai, 10 State of the Internet Report, No. 1, First Quarter 2017; available at: <https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/q1-2017-state-of-the-internet-connectivity-report.pdf>.

² The Internet cloud refers to the vast array of interconnected networks that make up the Internet and provide users with seamless connectivity to these networks and the content available via these networks. “The increasing functionality of the Internet is decreasing the role of the personal computer. This shift is being led by the growth of ‘cloud computing’—the ability to run applications and store data on a service provider’s computers over the Internet, rather than on a person’s desktop computer.” William Jeremy Robison, *Free at What Cost?: Cloud Computing Privacy Under The Stored Communications Act*, 98 GEO. L. J. 1195, 1199 (2010).

³ “To begin with, platforms both enable and benefit from competitive dynamics of economic exchange that differ in profoundly important ways from those of traditional, one-sided

last mile access to the Internet cloud, have relied exclusively or primarily on subscription payments from their “retail” broadband subscribers. However, intermediary status position makes it possible also to secure compensation from upstream ventures who need the intermediary’s downstream distribution link to consumers.

A second type of intermediary operates in the Internet ecosystem: non-carrier ventures that operate a platform for showcasing content and applications for use by downstream consumers. Two types of platforms have evolved: 1) ventures, like Google and Apple whose software provides the operating system for smartphone functions, as well as stores offering a curated inventory of content and applications available via wireless broadband networks; and 2) companies like Amazon, EBay, Facebook, Google, Netflix and PayPal which have captured substantial market share for specific types of intermediary functions.

Operating system intermediaries, e.g., Google Play and Apple’s iTunes and App Store, have the power to select what content to offer and to establish binding and non-negotiable terms

markets. The exchanges constituted by platforms are two- or multi-sided: they serve buyers, the sellers seeking to reach them, and often advertisers seeking the buyers’ attention. Because the platform forms relationships with members of each group separately, it can define the terms of each relationship differently.” Julie E. Cohen, *Law for the Platform Economy*, 10 (draft manuscript pagination), 51 U.C. DAVIS L. REV. (forthcoming); available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2991261 [hereinafter cited as Cohen Platform Economy].

for consumer access to content and applications.⁴ Other intermediaries also establish unilateral, non-negotiable terms and conditions, but consumers have easily accessible alternatives.⁵

Intermediaries can achieve market dominance in a “winner take all”⁶ competition by creating the dominant platform standing between upstream content sources and downstream consumers. The combination of high startup costs and low incremental costs to add subscribers favors market concentration, often with a single firm having a near monopoly market share.⁷ In the markets for broadband carriage and many Internet service market segments, such as social

⁴ “Contracts of adhesion are form contracts drafted and controlled in all respects by the party in the vastly superior bargaining position, that leave to the weaker contracting party only two options: (1) adhere to the terms as drafted by the party with superior power, or (2) reject its terms entirely. With contracts of adhesion, there is, by definition no negotiation option; it is strictly ‘take-it-or-leave-it.’” Charles E. MacLean, *IT Depends: Recasting Internet Clickwrap, Browseware, “I Agree,” and Click-Through Privacy Clauses as Waivers of Adhesion*, 65 CLEV. ST. L. REV. 45, 48 (2016).

⁵ “Traditionally, antitrust analysis is concerned about switching costs from one platform to another. However, in online markets, switching costs are often low because of multi-homing. That is, consumers use multiple search methods online in undertaking web searching. In doing so consumers switch easily from a general search engine to specialized vertical search engines and apps.” D. Daniel Sokol & Jingyuan (Mary) Ma, *Understanding Online Markets and Antitrust Analysis*, 15 NW. J. TECH. & INTELL. PROP. 43, 51 (Spring, 2017).

⁶ See Om Malik, *In Silicon Valley Now, It’s Almost Always Winner Takes All*, THE NEW YORKER (Dec. 30, 2015); available at: <http://www.newyorker.com/tech/elements/in-silicon-valley-now-its-almost-always-winner-takes-all>.

⁷ “The big five platform companies—Alphabet, Amazon, Apple, Facebook and Microsoft—earned \$93bn last year and have high market shares, for instance in search and advertising. They are innovative but sometimes behave badly. They have bought 519 firms, often embryonic rivals, in the past decade, and may stifle them. The data they gather can lock customers into their products. They may also allow firms to exert their market power “vertically” up and down the supply chain—think of Amazon using information on what consumers buy to dominate the logistics business. Investors’ sky-high valuations for the platform firms suggest they will, in aggregate, roughly triple in size.” Schumpeter, *The University of Chicago worries about a lack of competition*, THE ECONOMIST (April 12, 2017); available at: <http://www.economist.com/news/business/21720657-its-economists-used-champion-big-firms-mood-has-shifted-university-chicago>.

networking, winning ventures accrue scale and efficiency advantages as more and more consumers join the bandwagon and select the same venture.⁸

Economists use the term two-sided markets to identify platform functions where transactions occur both upstream and downstream from the intermediary.⁹ Some new, so-called unicorn intermediaries, can acquire substantial market share and billion dollar valuation in record time, by using digital, broadband networks that can provide global reach at very low cost.

Successful insertion of an intermediary platform has generated both positive and negative impacts on consumer welfare, competition, the rate of innovation, employment and other key factors. On the positive side, intermediaries can promote efficiency, economies of scale¹⁰ and

⁸ “Digital markets suffer from a high level of concentration. Currently a handful of digital intermediaries with mega platforms control effective points of access to potential users. These include smart devices (iPhone and Kindle), operating systems (iOS and Android), application stores (Apple Store and Google Play) and browser entry points (Google Search and Facebook). The high level of concentration is largely due to network effects, created when the value for each consumer of using the platform rises in parallel with the number of others using the system. These network effects are further increased by the network effects of big data.” Michal S. Gal & Niva Elkin-Koren, *Algorithmic Consumers*, 30 HARV. J.L. & TECH. 309, 334-35 (Spring, 2017).

⁹ See David S. Evans and Richard Schmalensee, *Matchmakers: The New Economics of Multisided Platforms* (Boston: Harvard Business Review, 2016); David S. Evans and Richard Schmalensee, *Guide to the Vocabulary of the New Economics of Multisided Platforms*, Social Science Research Network, posted June 11, 2016); available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2793021; Lapo Filstrucchi, Damien Geradin, Eric van Damme and Pauline Affeldt, *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J. Compt. L & ECON. No.2, 293 (2014).

¹⁰ A firm exhibits economies of scale if the average cost of producing a good falls as the quantity produced rises. “Many internet businesses exhibit large economies of scale, because many of their costs are fixed. For example, many of eBay's costs come from servers and software development, and these do not increase with the number of customers. Every additional transaction lowers the average cost of a transaction.” Internet and Business Wiki, How the internet has changed business; available at: <http://ibiz.wikidot.com/economies-of-scale>.

positive network externalities¹¹ where the overall value in a network and its ability to generate consumer benefits grow as more users participate. On the negative side, intermediaries, operating without significant competition, can extract high prices from both upstream and downstream participants, erect very high barriers to market entry and use comparative advantages to dominate in both core and related markets such as the collection, processing and sale of “Big Data”¹² about subscriber behavior.

The business models used by intermediaries often rely on a strategic determination of whether and how to extract payments from multiple parties. Intermediaries can calibrate prices, often appearing to provide “free,” or subsidized services to users on one side of the platform, typically downstream consumers. Of course, consumers invariably do pay for products and services whose advertising costs and other subsidies generate higher prices. Consumers also increasingly permit intermediaries to compile information about their wants, needs, desires, app uses, searches and other behavior that can be processed and marketed to advertisers as vastly

¹¹ “Network externalities are the effects on a user of a product or service of others using the same or compatible products or services. Positive network externalities exist if the benefits (or, more technically, marginal utility) are an increasing function of the number of other users. Negative network externalities exist if the benefits are a decreasing function of the number of other users. For example, Facebook likely confers positive network externalities since it is more useful to a user if more people are using it as well.” Mike Moffatt, *Introduction to Network Externalities* (July 1, 2016); available at: <https://www.thoughtco.com/introduction-to-network-externalities-1146145>.

¹² “[T]echnological advances in data collection and storage, along with increases in the use of predictive analytics, are transforming the way that business is conducted in all sectors of the economy. Much attention has been given to the benefits that Big Data will generate: it will provide businesses with insights about their customers, enabling them to tailor their practices to better satisfy consumers and identify ways to increase the efficiency of their operations.” Max H. Helveston, *Consumer Protection in the Age of Big Data*, 93 *WAS U. L. REV.* 859, 861 (2016).

improved calibration for targeted commercial pitches. Privacy intrusions¹³ and the commodification of consumer behavior generate significant value that a platform operator can use to generate revenues in ways that most subscribers may not fully understand, or quantify.

This paper identifies four types of government responses to price and quality of service discrimination that exploits choke points within the Internet ecosystem where large volume of traffic has to traverse a single digital, broadband network, or service provider platform. Governments can refrain from regulating access and accept market concentration as the proper reward to ventures offering desirable content and carriage services. Alternatively, they can impose ex ante safeguards to remedy anticipated harms to competition and consumers such as market concentration and near monopoly prices. Between these poles, governments can apply ex post antitrust/competition policy remedies, or rely on expert regulatory agencies to respond to complaints, particularly ones about privacy invasions and unfair trade practices.

The paper reports that existing antitrust policy does not support aggressive government intervention based on an assessment that short term consumer benefits accrue and government intervention might reduce consumer welfare, without any assessment of the potential for longer term competitive and consumer harm. The paper also notes that the current regulatory policy favors market forces even when platform operators control key access points and consumers have no way to understand and quantify the value of what they confer to platform operators in

¹³ “It would be nice to believe that market forces are in fact promoting optimal levels of privacy. It would also be comforting if antitrust law indirectly promoted optimal privacy options by assuring a diverse range of firms that can compete to supply privacy at various levels (and various forms). But this position is not remotely plausible. Antitrust law has been slow to recognize privacy as a dimension of product quality, and the competition that antitrust promotes can do as much to trample privacy as to protect it. In an era of big data, every business has an incentive to be nosy in order to maximize profits.” Frank Pasquale, *Privacy, Antitrust and Power*, 20 GEO. MASON L. REV. 1009, 1010 (Summer, 2013).

exchange for the opportunity to subscribe to broadband service and access to advertiser supported content and applications.

The paper recommends that courts and government agencies execute their duty to remedy marketplace distortions generated by platform operators engaged in anticompetitive practices, but also to recalibrate existing tools to examine the impact on both sides of an intermediary platform, the availability of viable service alternatives and the consequences of platform market domination on related industry segments. Courts and government agencies should devise timely and effective remedies for resolving valid complaints documenting harm to consumers and competitors.

