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Assessing the Economic Benefits and Costs of the FCC's Imposition of Title II Regulation

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INTRODUCTION

The bi-partisan Telecommunications Act of 1996 (Act) could not be clearer regarding regulation of the Internet: “The Internet and other interactive computer services have flourished, to the benefit of all Americans, *with a minimum of government regulation.*”¹ In light of this finding, the Act declares the policy of the United States is “to preserve the vibrant and competitive free market ... for the Internet and other interactive computer services *unfettered by Federal or State regulation.*”² Congress also made clear that information services are among the interactive computer services that should remain free from regulation, and that services that “provide[] access to the Internet” are information services.³

The Act codified a pre-existing regulatory environment in which Internet firms, both infrastructure providers and the larger ecosystem of content providers, felt free to innovate, invest and compete. Economic measures of performance in this industry—price, output, innovations, and investment—all point to the success of the “pro-competitive, de-regulatory national policy framework” established by the Act and explicitly encouraged by Federal Communications Commission (FCC or Commission) decisions correctly classifying Internet access services as unregulated information services.⁴

Despite this triumph of public policy, and despite Congress’s directive to continue to leave the Internet “unfettered by Federal or State regulation,” the Commission reclassified much if not all of the Internet ecosystem as a telecommunications service in its Open Internet Order (“Order”).⁵ That decision subjects the Internet to Title II of the Communications Act, relocating it to the heavily regulated public-utility sector. The Order represents a radical shift in policy, reversing nearly two decades of consistent, bi-partisan “light touch” oversight of the Internet. Worse, the FCC effected this transformation without satisfying the basic requirement, compelled by both economic logic and most recently the Supreme Court’s decision in *Michigan v. EPA*, to conduct an appropriate consideration of the costs and benefits of the impacts of the proposed regulatory change.⁶ As students of both economics and regulation, we find that the Order fails to follow widely accepted economic principles in identifying either the likely costs or benefits of its historic decision.

¹ 47 U.S.C. § 230(a)(4) (1996) (emphasis added)

² 47 U.S.C. § 230(b)(2) (emphasis added).

³ 47 U.S.C. 230(e)(2).

⁴ H.R. Rep. No. 104-458, at 1 (Conf. Rep.).

⁵ Report and Order on Remand, Declaratory Ruling, and Order, Protecting and Promoting the Open Internet, 30 FCC Rcd 5601 (2015) [hereinafter *Order*].

⁶ 576 U.S. ____ (2015).

In this vignette, we describe three fundamental economic flaws in the Order's decision to apply Title II regulation to the Internet. *First*, the Order overstates the likely benefits of its stringent regulatory regime by relying on implausible theory and speculation about anticompetitive threats from broadband access providers. *Second*, by failing to account appropriately for the overwhelming empirical evidence showing that long-standing light-touch regulation has, as Congress intended, encouraged unprecedented investment in broadband, the Order over-states the benefits from additional regulatory controls and under-states the corollary costs that Title II will impose. *Third*, the Order recklessly dismisses evidence of the very real threat to investment, innovation and output that will likely result from the imposition of Title II—substantial additional costs the agency failed to consider properly. In sum, the Order fails not only to weigh the costs of its new common carrier regime against likely *de minimis* benefits, but also fails to apply economic rigor to its evaluation of the record.

GATEKEEPER CONCERNS DO NOT PROVIDE A SOUND FOUNDATION FOR IMPOSING TITLE II REGULATION

While acknowledging “some disagreement among commenters,” the Order relies on a flawed economic theory of market power to justify its significant expansion of the scope of regulation over Internet access.⁷ In particular, the Order asserts that “regardless of the competition in the local market,” a broadband provider’s position as a “gatekeeper” between consumers and information suppliers means that “once a consumer chooses a broadband provider, that provider has a monopoly on access to the subscriber.”⁸ As the FCC sees it, with this perceived monopoly power comes the risk that the Internet Service Provider (ISP) will promote its own content or that of affiliates more than independent content providers, damaging the open nature of the Internet.⁹

But in contrast to the claim, competition in the local market *is* relevant to both the ability and incentive of ISPs to harm competition. Indeed, the presence of competition compels ISPs to offer high quality services at attractive prices to prospective consumers in the hope they become actual customers. In the presence of a competitive choice for consumers, a firm’s actual customer base is not, as envisioned by the FCC, a collection of victims of monopoly but rather the manifestation of the firm’s ability to provide economically attractive offerings.¹⁰ In this context, *ex ante* search by consumers and the quest by firms

⁷ Order ¶180.