II. Consumer Benefits from Two-Sided Markets

While intermediaries have operated in many marketplaces for centuries,¹⁴ emerging broadband, digital platforms radically change “the traditional equilibria of supply and demand, blurring the lines between owners and users, producers and consumers, workers and contractors, and transcending the spatial divides of personal and professional, business and home, market and leisure, friend and client, acquaintances and stranger, public and private.”¹⁵ Digital broadband platform operators can accrue substantial consumer benefits even as they acquire increasing market shares. A “win-win” scenario combines ample benefits for platform operators and consumers by changing and enhancing the value proposition in commercial transactions.

¹⁴ For example retailers have used catalogs to offer a vast array of commercial options via a single source. “Inclusion of a product in the Sears, Roebuck catalog gave its manufacturer access to a marketing juggernaut with the ability to reach consumers nationwide, the range to offer concert grand pianos and engraved shotguns, and the power to undercut the prices charged by local [bricks and mortar] ‘five-and-ten-cent stores’ for everyday essentials. Cohen Platform Law at 3.

¹⁵ Orly Lobel, *The Law of the Platform*, 101 MINN. L.REV. 87, 90 (Nov. 2016).

Digital broadband platform operators can quickly acquire scale economies¹⁶ and efficiency gains by attracting growing numbers of users and spreading costs over a large population of users. The incremental cost to add an additional participant approaches zero, because broadband networks have high initial, investment costs, but very low incremental costs incurred when adding users. Additionally, broadband platforms can accrue positive networking externalities¹⁷ as subscribership grows. When intermediaries reach a critical mass of popularity, non-users see the advantages in joining the bandwagon which further enhances the comparative attractiveness of a particular platform operator vis a vis other competitors and options.¹⁸

Platform intermediaries must deliver a compelling value proposition to generate consumer use, particularly when alternatives exist, with low entry barriers and switching costs. Few platforms start with a dominant market share and the ability to forestall multi-homing, the

¹⁶ Scale economies refer to the ability of a single firm to produce a good or service at the lowest per unit cost. “For nearly 100 years, microeconomic theory said that widespread access to telephone technology was more likely if there was only one telephone company, because of economies of scale resulting in what economists call ‘natural monopoly.’” Henry H. Perritt, Jr., *Keeping the Internet Invisible: Television Takes Over*, 21 J. TECH. L. & POL’Y 121, 127 (2017).

¹⁷ “Network markets are frequently characterized by positive network effects, or ‘externalities’-‘benefits to society that accrue as the size of a network grows.’ In a network market, the value to each individual consumer increases with the number of other individuals who use the same network. Take, for example, a telephone network. If very few telephones existed, I would not value a telephone very highly, or at least not nearly as highly as I do today. The more individuals who use the telephone network, the more individuals I am able to reach with my own telephone-and the more valuable my phone becomes to me.” John M. Newman, *Anticompetitive Product Design in the New Economy*, 39 FLA. ST. U. L. REV. 681, 688-89 (Spring, 2012).

¹⁸ See John Farrell & Garth Saloner, *Standardization, Compatibility and Innovation*, 16 RAND J. OF ECON. 70 (1985); Michael L. Katz. & Carl Shapiro, *Network Externalities, Competition and Compatibility*, 75 AM. ECON. REV. 424 (1985); Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479 (1998).

option of consumers to use many different platforms and to switch between them. Many platform operators encounter competition.¹⁹ The combination of competitive necessity and more efficient operations can readily translate into the offering of lower priced products and services to consumers, particularly because two-sided platform operators can calibrate how much to charge each side:

[P]rofit-maximizing prices may require charging one side less than the marginal cost of serving that side. Empirical surveys of industries based on . . . [two-sided platforms] find many examples of prices that are low, or even negative, so that customers on one side are incentivized to participate in the platform.²⁰

Economists, legislators, regulators and policy makers find it difficult to support restrictions, or prohibitions on the activities of two sided platform operators willing to offer subsidies, internally, or from upstream market participants, that confer significant cost savings to consumers. Such reticence may allow the pricing of goods and services at zero cost, or at least below the marginal cost of production, an outcome normally considered illogical and unsustainable in the bricks and mortar marketplace, or evidence of significant market distortion through predatory pricing conduct and abuse of market power.²¹

¹⁹ “Online markets are constantly changing. Indeed, online markets typically have innovative challengers against incumbents. Challengers may overtake incumbent firms through new ideas and technologies. In such settings, there are low entry barriers.” D. Daniel Sokol and Jingyuan Ma, *Understanding Online Markets and Antitrust Analysis*, 15 NW. J. TECH & INTELL. PROP. 43, 48 (Spring, 2017).

²⁰ David S. Evans and Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 COLUM. BUS. L. REV. 667, 668.

²¹ Some economists and legal scholars refrain from classifying low, or below cost pricing by platform operators as evidence of market power or anticompetitive conduct. “[T]he price on each side is a complex function of the elasticities of demand [i.e., [intensity of preference] on both sides, indirect network effects, and marginal costs on both sides. Thus, it is incorrect to conclude, as a matter of economics, that deviations between price and marginal cost on one side indicates that 2SPs are pricing to exploit market power and drive out competitors. *Id.* at 696.

III. Consumer Costs from Two-Sided Markets

Immediate and longer term costs offset readily identifiable benefits from two-sided platforms. In the short term, ventures like Amazon enhance consumer welfare by offering a growing inventory of products and services at lower prices, the product of operational efficiencies and the willingness to eschew profits in exchange for increasing market share and scope. However, in the longer term, consumers may suffer from the loss of competition from bricks and mortar, local vendors as well as from the consequences of ever more accurate assessment of consumer price sensitivity and increasingly invasive collection of subscribers' consumption behavior and the brokering of such data by largely unregulated ventures.²² At some point, online platform operators may consider their market position sufficiently impenetrable so that they can refrain from aggressive price cutting and forgoing near term profitability.

Additionally, these operators may have so developed data analytics that they can quite accurately set and frequently modify prices with an eye toward maximizing profits.²³ Dynamic pricing refers to the ability of product and service vendors to change prices quickly by collecting

²² Data brokers, or information reselling companies, collect consumer information and convert it into marketable information about categories of consumers, or even individual dossiers about a single consumer. "A glaring drawback exists in this convenient set up between data brokers and marketing companies—it takes place without consumers' knowledge or consent. Because data brokers mostly operate beyond the gaze of the public eye, individuals are largely unaware of their existence and their monumental impact on day-to-day transactions. This is problematic for two reasons: (1) it invades consumers' rights to privacy and (2) subjects them to unwarranted, and often unforeseeable discrimination." Ashley Kuempel, *The Invisible Middlemen: A Critique and Call for Reform of the Data Broker Industry*, 36 NW. J. INT'L L. & BUS. 207, 210 (Winter, 2016).

²³ See, e.g., Laura Fleming, *How Much Does J. Crew Really Know About You?: The Harsh Reality of A Mega-Retailer's Privacy Policy*, 31 Syracuse J. Sci. & Tech. L. Rep. 1 (2015).

and analyzing data about current consumer demand.²⁴ Rather than set a fixed price, only occasionally raised or lowered, vendors can make frequent pricing changes based on current marketplace conditions. While such dynamic pricing arguably represents an efficiency promoting, fine-tuning of price setting, consumers may consider it unfair and discriminatory.²⁵ When demand increases, or supply drops, so-called surge pricing substantially increases prices from a level most consumers consider fair and reasonable. Even though low demand and oversupply might trigger short term price reductions, consumers may focus on rapid and substantial surge prices.

A worst case scenario considers a platform-dominated economy as severely harmful to workers and consumers, not an extraordinary opportunity:

A “peer economy” of platform-arranged production will break down old hierarchies. Gig workers will be able to know Etsy scarfs in the morning, drive Uber cars in the afternoon, and write Facebook comments at night, flexibly between jobs and leisure at will.

²⁴ “Dynamic Pricing uses consumers’ ‘electronic footprint[s]’--their record of previous purchases, their addresses, and maybe the other sites they have visited to determine just how much they are willing to pay for a product or service. Those consumers who can afford to pay more based on their footprint, do, while more price-sensitive consumers receive the same product or service for less.” Vivian Adame, *Consumers’ Obsession Becoming Retailers’ Possession: The Way that Retailers Are Benefiting From Consumers’ Presence on Social Media*, 53 SAN DIEGO L. REV. 653, 667 (Summer, 2016); quoting Paul Krugman, *Reckonings; What Price Fairness?*, N.Y. TIMES (Oct. 4, 2000), <http://www.nytimes.com/2000/10/04/opinion/reckonings-what-price-fairness.html>.

²⁵ “[D]igital market manipulation creates subjective privacy harms as the consumer has a vague sense that information is being collected and used to her disadvantage, but never truly knows how or when. In the digital market manipulation context, the consumer does not know whether the price she is being charged is the same as the one charged to someone else, or whether she would have saved money by using a different browser or purchasing the item on a different day.” Ryan Calo, *Digital Market Manipulation*, 82 GEO. WASH. L. REV. 995, 1029 (Aug. 2014).

But is platform capitalism really a route to opportunity for labor, or just one more play for capital accumulation in an increasingly stratified economy? ²⁶

IV. Subscriber Data Value and Lock-in Cost Missing in the Cost/Benefit Analysis

To calculate the value proposition in broadband networks, subscribers typically consider the benefits of access as offset by the costs. One can readily assess the benefits of access, but the costs are not as readily determined. Consumers may wrongly assume that they have free access, because no subscription payment occurs except to the broadband carrier. The free access conclusion fails to consider two somewhat hidden and not easily quantifiable costs: 1) the increase in the price of advertised goods and services, possibly better calibrated through data mining and 2) the monetary value accruing to intermediary carriers, operating system software authors and broadband content and application vendors when they acquire, collate, analyze and sell data about subscribers' wants, needs, desires, web site visits, location and communications. ²⁷

Consumers have plenty of experience with advertiser-supported access to content as this model has provided a “win-win” value position in broadcast radio and television for many

²⁶ Frank Pasquale, *Two Narrative of Platform Capitalism*, 35 YALE L. & POL'Y REV. 309, 312-13 (Fall, 2016).

²⁷ See, e.g., Matthew T. Bodie, Miriam A. Cherry, Marcia L. McCormick, & Jintong Tang, *The Law and Policy of People Analytics*, 88 U. COLO. L. REV. 961 (Fall, 2017); Ramsi A. Woodcock, *Big Data, Price Discrimination, and Antitrust*, 68 HASTINGS L.J. 1371 (Aug. 2017); Philip Hacker & Bilyana Petkova, *Reining in the The Big Promise of Big Data: Transparency, Inequality, and New Regulatory Frontiers*, 15 NW. J. TECH. & INTELL. PROP. 1 (Spring, 2017); Michal S. Gal & Niva Elkin-Koren, *Algorithmic Consumers*, 30 HARV. J.L. & TECH. 309 (Spring, 2017); Kenneth A. Grady, *Mining Legal Data: Collecting and Analyzing 21st Century Gold*, 7 J. INTERNET L. 1 (Jan. 2017).

years.²⁸ Consumers also have the opportunity for “free-rider”²⁹ access to advertiser-subsidized content without having to consume the products and services provided by the advertisers.

Additionally, both content intermediaries and advertisers have had limited ways to acquire data about consumers, for better targeting, because of the one-way nature of broadcasting and relatively uncalibrated and unsophisticated ways to calculate audience numbers and preferences.

Broadband intermediaries have far better ways to monitor, surveil, collect and sell subscriber data. This changes the value position of what the intermediary has to offer, because the ability to “mine” subscriber data has value that can provide a substantial, new revenue

²⁸ “By ‘subsidizing’” the press, advertising makes mass media broadly available. This subsidy enables the media to engage in the expensive enterprises of gathering, shaping, and distributing news (and entertainment).” C. Edwin Baker, *Advertising and a Democratic Press*, 140 U. PA. L. REV. 2097, 2100 (June, 1992).

²⁹ “A private good is both rival and exclusive. Consumption of the good excludes others from consuming the same good, and relative to a public good, it is much easier to exclude consumers from the good’s benefit. Most of the goods and services bought and sold are private goods. Gasoline, for example, is a private good because each gallon can be used by one consumer only to the exclusion of another consumer.

The nonexcludability and nonrival features of public goods threaten the ability of an original supplier of goods to recover her investment. Nonexcludability means that she cannot systematically refuse to supply the good to nonpayers while supplying it to payers. Nonrivalness means that each customer becomes a potential competing supplier. Thus, public goods, and goods that have some public-good characteristics, have a higher free-ride potential. Conversely, the stronger the characterization of a product as a private good, with its commensurate increase in exclusivity, the lower the free-ride potential. A drive-in movie, for example, has public-good characteristics. It is nonrival and it is difficult to exclude viewers. Nonpaying viewers may not be able to hear the movie, but they can still see it and free ride to an extent. The same movie takes on private-good characteristics when shown in a private theater. It then becomes possible to exclude people from enjoying the movie altogether, ending the free-rider threat. Thus, as the movie takes on more private-good characteristics, its free-ride potential decreases.” Henry H. Perritt, Jr., *Property and Innovation in the Global Information Infrastructure*, 1996 U. Chi. Legal F. 261, 267-68. *See also*, Marina Lao, *Resale Price Maintenance: The Internet Phenomenon and “Free Rider” Issues*, 55 ANTITRUST BULL. 473 (2010).

stream.³⁰ Broadband carriers have inserted language in their subscription agreements that confers a nearly unfettered contractual right to collect and sell data about individual subscribers.³¹ Unlike content and application providers, as well as operating system software authors, broadband carriers have no obligation to confer a benefit, or service discount, in exchange for such access. Subscribers have to accept the carrier retained right of data collection and sale as part of what they have to relinquish to the carrier in exchange for the privilege to become a paying subscriber.³²

³⁰ “When it comes to the aforementioned digital intermediaries, we as a society have no idea what information and ads individuals are exposed to: we have no way of knowing how that information was selected for them; we do not know whether there is a human editor who edits information streams, and if there is, who he/she might be; and even producers, whose content is being relayed, have only very limited information on who their audience is, while the public has almost no insight into the transactions and information flows on these platforms.” B. Bodo et al, *Tackling The Algorithmic Control Crisis-The Technical, Legal, And Ethical Challenges of Research Into Algorithmic Agents*, 19 YALE J. L. & TECH. 133, 141 (2017).

³¹ See, e.g., Facebook Data Policy; available at: <https://www.facebook.com/privacy/explanation>; Google Privacy Policy; available at: <https://www.facebook.com/privacy/explanation>.

³² For example, AT&T’s Privacy Policy outlines the numerous ways the company can use subscriber information internally and as a marketable asset. In terms of what benefits accrue to subscribers, the company states “you get advertising that’s more relevant to your interests. For example, if a particular audience segment, like adults between the ages of 21 and 25 with a certain income range, has demonstrated a greater interest in movies than other segments, we might send them a movie ad for a movie geared toward young adults. This is just one way we deliver content that’s more relevant.” AT&T, AT&T Privacy Policy FAQ; available at: http://about.att.com/sites/privacy_policy/terms#collect.

Remarkably, Congress³³ and the Federal Communications Commission (“FCC”)³⁴ have concluded that consumers do not need any FCC guards against privacy invasion and overly intrusive data collection. Opponents to consumer safeguards created by the FCC, but not yet implemented in 2016, emphasized that digital broadband carriers should not have to incur greater regulatory burdens than what content and application vendors bear. However, the concern for regulatory parity considers broadband carriage as no more essential to consumers than any particular service or application carried by network operators. Arguably, no service or application rises to the level of public utility or essential service. Consumers opting to become subscribers willingly part with privacy rights in exchange for access. The FCC now considers broadband carriers as similarly entitled to extract such concessions, even though existing, or prospective subscribers receive no discount or additional enhancement.

³³ Senate Joint Resolution 34, Providing for congressional disapproval under chapter 8 of title 5, United States Code, of the rule submitted by the Federal Communications Commission relating to “Protecting the Privacy of Customers of Broadband and Other Telecommunications Services,” Public Law 115–22, 115th Congress (April 7, 2017); available at: <https://www.congress.gov/115/plaws/publ22/PLAW-115publ22.pdf>.

³⁴ Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, Order Granting Stay Petition in Part, FCC 17-19 (rel. March 1, 2017); available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-19A1_Rcd.pdf.

In 2016, the Democratic majority FCC proposed privacy safeguards that did not become effective with the election of Donald and the conversion to a Republican majority. *See* Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, Report and Order, 31 F.C.C.R. (2016) (Nov. 2, 2016); available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-148A1.docx; *see also*, *Fact Sheet: The FCC Adopts Order To Give Broadband Consumers Increased Choice Over Their Personal Information*; available at: https://apps.fcc.gov/edocs_public/attachmatch/DOC-341938A1.pdf; Cecilia Kang, *Broadband Providers Will Need Permission to Collect Private Data*, THE NEW YORK TIMES (Oct. 27, 2016); available at: <https://www.nytimes.com/2016/10/28/technology/fcc-tightens-privacy-rules-for-broadband-providers.html>.

A majority at the FCC now considers the Federal Trade Commission (“FTC”) as fully capable of providing any necessary safeguards,³⁵ despite the lack of sector-specific expertise in telecommunications. The FTC only offers ex post remedies by responding to complaints, while the FCC regularly assesses the potential for harm to competition and consumers.

Unlike broadband carriers, operating system, content and application providers do confer consumer benefits for the opportunity to commodify and sell subscriber data. With varying degrees of clarity, subscription agreements set out what kinds of data can be collected and sold. Subscribers cannot negotiate modifications of these terms and few read and understand what privacy rights they relinquish and which firms may acquire data about them.³⁶ Additionally, subscribers and industry observers have limited ways to calculate the value in data mining and

³⁵ In granting a stay to privacy rules specifically applicable to Internet Service Providers, proposed in 2016, the FCC stated its intent to rely primarily on FTC safeguards and general protections created by Sec. 222 of the Communications Act, 47 U.S.C. § 222 (2015). “[W]e conclude that preserving the status quo pending further examination of whether to uphold the Order’s deviation from the FTC’s successful data security framework would benefit consumers, competition, innovation and the digital economy—and thus further the public interest. Therefore, the public interest disfavors compelling BIAS providers and other telecommunications carriers to incur substantial costs and burdens to implement the data security rule pending our reconsideration of that rule.” Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, WC Docket No. 16-106, Order Granting Stay Petition in Part, 32 F.C.C.R. 1793, 1799-1800 (2017). *See also*, Protecting the Privacy of Customers of Broadband and Other Telecommunications Services, Report and Order, 31 F.C.C.R. 13911 (2016).

³⁶ “The dynamic ways in which information is transmitted, collected, and stored through common online interactions exceeds the norms of traditional peer-to-peer relationships. Data is used to create marketing profiles, sell advertisements, conduct product analysis, and some much more in the big data marketplace. These realities illustrate the difficulty for even a user familiar with the provisions of each terms of service agreement to conceptualize where their data might wind up.” Andre W. Bagley & Justin Brown, *Limited Consumer Privacy Protections Against the Layers of Big Data*, 31 SANTA CLARA HIGH TECH. L.J. 483, 489 (May, 2015).

sales. AT&T briefly provided a rough value estimate when it offered to refrain from data mining if a wireline subscriber paid an additional \$29 per month in certain markets.³⁷

One could argue that setting a price for enhanced privacy protection provides clarity and a new customer option.³⁸ However, many broadband subscribers may wrongly assume they should not have pay a premium for something they consider a basic right. Because many digital broadband subscribers do not read their service agreements, or understand them after a complete review, a misperception of privacy rights has widely occurred. Broadband subscribers agree to terms that accord service providers virtually unfettered opportunities to exploit the consumer data they acquire and process.

V. Deficiencies in Existing Government Oversight Models

It does not appear that governments have revised, or will consider revising existing legal, regulatory and jurisprudential models and frameworks for application to issues raised by the onset of broadband intermediary platforms. Governments use the same tools, market definitions, market penetration calculations, consumer protection strategies and competition policies as

³⁷ “As part of its GigaPower gigabit-speed broadband Internet service, AT&T is offering consumers an option to prevent AT&T from collecting vast amounts of data about its users’ browsing habits for advertising and other purposes. The privacy surcharge of \$29 per month – nearly \$350 per year – is a model that many consumer-facing edge providers like Facebook and Google have thus far resisted, choosing instead to continue offering their services for “free” while relying on their troves of user data to generate advertising revenue.” Willkie Farr & Gallagher LLP, *Data Privacy & Security Watch 5* (Spring, 2015); available at: http://www.willkie.com/~media/Files/Publications/2015/03/Willkie_Data_Privacy_and_Security_Watch_Spring%202015.pdf. See also, Elizabeth Dwoskin and Thomas Gryta, *AT&T Offers Data Privacy — for a Price*, THE WALL STREET JOURNAL, Digits (Feb. 18, 2015); available at: <https://blogs.wsj.com/digits/2015/02/18/att-offers-data-privacy-for-a-price/>.

³⁸ See Jeff John Roberts, *AT&T charges \$29 for privacy. Time for others to do the same*, GIGAOM (Feb. 17, 2015); available at: <https://gigaom.com/2015/02/17/att-charges-29-for-privacy-time-for-others-to-do-the-same/>.

though digital, broadband networks operate no differently than legacy, bricks and mortar ventures. This section will identify four traditional governmental strategies and explain how each model ignores fundamental differences between the physical and broadband-mediated transactions.

As a threshold matter, governments decide whether and how to intervene in a specific industry sector. They may opt to rely entirely on marketplace forces, confident that competition will force stakeholders to operate in ways that deliver a compelling value proposition for consumers and engage in no anticompetitive practices. Other governments may pursue the opposite: an interventionist approach, imposing *ex ante* rules and regulations,³⁹ such as network neutrality and common carrier regulation,⁴⁰ based on the view that unfettered marketplace forces will harm consumers and competition. Between these polar opposites, two alternative, possibly complementary, *ex post* strategies exist: 1) apply antitrust, consumer protection and prohibitions

³⁹ On three occasions, the FCC has opted to apply *ex ante* regulatory oversight. Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C.R. 13,028 (2008), *vacated*; Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010) (FCC deemed to have exceeded its statutory authority when responding to a complaint and imposing network neutrality rules); Preserving the Open Internet, Report and Order, GN Docket No. 09-191, WC Docket No. 07-52, 25 F.C.C.R. 17905 (2010)[hereinafter 2010 Open Internet Order] *aff'd in part, vacated and remanded in part sub nom.* Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014), *on remand*, Protecting and Promoting the Open Internet, GN Docket No. 14-28, Notice of Proposed Rulemaking, 29 F.C.C.R. 5561 (2014); Protecting and Promoting the Open Internet, GN Dkt No. 14-28, Report & Order on Remand, Declaratory Ruling, and Order, 30 F.C.C. Rcd. 5601 (2015); *affirmed sub nom. affirmed sub nom.* United States Telecom Ass'n. v. FCC, 825 F.3d 674 (D.C. Cir. 2016), *pet. for en banc rehearing denied*, 855 F.3d 381(D.C. Cir. 2017).

⁴⁰ See Justin S. Brown & Andrew W. Bagley, *Neutrality 2.0: The Broadband Transition to Transparency*, 25 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 639 (2015); Barbara van Schewick, *Network Neutrality and Quality of Service: What a Nondiscrimination Rule Should Look Like*, 67 STAN. L. REV. 1 (2015); Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. TELECOM. & HIGH TECH. L. 141 (2003).

on unfair trade practices to remedy proven harms and 2) use dispute resolution through litigation and complaint filing procedures to fashion remedies that typically impose monetary fines and compulsory modification of business practices.

Each of the legacy models fails to achieve an ideal balance between governmental regulatory forbearance and intervention, primarily because the assumptions, strategies and tactics applied do not make essential adjustments reflecting the difference between digital, broadband networking and preexisting channels of commerce. Additionally, traditional tools applied by the Justice Department, FCC and FTC result in less than optimal outcomes either by detecting false positives, which trigger unnecessary marketplace intervention, or by reaching false negatives, which fail to trigger important safeguards based on an incorrect determination that no harm to consumers or competition has, or will occur.

A. False Positives and Negatives

Governments generate the greatest disservice to constituents when regulatory safeguards unnecessarily replace or dislodge marketplace forces, or when harm to consumers and competition occurs, because regulatory safeguards do not exist. Significant harms also occur when regulatory safeguards infringe on markets when ex ante government safeguards generate a false positive that identify as troublesome transitory or nonexistent harm. False negatives generate similar problems when the absence or ineffectuality of safeguards prevent the regulatory agency from identifying and resolving marketplace harms on a timely basis.

The three primary government agencies, with a jurisdictional link to aspects of digital broadband platforms, have generated both false positives and negatives primarily because the tools they have used in physical markets are ill-equipped to identify and resolve problems in the Internet cloud. The Department of Justice has statutory authority to investigate and sanction

anticompetitive conduct, but current economic doctrine favors inaction when identifiable, near term consumer benefits accrue, despite the likelihood for longer term financial harm to both consumers and competitors. The FTC has begun to ascend the learning curve on questions about privacy and unfair trade practices in the Internet ecosystem, but it has lacked jurisdiction at certain times while at other times it appears to lack specific expertise in how digital, broadband networks and two-sided markets operate. The FCC has generated regulatory uncertainty and overall confusion by shifting between a predisposition not to act, despite some evidence of harm to consumers and competition, and newfound zeal to generate ex ante safeguards that may overreach and trigger false positives.

With three government agencies sharing jurisdiction over policy, economic and legal issues related to two-sided markets, consumers can suffer from both inaction and overreach. Currently the three government agencies in a position to oversee and remedy platform intermediary marketplace abuses lack the will to act, largely based on contestable attributions about the sufficiency of self-regulation and competitive necessity.

1) **Department of Justice**

The Justice Department has primary statutory authority to enforce antitrust laws and generally to assess the competitive health of markets.⁴¹ This agency relies heavily on economic doctrine⁴² to provide guidance on how to enforce laws enacted over one hundred years ago. The

⁴¹ See, United States Department of Justice, *Antitrust Laws and You*; available at: <https://www.justice.gov/atr/antitrust-laws-and-you>; Kevin Ryan, Madelyn La France, Harry Phillips & Jay Winkleman, *Antitrust*, 54 AM. CRIM. L. REV. 987 (Fall, 2017).

⁴² “Antitrust analysis studies and predicts the economic effects of strategic firm behavior and changes in industry structure. Economists work in teams with attorneys in the Division on every civil investigation of proposed mergers or possible anticompetitive business conduct by firms (such as exclusive contracts and loyalty discounts). We spend time in the beginning of an investigation interviewing executives at firms and evaluating company documents and data to

Justice Department has embraced policies, often first promoted by academics, that attempt to determine how commercial pricing decisions and proposed mergers affect competition.

For example, the Chicago School⁴³ has provided consistent and impactful intellectual leadership to support the conclusion that government should eschew marketplace intervention if near term, quantifiable consumer benefits appear plausible, even if structural changes result in highly concentrated markets.⁴⁴ Using this policy, the Justice Department typically refrains from objecting to acquisitions of companies that complement and vertically integrate with the acquiring company's commercial activities.⁴⁵ In the communications marketplace, the Justice Department did not object when Comcast proposed to acquire NBC Universal,⁴⁶ because the

determine the best way to model the industry and identify potentially dispositive facts and empirical projects.” United States Department of Justice, Economic Analysis Group, What We Do; available at: <https://www.justice.gov/atr/about-division/economic-analysis-group>.

⁴³ The Chicago School refers to economic theory and policy favoring marketplace resource allocation and limited government intervention, focused primarily on promoting economic efficiency. Economists at the University of Chicago have achieved prominence in this line of academic analysis. “Why has U.S. antitrust law grown more tolerant in its treatment of dominant firm behavior? In tracing the intellectual stimulus for this development, I often have ascribed the U.S. retreat from intervention-oriented policies chiefly to the influence of the ‘Chicago School’ and have treated Chicago School ideas as the principal intellectual foundation of modern U.S. doctrine and policy.” William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 Colum. Bus. L. Rev. 1, 4 (2007). See Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661, 662-72 (1998).

⁴⁴ See, Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925 (1979); Robert H. Bork, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1978).

⁴⁵ See United States Department of Justice, Non-Horizontal Merger Guidelines; available at: <https://www.justice.gov/atr/non-horizontal-merger-guidelines>.

⁴⁶ United States Department of Justice, Office of Public Affairs, Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions (Jan. 18, 2011); available at: <https://www.justice.gov/opa/pr/justice-department-allows-comcast-nbcu-joint-venture-proceed->

combined venture primarily integrated content creation with content distribution. Conceivably, a single venture engaged in two aspects in the “food chain” of video commerce can enhance consumer welfare and promote competition while also enhancing scale, efficiency and stock valuation of the acquiring company.⁴⁷

The Justice Department also has embraced economic doctrine that very high market share held by one or two companies does not necessarily evidence harmful market power.⁴⁸ Instead, such industrial concentration can accrue efficiency and economies of scale benefits without also raising prices for consumers. Additionally, this agency largely favors any commercial activity that confers a near term cost saving to consumers, despite the potential for longer term harm.⁴⁹

[conditions](#). See also, Megan Sieffer, *Conception to Distribution: Vertical Integration in the Television Production and ISP Industry*, 6 J. Bus. Entrepreneurship & L. 157 (2012).

⁴⁷ “In the 1950s—while Congress, enforcement agencies, and the courts recognized potential threats posed by vertical arrangement—Chicago School scholars began to cast doubt on the idea that vertical integration has anticompetitive effects. By replacing market transactions with administrative decisions within the firm, they argued, vertical arrangements generated efficiencies that antitrust should promote. And if integration failed to yield efficiencies, then the integrated firm would have no cost advantages over unintegrated rivals, therefore posing no risk of impeding entry.” Lina M. Khan, *Amazon’s Antitrust Paradox*, 126 YALE L.J. 710, 733 (Jan., 2017). See also, Robert Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconception*, 22 CHI. L. REV 157 (1954).

⁴⁸ Courts in the United States and elsewhere in the world have embraced the view that “high market share in a multi-sided market setting is not indicative of market power.” Sokol and Ma, 15 NW. J. TECH & INTELL. PROP. at 48. See, David S. Evans, *The Emerging High-Court Jurisprudence on the Antitrust Analysis of Multisided Platforms*, COMPETITION POLICY INTERNATIONAL ANTITRUST CHRONICLE (Feb., 2017); available at: <https://www.competitionpolicyinternational.com/wp-content/uploads/2017/02/CPI-Evans.pdf>; Hein Hobbelen, Nima Lorje and Aylin Guenay, *Selected Recent Developments in the Application of EU Competition Law to Online Platforms* (Oct. 2016); available at: <http://www.eui.eu/Projects/ENTRANCE/Documents/NewEntrance/Workshops/AnnualConference/Recent-Development-in-the-Application-of-EU-Competition-law-to-Online-Platforms-Hobbelen-Lorje%CC%81-Guenay.pdf>.

⁴⁹ “Predatory pricing poses a dilemma that has perplexed and intrigued the antitrust community for many years. On one hand, history and economic theory teach that predatory

In application, the Justice Department and reviewing courts consider quite unlikely and infeasible a company strategy for deliberately underpricing goods and services with an eye toward driving out competitors and subsequently raising prices.⁵⁰ Embracing Chicago School rationale, the Justice Department and many reviewing courts consider such predatory pricing irrational, because ventures may not be able to recoup prior losses, particularly for markets with low barriers to market entry.⁵¹

The nature of two-sided digital broadband markets and the business strategies of platform operators challenge baseline assumptions driving antitrust policies. The Justice Department has not previously confronted a business strategy like that of Amazon that expects to endure decades

pricing can be an instrument of abuse; on the other hand, price reductions are the hallmark of competition and the tangible benefit that consumers perhaps most desire from the economic system.” Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2241 (Aug. 2000).

⁵⁰ See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 212, 217 (1993). “[C]ourts routinely hold plaintiffs’ allegations of predatory pricing to be implausible because judges view the alleged conduct as irrational. In *Matsushita*, the majority reasoned that predatory pricing ‘makes no economic sense’ because the alleged conspiracy in that case failed. However, in some later opinions invoking *Matsushita*, the court’s pronouncement of implausibility is belied by the very success of the alleged predation. For example, in *Brooke Group*, Liggett alleged that B&W engaged in predatory pricing in order to coerce Liggett into increasing the prices of generic cigarettes, which would allow B&W and the other tobacco firms to raise prices of branded cigarettes. The Supreme Court found Liggett’s theory to be implausible because it would have required B&W to engage in allegedly irrational conduct--sustaining definite losses with a speculative likelihood of recoupment.” Christopher R. Leslie, *Rationality Analysis in Antitrust*, 158 U. PA. L. REV. 261, 319 (Jan. 2010).

⁵¹ The “Chicago School critique of predatory pricing doctrine rests on the idea that below-cost pricing is irrational and hence rarely occurs. For one, the critics argue, there is no guarantee that reducing prices below cost would either drive a competitor out or otherwise induce the rival to stop competing. Second, even if a competitor were to drop out, the predator would need to sustain monopoly pricing for long enough to recoup the initial losses *and* successfully thwart entry by potential competitors, who would be lured by the monopoly pricing.” Amazon’s Antitrust Paradox at 726-27.

of losses generated by a deliberate strategy to expand market share and the range of products and services offered coupled with low prices that even major bricks and mortar businesses cannot match.

Amazon can pursue a “loss leader,” “expanding shelf-space” pricing strategy, because its platform activities extend well beyond serving as an intermediary for books and other consumer products. Its “conduct and structure may threaten competition yet fail to trigger scrutiny under the analytical framework presently used in antitrust”⁵² based on its control over consumer data and relentless pursuit of market share in a “winner take all” competition.

An essential element of the business of Amazon and other digital, broadband platform operators does not trigger any government scrutiny using conventional antitrust measures of relevant markets, dominance and pricing power. Government agencies allocate most if not all scrutiny over a venture’s core business, while ignoring how ancillary ventures constitute a key, strategic part. For example, government antitrust/competition policy has concentrated on Google’s dominant market share in the Internet search marketplace, without fully appreciating that search dominance also extends into the market for broadband network delivered advertising and the development of markets for the large volume of consumer data the company acquires, processes and analyzes.⁵³

⁵² *Id.* at 784.

⁵³ “[C]ustomer data can be a strategic asset that allows a platform to maintain a lead over rivals and to limit entry into its market.” Howard A. Shelanski, *Information, Innovation and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663, 1679 (2013). *See also*, Daniel L. Rubinfeld and Michal S. Gal, *Access Barriers to Dig Data*, 59 ARIZ. L. REV. 339 (Summer, 2017).

The likely failure of antitrust/competition policy agencies to detect long term adverse impacts to consumers and competition, does not necessarily warrant preemptive steps that would foreclose acquisitions, order divestitures, mandate licensing to key business functions, or impose neutrality or common carrier safeguards. Such safeguards could well impose excessive, false positive remedies. However, the current state of antitrust economic doctrine and policy appears likely to generate false negative determinations, based on the failure to consider the broad reach of platform operators' business plans and how ancillary and under-scrutinized activities help offset the consequences of aggressive, below cost pricing strategies used to acquire dominance in winner take all markets.

2) Federal Trade Commission

The FTC has lead responsibility for consumer protection in privacy and data security across many different lines of business⁵⁴ but must defer to the sector-specific expertise of the FCC when a problem involves ventures classified as common carriers.⁵⁵ The common carrier regulatory classification unambiguously has applied to wireless cellular telephone carriers since

⁵⁴ Section 5(a)(2) of the Federal Trade Act, *codified at* 15 U.S.C. §45(a)(2) (2015) empowers and directs the FTC “to prevent persons, partnerships, or corporations, except banks, savings and loan institutions . . . Federal credit unions . . . common carriers . . . air carriers and foreign air carriers . . . from using unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce.” *See also*, Woodrow Hartzog & Daniel J. Solove, *The Scope and Potential of FTC Data Protection*, 83 GEO. WASH. L. REV. 2230 (Nov. 2015).

⁵⁵ Section 5 of the Federal Trade Commission Act gives the agency enforcement authority over “unfair or deceptive acts or practices,” but exempts, among others, “common carriers subject to the Acts to regulate commerce.” 15 U.S.C. § 45(a)(1)-(2).

their market debut⁵⁶ and had applied to all broadband Internet access providers until late 2017 when the FCC reclassified it as an information service.⁵⁷

Having split jurisdiction between the FTC and the FCC has the potential for more false negatives resulting from uncertainty over which agency has jurisdiction⁵⁸ to detect and remedy deceptive acts and unfair trade practices.⁵⁹ A decision by the Ninth Circuit Court of Appeals⁶⁰

⁵⁶ “A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this chapter, except for such provisions of subchapter II as the Commission may specify by regulation as inapplicable to that service or person. In prescribing or amending any such regulation, the Commission may not specify any provision of section 201, 202, or 208 of this title, and may specify any other provision only if the Commission determines that—

- (i) enforcement of such provision is not necessary in order to ensure that the charges, practices, classifications, or regulations for or in connection with that service are just and reasonable and are not unjustly or unreasonably discriminatory;
- (ii) enforcement of such provision is not necessary for the protection of consumers; and
- (iii) specifying such provision is consistent with the public interest.” 47 U.S.C. §332(c)(1)(A) (2015).

⁵⁷ See Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order, WC Docket No. 17-108, FCC 17- 166 (rel. Jan. 4, 2018)[hereinafter cited as Restoring Internet Freedom Order]; available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-166A1.docx.

⁵⁸ “Consumers may also be worse off if the two enforcers have conflicting rulebooks.” Maureen K. Ohlhausen, *FTC-FCC: When is Two a Crowd?*, 33rd Annual Institute on Telecommunications Policy & Regulation, 4 (Dec. 4, 2015) available at: https://www.ftc.gov/system/files/documents/public_statements/893473/151204plispeech1.pdf; [Hereinafter cited as *When is Two a Crowd?*].

⁵⁹ “[H]aving more enforcers isn’t always better for consumers. For example, consumers will be worse off if overlapping efforts unnecessarily divert resources from more pressing issues. When two cops are on one beat, another beat may be left vulnerable. Additionally, if enforcers fail to leverage their comparative advantages, consumers will be worse off. For example, one wouldn’t expect a homicide detective to do a good job as a tax fraud investigator, and vice versa.” *When is Two a Crowd?* at 4.

⁶⁰ *Federal Trade Commission v. AT&T Mobility LLC*, 835 F.3d 993 (9th Cir. 2016) Rehearing en Banc Granted by *Federal Trade Commission v. AT&T Mobility LLC*, 9th Cir.(Cal.), May 9, 2017.

had injected even greater uncertainty about whether the FTC retains any jurisdiction if a venture engages in any sort of common carrier activity, but an *en banc* opinion reinstated FTC jurisdiction over the non-common carrier activities of ventures that offer both common carrier and private carrier services.⁶¹

The *en banc* court decision concluded that the FTC had lawful authority to investigate whether AT&T misrepresented the nature of its “unlimited” broadband data plan in light of the carrier’s practices of slowing (“throttling”) the bit transmission speeds for some subscribers who exceeded an unspecified cap on aggregate downloading and uploading within one month. The court also rejected AT&T’s assertion that the FTC lacked jurisdiction based on the subsequent decision by the FCC to reclassify broadband Internet access as an information service, a form of private carriage, not common carriage.⁶²

This decision validates the availability of FTC regulatory safeguards for broadband Internet access now classified by the FCC as non-common carrier, information service. The FTC now has lawful authority to provide consumer safeguards, including privacy and cybersecurity matters, for which the FCC has stated its intent not to address. The FCC and FTC have executed

⁶¹ Federal Trade Commission v. AT&T Mobility LLC, No. 15-16585, ___ F.3d ___, (9th Cir. Feb. 26, 2018)); available at: <http://cdn.ca9.uscourts.gov/datastore/opinions/2018/02/26/15-16585.pdf>.

⁶² “Contrary to AT&T’s position, the prospective Reclassification Order does not rob the FTC of its jurisdiction or authority over conduct occurring before the order. The FTC’s power to bring enforcement lawsuits in federal court derives from the FTC Act, which authorizes the agency to sue in any case involving ‘any provision of law enforced by’ the FTC. 15 U.S.C. § 53(b)(1). Before the reclassification, the FTC had the authority to pursue this suit. The prospective reclassification can hardly be viewed to retrospectively strip the FTC of that enforcement authority. *Id.* at 33.

a Memorandum of Understanding outlining the scope of oversight each agency will assert in light of their shared jurisdiction.⁶³

The sharing of responsibility between the FCC and FTC will continue to combine significantly different expertise and case precedent. The FTC has focused on content and service providers while the FCC has concentrated on the behavior of the carriers providing the conduit for content and applications. In a convergent marketplace, where conduit and content combine, safeguards are needed for both functions. Similarly, convergent technologies do not make it possible for regulatory jurisdiction to apply based on a semantic of telecommunications common carriers and providers of information services and other types of unregulated content and applications.

3) Federal Communications Commission

The FCC has struggled for decades to establish the optimal regulatory treatment of data communications. The Commission has careened from establishing ex ante safeguards, based on assumption that carriers have the ability and incentive to engage in anticompetitive practices, to using ex post remedies triggered only when it receives a compelling complaint. Such administrative inconsistency has resulted from the combination of ambiguous and outdated legislation, increased partisanship among the Commissioners, which economic doctrine a majority of the Commissioners embrace and an apparent inability to adjust policies, rules and regulations to account for converging technologies and markets.

⁶³ See Restoring Internet Freedom FCC-FTC Memorandum Of Understanding (Dec. 14, 2017); available at: https://apps.fcc.gov/edocs_public/attachmatch/DA-18-393A1.docx; and <https://www.ftc.gov/policy/cooperation-agreements/restoring-internet-freedom-fcc-ftc-memorandum-understanding>.

The Communications Act of 1934, most recently amended in 1996, provides the FCC with service definitions that the Commission considers mutually exclusive and dichotomous.⁶⁴ Even though consumers readily understand that a wireless handset provides both voice and data services, the FCC attempts to ignore technological and market convergence by shoehorning all wireless services into a lightly regulated information service category.

The FCC triggered several court reversals when it attempted to stretch the permissible regulatory scope of information service oversight.⁶⁵ It responded in 2015 with a decision to reclassify broadband Internet access as regulated telecommunications services that overreaches unless the Commission follows through with its commitment to forbear from applying most common carrier regulations.⁶⁶ In these partisan and non-collegial times, a Republican FCC Commissioner will not trust a Democratic counterpart to make good on a promise to remove, or refrain from applying most common carrier regulations as unnecessary and possibly

⁶⁴ “The approach we adopt today best implements the Commission’s long-standing view that Congress intended the definitions of ‘telecommunications service’ and ‘information service’ to be mutually exclusive ways to classify a given service.” 2017 Restoring Internet Freedom Order at ¶53.

⁶⁵ Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C.R. 13,028 (2008), *vacated*, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010); Preserving the Open Internet, Report and Order, GN Docket No. 09-191, WC Docket No. 07-52, 25 F.C.C.R. 17905 (2010) *aff’d in part, vacated and remanded in part sub nom. Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

⁶⁶ “[T]his Order concludes that the retail broadband Internet access service available today is best viewed as separately identifiable offers of (1) a broadband Internet access service that is a [common carrier] telecommunications service (including assorted functions and capabilities used for the management and control of that telecommunication service) and (2) various ‘add-on’ applications, content, and services that generally are information services.” Protecting and Promoting the Open Internet. GN Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order, 30 F.C.C.R. 5601, 5615 (2015) [hereinafter cited as 2015 Open Internet Order]; *affirmed sub nom. United States Telecom Ass’n. v. FCC*, 825 F.3d 674 (D.C. Cir. 2016), *pet. for en banc rehearing denied*, 855 F.3d 381 (D.C. Cir. 2017).

counterproductive. Similarly, a Democratic Commissioner will not trust a Republican counterpart to take any affirmative steps to remedy real competitive and consumer protection harms once an information service classification applies which would permit the FCC to eschew any oversight.

The FCC cannot provide regulatory clarity when its Commissioners elevate political party objectives above common sense and the public interest. Republican Commissioners are convinced that regulation imposes unnecessary costs that translate into higher prices, less innovation, reduced investment in infrastructure and fewer jobs. They consider the telecommunications and information services marketplaces robustly competitive and able to self-regulate, even though consumers typically have to accept non-negotiable service terms and conditions that include mandatory arbitration ⁶⁷ in lieu of court hearings and near complete opportunities for carriers to commodify and market data about subscribers' network uses. Democratic Commissioner identify the same adverse consequences to competition and consumers, but attribute the failure to regulate as the cause.

Throughout the FCC's consideration of the proper regulatory model for broadband Internet access, the Commission did not directly address the impact of platform intermediaries. It did identify separate elements in the complete link from content and application source to consumer. However, it emphasized the potential for "retail" Internet Service Providers ("ISPs") serving end users to operate anti-competitively only insofar as its treatment of traffic destined for their subscribers. The Commission focused primarily on ISP traffic management and delivery

⁶⁷ See *AT&T Mobility c. Concepcion*, 131 S.Ct. 1740 (2011)(deeming enforceable a compulsory arbitration requirement contained in a wireless carriage subscription agreement); Arpan A. Sura & Robert A. Derise, *Conceptualizing Concepcion: The Continuing Viability of Arbitration Regulations*, 62 U. KAN. L. REV. 403 (Dec. 2013).

roles without considering whether and how ISP carriage might create a platform intermediary function. The current FCC has no interest in examining ISP collection and marketing of subscriber network use and in assessing the impact on legitimate privacy expectations. Having now reclassified broadband Internet access as an information service, the FCC has largely disengaged from broadband oversight.

a) Restoring Internet Freedom Order

On a 3-2 party line vote, the FCC again shifted its Internet regulatory posture, this time eliminating rules and regulations that anticipate the need to establish rules and regulations to remedy practices that harm consumers and competition.⁶⁸ The Republican majority voted a complete reversal of what it considered heavy-handed and unnecessary marketplace meddling that the Democratic majority had created in 2015.⁶⁹ Relying on conjecture and research sponsored by stakeholders, the current FCC deemed its reversal as necessary to remedy the marketplace intrusions of the 2015 Open Internet Order that it now believes has harmed competition, broadband infrastructure investment and innovation.⁷⁰

⁶⁸ Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order, WC Docket No. 17-108, FCC 17-166 (rel. Jan. 4, 2018) [hereinafter cited as Restoring Internet Freedom Order]; available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-166A1.docx.

⁶⁹ “We reverse the Commission’s abrupt shift two years ago to heavy-handed utility-style regulation of broadband Internet access service and return to the light-touch framework under which a free and open Internet underwent rapid and unprecedented growth for almost two decades. We eliminate burdensome regulation that stifles innovation and deters investment, and empower Americans to choose the broadband Internet access service that best fits their needs.” *Id.* at ¶1.

⁷⁰ “The Commission has long recognized that regulatory burdens and uncertainty, such as those inherent in Title II, can deter investment by regulated entities The balance of the evidence in the record suggests that Title II classification has reduced ISP investment in the network as well as hampered innovation because of regulatory uncertainty.” Restoring Internet Freedom Order at ¶88.

The Restoring Internet Freedom document has three parts: a Declaratory Ruling, Report and Order, and Order. In the Declaratory Ruling portion, the FCC reclassified broadband Internet access service as an information service not lawfully subject to Title II, common carrier regulation.⁷¹ Before its 2015 Open Internet Order, the FCC treated broadband access as an information service and the Supreme Court deferred to the Commission’s regulatory judgment in the *Brand X* case.⁷² However, the FCC attempted to use its “ancillary jurisdiction,” under Title I of the Communications Act to justify regulatory safeguards twice considered as unlawful common carrier-type duties by reviewing courts.⁷³

Ironically, when asserting that wireless broadband constitutes a full, competitive alternative to wireline option, the Restoring Internet Freedom Order emphasizes the near term availability of fifth generation wireless service that required substantial sunk investment by carriers subject to network neutrality obligations: “With the advent of 5G technologies promising sharply increased mobile speeds in the near future, the pressure mobile exerts in the broadband market place will become even more significant. *Id.* at ¶130.

⁷¹ “[W]e end utility-style regulation of the Internet in favor of the market-based policies necessary to preserve the future of Internet freedom. In the 2015 *Title II Order*, the Commission abandoned almost twenty years of precedent and reclassified broadband Internet access service as a telecommunications service subject to myriad regulatory obligations under Title II of the Communications Act of 1934, as amended (the Act). We reverse this misguided and legally flawed approach and restore broadband Internet access service to its Title I information service classification. We find that reclassification as an information service best comports with the text and structure of the Act, Commission precedent, and our policy objectives. We thus return to the approach to broadband Internet access service affirmed as reasonable by the U.S. Supreme Court.” *Id.* at ¶2.

⁷² *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967 (2005).

⁷³ *See* Formal Complaint of Free Press and Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications, Memorandum Opinion and Order, 23 F.C.C.R. 13,028 (2008), *vacated*; *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010) (FCC deemed to have exceeded its statutory authority when responding to a complaint and imposing network neutrality rules); *Preserving the Open Internet*, Report and Order, GN Docket No. 09-191, WC Docket No. 07-52, 25 F.C.C.R. 17905 (2010)[hereinafter 2010 Open Internet Order] *aff’d in part, vacated and remanded in part sub nom.* *Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014).

The Restoring Internet Freedom Order reclassified wireless broadband Internet access service as a private mobile service⁷⁴ in an attempt to remove the common carrier responsibilities created by Congress for the so-called Commercial Mobile Radio Service.⁷⁵ The Order also removes the FCC from using its telecommunications-specific expertise to guard against possible antitrust, consumer protection and privacy violations. Instead, the FTC will add this responsibility⁷⁶ to its broad oversight wingspan.

The Report and Order portion revised an existing transparency policy to include the requirement that broadband carriers disclose information about their practices to consumers, entrepreneurs, and the Commission, including any blocking, throttling, paid prioritization, or affiliated prioritization.⁷⁷ The FCC considers disclosure sufficient instead of an absolute prohibition of the practices mentioned above. The Commission now believes that the “bright

⁷⁴ “We also reinstate the private mobile service classification of mobile broadband Internet access service and return to the Commission’s definition of “interconnected service” that existed prior to 2015. We determine that this light-touch information service framework will promote investment and innovation better than applying costly and restrictive laws of a bygone era to broadband Internet access service.” Restoring Internet Freedom Order at ¶2.

⁷⁵ Pub. L. No. 103-66, 107 Stat. 312 (1993), *codified at* 47 U.S.C. § 332.

⁷⁶ “Our balanced approach also restores the authority of the nation’s most experienced cop on the privacy beat—the Federal Trade Commission—to police the privacy practices of Internet Service Providers (ISPs).” Restoring Internet Freedom Order at ¶2.

⁷⁷ “Next, we require ISPs to be transparent. Disclosure of network management practices, performance, and commercial terms of service is important for Internet freedom because it helps consumers choose what works best for them and enables entrepreneurs and other small businesses to get technical information needed to innovate. Individual consumers, not the government, decide what Internet access service best meets their individualized needs. We return to the transparency rule the Commission adopted in 2010 with certain limited modifications to promote additional transparency, and we eliminate certain reporting requirements adopted in the *Title II Order* that we find to be unnecessary and unduly burdensome.” Restoring Internet Freedom Order at ¶3.

line” rules created in the 2015 Open Internet Order impose burdensome costs and constraining ISP flexibility to serve consumers. Additionally, the Commission eliminated what it considered vague and expansive Internet Conduct Standard, under which the FCC could micromanage innovative ISP business models and their commercial relationship both downstream to retail broadband consumers and upstream to other ISPs, Content Distribution Networks, such as Akamai and content creators.⁷⁸

The Order portion unilaterally shuts down any additional fact finding and public comment filing opportunities finding that that the public interest would not be served by adding to the already-voluminous record in this proceeding.⁷⁹

VI. A Realistic Assessment of Platform Costs and Benefits

Consumers and governments may not fully understand the tradeoffs when digital, broadband intermediaries dominate many market segments including first and last mile content carriage, smartphone and computer operating systems and a variety of content and applications market segments including Internet search, social networking and Internet-mediated, retail commerce. One can readily appreciate the upside consumer benefits in having access to advertiser-supported content and Internet markets subsidized by ventures willing to forego short

⁷⁸ “We eliminate the conduct rules adopted in the *Title II Order*—including the general conduct rule and the prohibitions on paid prioritization, blocking, and throttling. We do so for three reasons. First, the transparency rule we adopt, in combination with the state of broadband Internet access service competition and the antitrust and consumer protection laws, obviates the need for conduct rules by achieving comparable benefits at lower cost. Second, scrutinizing closely each prior conduct rule, we find that the costs of each rule outweigh its benefits. Third, the record does not identify any legal authority to adopt conduct rules for all ISPs, and we decline to distort the market with a patchwork of non-uniform, limited-purpose rules.” *Id.* at ¶239.

⁷⁹ “We are convinced that we have a full and complete record on which to base our determination today without incorporating . . . [additional] materials. *Id.* at ¶343.

term profits for longer term market share and diversification. A more difficult undertaking calculates what direct and indirect costs consumers incur, presently and in the future, for the opportunity to participate in “winner take all” two-sided markets.

Prevailing economic doctrine, widely embraced by government legislators, judges and regulators, favors an inclination not to intervene in the marketplace, when identifiable, near term cost savings and other welfare enhancements flow to consumers. However, it has become increasingly clear that consumers have to contribute more value, than what they might infer from widespread promotion of “free” and subsidized access. Last mile carriers, app store vendors and many dominant firms in the Internet ecosystem have mastered the ability to acquire, market and sell subscriber data which constitutes the value exchanged by subscribers for access.

In the short run, the value proposition from participating in two-sided markets may decline as consumers begin to understand the monetary value of the network usage data they generate and consent to having platform operators convert into revenue from advertisers and through dynamic pricing. In the longer term, the commodification of consumer data may accrue the highest strategic and financial advantages for ventures that already have successfully exploited positive network externalities and have acquired large market shares. Whether this advantage stifles innovation and competition, depends on whether consumers can freely change their subscriptions and actually do so. In the Internet ecosystem, lock-in can occur when consumers lack complete information about what they have to pay and what they lose in exchange for the opportunity to become a subscriber. In addition to the transaction costs incurred in looking for an alternative and subscribing to it, prospective churning consumers have to identify greater welfare enhancement, lower costs, or both. Possibly few consumers have the

disposition and wherewithal to undertake regular cost/ benefit analyses as well as a determination whether to stick with the status quo, or seek better terms and conditions.

Simply put, digital broadband consumers may likely suffer more significant, but not readily quantifiable harms, as digital, broadband intermediaries find new and more precise ways to maximize revenues from both upstream and downstream sources. Broadband carriers and other platform operators will attempt to create ever more diverse and profitable revenue streams by mining, marketing and selling downstream subscriber usage data. Additionally, such intermediaries will continue to impose commissions, surcharges and other fees on upstream content and applications vendors.

Government agencies with jurisdiction to monitor such actions appear ill-equipped to provide effective oversight based on their fealty to now questionable economic and antitrust theory, the inability or unwillingness to consider costs and benefits on both sides of the two-sided market and their emphasis on short term consumer benefits that may not seem as generous as initially estimated. The FCC disserves the public interest given its predilection to find false positive problems ostensibly remedied with ex ante safeguards when Democrats have a majority and false negatives when a Republican majority removes consumer safeguards and fails to establish ex post remedies, despite the likelihood that disputes and conflicts will arise.

Additionally, the multiple-decade emphasis on network neutrality has distracted the FCC and the other agencies having partial jurisdiction.⁸⁰ The fixation with last mile downstream

⁸⁰ “[T]he current regulatory structure does not permit any regulator to consider the full group of actors whose activities determine the neutrality or nonneutrality of access to networked digital communications capabilities. . . . Platforms and their government relations firms have exploited the apparent unfairness; for example, Google has adopted the posture of a supplicant seeking nondiscriminatory access to connection points for its Google Fiber initiative, even though it and other dominant platform firms ‘already benefit from what are essentially internet fast lanes, and this has been the case for years.’” Cohen Platform Law at 42, *quoting* Robert

parity of access largely ignores what platform intermediaries can do behind the scenes with data mining techniques that extract marketable and valuable information about subscriber behavior. Narrowing the focus to the potential for unlawful quality of service discrimination vis a vis content carriage, leaves the FCC with little time, energy and inclination to consider what kinds of harms can result from the collection of data about what content subscribers access and how intermediaries can use this data to erect even higher barriers to market entry and competition.

A. The Way Forward

Regulatory agencies with jurisdiction to safeguard consumers and reviewing courts should better calibrate the tools they use to investigate the potentially harmful effects of platform intermediaries on competition and consumers, with emphasis on the potential for privacy intrusions, unfair trade practices, market concentration and anticompetitive tactics. The goals for recalibration should focus on acquiring a better understanding of platform operator practices and their impacts rather than serve as a justification for more intrusive government oversight. Such a holistic approach can better assess the costs and benefits generated by platform intermediaries.

1) Assess Impacts on Both Sides of a Platform

To achieve greater clarity on the potential for beneficial and harm impact, courts and government agencies should examine platform operations on both upstream and downstream market sides. Using a cost benefit analysis, they may determine that harmful impacts on one side are offset by benefits on the other side. In other instances, they may identify greater harms or benefits when examining both sides.

McMillan, *What Everyone Gets Wrong in the Debate over Net Neutrality*, WIRED (June 23, 2014); available at: https://www.wired.com/2014/06/net_neutrality_missing.

A complete assessment of market impacts on both sides of a platform promotes a thorough and fair assessment without increasing the odds for intervention, or forbearance. For example, in *United States v. American Express*,⁸¹ the Second Circuit Court of Appeals considered both sides of the credit card platform and reversed a lower court's decision that could have harmed consumers in the long run even as it appeared to benefit them in the short term.

United States v. American Express examined market impacts on both sides of the credit card platform marketplace with an eye toward assessing the complete financial impact of a credit card company's rule precluding vendors, accepting multiple types of credit cards, from encouraging consumers to use one that would impose lower fees on vendors. The court rejected the lower court's singular focus on upstream vendors, because so-called anti-steering rules can have a direct impact on both upstream vendors and downstream consumers as well as impact the relationships and interactions⁸² between both market segments and the issuers of credit cards:

The interdependency that causes price changes on one side can result in demand changes on the other side. If a merchant finds that a network's fees to accept a particular card exceed the benefit that the merchant gains by accepting that card, then the merchant likely will choose not to accept the card. On the other side, if a cardholder finds that too few merchants accept a particular card, then the cardholder likely will not want to use that card in the first place. Accordingly, in order to succeed, a credit-card

⁸¹ *United States v. American Express Company*, 838 F.3d 179 (2d Cir. 2016) *cert. granted*, *Ohio v. Am. Express Co.*, No. 16-1454, 2017 WL 2444673 (Oct. 16, 2017).

⁸² “The functions provided by the credit-card industry are highly interdependent and, at the cardholder/merchant-acceptance level, result in what has been called a ‘two-sided market.’ The cardholder and the merchant both depend upon widespread acceptance of a card. That is, cardholders benefit from holding a card only if that card is accepted by a wide range of merchants, and merchants benefit from accepting a card only if a sufficient number of cardholders use it.” *Id.* 838 F.3d 185-86.

network must “find an effective method for balancing the prices on the two sides of the market.”⁸³

The court undertook a comparison of costs and benefits affecting both vendors and credit card users. While anti-steering rules mandated by credit card issuers can constitute an illegal vertical restraint on trade, by reducing competition among credit card companies, the court considered the potential for offsetting, positive financial impact on credit card users through lower costs and more financial incentives to use a specific card.⁸⁴

A thorough examination of impacts to both upstream vendors accepting credit cards and downstream consumer using them motivated the Second Circuit Court of Appeals to reverse a lower court’s decision finding anticompetitive harm only to vendors. The appellate court identified offsetting benefits to consumers even when credit card company rules impose higher costs and limit ways for vendors to steer consumers to cards with lower vendor fees.

The Second Circuit opted to examine both sides of the credit card market, because variance in costs incurred by both vendors and credit card users can impact both sides of the platform operated by a credit card issuer. In light of the interdependency of product and service vendors and consumers using credit cards, the court identified two joint market effects not considered by the lower court: 1) impact of anti-steering rules on the level of card issuer market

⁸³ *Id.* at 186 quoting Jean–Charles Rochet & Jean Tirole, An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems, 2 REV. NETWORK ECON. 69, 72 (2003).

⁸⁴ “In order to remain competitive on the cardholder side of the platform, a payment-card network might need to increase cardholder rewards—or, in other words, cut prices to cardholders. This, in turn, might diminish the network's profitability from the hypothetical price increase. If the network chose in that situation not to increase cardholder rewards, then merchant attrition likely would continue increasing as a result of the reduction in cardholders. Over time, the reduction in transactions could make the hypothetical price increase unprofitable.” United States v. American Express Company, 838 F.3d at 202.

competition and 2) the impact of credit card issuer anti-steering rules on their incentives to offer usage inducements to consumers. While the credit card marketplace is concentrated with only four companies and evidences substantial barriers to market entry, the court noted the ease with which consumers can shift card allegiance based on many factors including the costs incurred by using a specific card as well as the financial inducements offered by credit card issuers to encourage consumer loyalty.⁸⁵

The *American Express* case emphasizes the need for courts and by extension, regulatory agencies, to consider the relationship between upstream and downstream market participants in terms of their impact on each other—interdependency—and in terms of their relationship with the platform intermediary. In the credit card ecosystem, the availability of alternative credit cards and the ease with which consumers can change allegiances evidence a competitive credit card platform marketplace with significant consumer sensitivity to comparative costs and benefits accruing from the use of specific cards. Some credit card users attempt to maximize downstream subsidies and rebates by acquiring many different cards and strategically using the one card conferring the best benefits for each transaction, e.g., Card A for gasoline, Card B for airline tickets, Card C for restaurants.

The digital, broadband ecosystem may not have the same competitive alternatives. Similarly high barriers to market entry, combined with “all of nothing” scale opportunities from

⁸⁵ “Both merchants and cardholders engage in ‘multihoming,’ meaning that both cardholders and merchants may choose to use or accept several different cards. Multihoming tends to lower prices by functioning essentially as an availability of substitutes. . . . A cardholder often has more choices of payment method than a merchant has the ability to accept, and thus the cardholder may simply opt not to own cards that charge membership fees or offer relatively few cardholder benefits. Largely due to multihoming, not all merchants or all cardholders use all payment-card networks.” *Id.* at 189-90. “A firm that can attract customer loyalty only by reducing its prices does not have the power to increase prices unilaterally.” *Id.* at 203.

positive networking externalities, promote highly concentrated market segments. For example, the wireless marketplace in the United States also has four major, national carriers⁸⁶ and the wired broadband market is similarly concentrated.⁸⁷ Unlike the credit card marketplace, broadband access consumers cannot easily migrate from one carrier to another in light of service contracts imposing financial penalties for early termination, the option to spread out the cost of smartphones over a long service period and technical incompatibility between handsets.

Credit card consumers can apply for another card online in a matter of minutes, while broadband consumers incur far greater transaction costs and inconvenience in changing carriers. Significant lock-in also occurs when consumers opt to use a wireless handset manufactured by

⁸⁶ The market research firm Strategy Analytics reports that in the first quarter of 2017, Verizon had 146.013 million subscribers and generated \$15.778 billion in annual revenue. AT&T had 134.218 million subscribers and generated \$14.538 billion in annual revenue. T-Mobile had 72.597 million subscribers and generated \$7.329 billion in annual revenue. Sprint had 58.741 million subscribers and generated \$7.329 billion in annual revenue. The fifth largest carrier U.S. Cellular had 4.996 million subscribers and generated \$746 million in annual revenue. Mike Dano, *How Verizon, AT&T, T-Mobile, Sprint and more stacked up in Q1 2017: The top 7 carriers*, FIERCE WIRELESS (May 8, 2017); available at: <http://www.fiercewireless.com/wireless/how-verizon-at-t-t-mobile-sprint-and-more-stacked-up-q1-2017-top-7-carriers>.

⁸⁷ The top cable television broadband network providers, as of the fourth quarter in 2016: Comcast with 24.701million subscribers, Charter with 22.593 subscribers, and Altice USA with 4.167 million subscribers. Daniel Frankel, *The top 6 cable, satellite and telco pay-TV operators in Q4: Ranking Comcast, Charter and more*, FIERCE CABLE (March 15, 2017); available at: <http://www.fiercecable.com/cable/top-6-cable-satellite-and-telco-pay-tv-operators-q4-ranking-comcast-charter-and-more>.

As of the third quarter in 2016, AT&T had 14.2 million broadband subscribers and generated \$40.2 billion in total annual revenue. Verizon had 7.04 million broadband subscribers and generated \$30.9 billion in total annual revenue. CenturyLink had 5.95 million broadband subscribers and generated \$3.92 billion in total annual revenue. Frontier had 4.4 million broadband subscribers and generated \$2.52 billion in total annual revenue. Sean Buckley, *The top 12 wireline providers in Q3 2016: AT&T and Verizon see broadband gains, but cable retains the upper hand*, FIERCE WIRELESS (Nov. 21, 2016); available at <http://www.fiercetelecom.com/telecom/top-12-wireline-providers-q3-2016-at-t-and-verizon-see-broadband-gains-but-cable-retains>.

Apple and one using the Google Android operating system. Similarly, the bandwagon effect creates major disincentives for individuals to refrain from abandoning the market leader for another option having fewer subscribers.

By examining both sides of a digital, broadband platform market, courts and regulatory agencies can enhance the accuracy of their assessment of competition and whether consumers benefit or suffer from intermediaries having significant market share. In turn, they can better calibrate a remedy, or reach an empirically supported conclusion that no market intervention is necessary.

2) Consider Whether and How Lock-In Exists

Courts and regulatory agencies should consider the service options available to digital, broadband subscribers. In some instances, they have ample choices that prevent lock-in and evidence a competitive marketplace. However, in other instances lock-in occurs, because consumers have few alternatives, or they incur costs, inconvenience, or reduced benefits if they leave the dominant platform.

Lock in can occur even when alternative options exist. For example, an electronic commerce site, like Ebay, may steer subscribers to a former affiliated electronic funds transfer platform operated by PayPal, even though alternative payment systems exist and can be used. Consumers have incentives to use PayPal, because the EBay site appears to favor and expedite such transactions and most vendors prefer to receive payment via PayPal. The preference for PayPal and the greater ease consumers have in using the preferred payment system generate substantial motivations to take the promoted and preferred path of least resistance.

Courts and regulatory agencies have to consider the potential for lock-in beyond simply assessing whether a specific market segment has multiple platform operators. The existence of

alternatives, by itself, does not evidence ample multi-homing options. In the absence of service alternatives, courts and regulators should consider downstream consumers' quality of experience to ensure that the apparent preference for a single platform option promotes convenience and enhances consumer welfare.

3) Assess Market Impacts, Rather Than Simply Calculate Market Share

As noted, courts and regulators generally refrain from reaching conclusions about market competitiveness based solely on calculations showing a concentrated market, or one dominated by a single venture. Large firms having high market share may evidence a firm's superior business acumen, or the need for ventures to accrue economies of scale to thrive in a specific market segment.

On the other hand, market dominance may have significant and potentially adverse impacts on consumers and the potential for competition. Significant harm may arise not just because a firm has a dominant market share, but because it can leverage dominance in one market to dominate other market segments. For example, Google dominates the market for Internet search and advertising, despite ample multi-homing alternatives.⁸⁸ Regulatory and antitrust intervention is not warranted simply because Google has acquired substantial market share in Internet search. However, the company's success in dominating the search market also translates into substantial market share in the auctioning of advertising opportunities to search consumers.⁸⁹

⁸⁸ Google has an estimated 79.88 percent share of the Internet search market in the United States as of the third quarter 2016. Matt Southern, *Latest Search Market Share Numbers: Google Search Up Across All Devices*, SEARCH ENGINE JOURNAL (Aug. 31, 2016); available at: <https://www.searchenginejournal.com/august-2016-search-market-share/172078/>.

⁸⁹ "Google's monopoly of the online search advertising market causes clear harm to consumers. The most apparent harm is reduced competition in the online advertising market,

Courts and regulators may need to consider the inter-relationship between a venture's successes in two or more markets, because dominance in combined, or interdependent markets, may trigger new or greater risks for consumers. Just as platform intermediary operation affects both downstream and upstream users, so too can market success in one market generate unrivaled opportunities to extend market power elsewhere. Such leverage may have adverse impacts on the potential for new competition, even from innovative ventures.

While the FCC has concentrated on foreclosing the potential for anticompetitive practices of ISPs biased, non-neutral networks, perhaps even greater harm can arise in the accrual of market power by combining dominance in two or more intermediary markets, e.g., Google's dominance in Internet search and advertising. Neither the FCC, nor the FTC appear interested in undertaking a current assessment of Google's upstream activities. This may reflect proper concern about mission creep and jurisdictional overreach. However, the lack of scrutiny increases the odds for false negatives, simply based on the failure to investigate.

VII. Conclusion

Digital broadband technologies and markets have reached a critical mass of market penetration and efficiency enhancements highlighted by embedded platforms. The Internet ecosystem has many markets predominated by single ventures that have acquired dominance in “winner take all” competition that rewards ventures best able to exploit positive network

where the higher prices charged to advertisers inevitably gets passed onto consumers in the form of higher prices for the advertised goods and services they buy. But a deeper harm is the stunted ‘market’ for user data itself, where lack of vigorous competition means that users too readily share that data at too low a price—usually for free—in exchange for software services that cost Google far less than the value of the user data it collects.” Nathan Newman, *Search, Antitrust, and the Economics of the Control of User Data*, 31 YALE J. ON REG. 401, 411 (Summer, 2014).

externalities. Intermediaries have conferred significant, identifiable benefits to consumers, but they also incur offsetting costs, not all of which can be easily quantified or measured.

Intermediary platforms operators can calibrate cost recovery from both upstream and downstream users. In many instances, downstream consumers have benefitted from subsidies and pricing strategies that reduce, or eliminate direct, out of pocket costs. However, subsidy payers, such as advertisers, eventually recoup their costs through higher charges for goods and services. In light of enhancements in the acquisition, analysis and marketing of consumer behavior data, both vendors and platform intermediaries now have more diversified and extensive ways to recoup costs and to improve prospects for generating more revenues. Such data mining can impose new costs on consumers who have to tolerate more extensive privacy intrusions in exchange for access to so-called free services. Enhanced consumer surveillance can impose lower or higher costs as exemplified by dynamic pricing that frequently changes rates through algorithmic analysis of overall demand, as well as a prediction of a prospective customer's intensity of preference for a particular good, or service.

In light of the mixed impacts of embedded intermediaries on competition and consumers, legislatures, courts and regulators should apply up to date tools for assessing current and prospective impacts. Unfortunately, the speed of innovation and the convergence of technologies and markets have exceeded the ability of governments to stay current. Accordingly, the tools used to assess market impact have become ill-suited and poorly calibrated to meet new challenges.⁹⁰ Conventional antitrust and economic theories lack an emphasis on

⁹⁰ “While traditional [merger and acquisition] filing thresholds such as revenue and market share are meant to capture transactions likely to give rise to competition concerns in most sectors, some antitrust authorities are now questioning whether the thresholds are adequate to identify potentially anticompetitive transactions in certain sectors, such as biotechnology and high-tech. The potential for innovation or a unique repository of ‘big data’ are often key features

identifying both short term and longer term consequences of platform operations. While immediate consumer welfare enhancement supports regulatory forbearance, governments need to consider whether and how longer term impacts will continue benign or favorable.

In too many instances, governments have overstated consumer benefits and the absence of competitive harm, because they have not considered an intermediary's impact on both upstream and downstream markets, failed to consider fully whether and how subscriber lock-in has occurred and generated rationales excusing substantial market concentration based on short term consumer benefits that may not be as generous if offsetting privacy intrusions are considered.

Going forward, governments should appreciate that platform intermediaries do not operate as charities and that the conferral of benefits to consumers may be offset by negative impacts on both consumers and competition, even in the short term. A more holistic examination of impacts, without placing a premium on short term consumer benefits, would generate a more accurate assessment of the mixed impacts generated by platform intermediaries.

of these sectors—and some question whether a company's small current revenues might mask future competitive significance.” Rachel Brandenburger, Logan Breed & Falk Schoning, *Merger Control Revisited: Are Antitrust Authorities Investigating the Right Deals?*, 31 SPG ANTITRUST 28, 29 (Spring, 2017).