⁸ *Id.*

⁹ *Id.* ¶¶ 20-21, 80.

¹⁰ Such competition also undermines incentives for discriminatory conduct by ISPs against Internet content providers. In this regard, the Order fails to consider that the profitability of (and thus the incentive to engage in) discriminatory conduct vis-à-vis

for new users compels competitors to offer attractive price-quality combinations *in the absence of comprehensive public-utility regulation*.

The gatekeeper theory motivating the Commission's sudden leap to Title II ignores these fundamental economic principles. Instead of recognizing the important role of competition, the Order artificially narrows reality to the "monopoly" an ISP has "once a consumer chooses a broadband provider."¹¹ This implausible view of monopoly (true only in the literal sense that the customer is being served by a single ISP at a given moment in time) is economically vacuous. The same "monopoly" could be said to exist for customers who have entered a movie theater or restaurant. Yet this everyday phenomenon has never been seen as a market failure demanding the imposition of comprehensive regulation.¹²

In fact, the Commission acknowledges that its monopoly problem "could...be mitigated if a consumer could easily switch broadband providers" but then dismisses this possibility by listing contractual or consumer characteristics that either "may" or "can" create switching costs for consumers. The FCC concludes that the gatekeeper potential of broadband providers "is strengthened by the high switching costs consumers face when seeking a new service."¹³ The Commission's speculation that switching costs lock consumers into a given provider are flatly contradicted, however, by data that reveal both a rapidly growing market (compelling competition for new customers) and the propensity of consumers to switch (compelling competition to retain customers). Since just the end of 2010, the U.S. has added over 110 million broadband subscriptions—subscriptions for which broadband providers had to compete.¹⁴ The Commission's further claim that switching costs are "a critical factor that negatively impacts mobile broadband consumers" relies solely on a filing that, in turn, merely cites *survey* data regarding consumer reluctance to switch providers.¹⁵

content providers depends on whether the ISP could generate higher profits from the promoted (affiliated) products to cover the lost margins from departing broadband customers. For example, Time Warner Cable's losses of *broadband* subscribers during its dispute with CBS in 2014, even when that dispute was over access to television content, is indicative of how strongly and rapidly consumers respond to changes in content availability. See Brian Stelter, *Time Warner Left Bruised in Fee Battle With CBS*, THE NEW YORK TIMES (Oct. 31, 2013), http://www.nytimes.com/2013/11/01/business/media/time-warner-reports-record-quarterly-loss-of-tv-subscribers.html?_r=0 (estimating that Time Warner lost 24,000 broadband subscriptions in the quarter, compared to a gain of 131,000 and 8,000 broadband subscriptions in the prior two quarters).

¹¹ Order ¶ 80.

¹² For an enumeration of rationales for the imposition of regulation, see Stephen Breyer, *Analyzing Regulatory Failure: Mismatches, Less Restrictive Alternatives, and Reform*, 92 HARV. L. REV. 547 (1979).

¹³ Order ¶ 81.

¹⁴ *Internet Access Services: Status as of December 31, 2013*, Figure 1, FCC, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-329973A1.pdf.

¹⁵ Order ¶ 81.

Based on this, the Commission concludes that a stated reluctance to change providers is “consistent with the existence of important switching costs for consumers.”¹⁶ But contrary to that speculation, *actual consumer behavior data* show just the reverse: *monthly* churn rates among consumers of U.S. mobile telephone service providers in the first three quarters of 2014 was roughly 1.6 percent.¹⁷ And approximately *ten million* Americans changed wireless providers in the fourth quarter of 2014 alone!¹⁸

By erroneously dismissing clear market evidence of consumer switching behavior—and thus the presence of competition—the FCC substantially overstates any benefits of public-utility regulation to protect consumers against “monopoly abuses.”

THE FCC IGNORED EVIDENCE OF THE POSITIVE IMPACT OF CONGRESS'S “LIGHT-TOUCH” REGULATORY IMPERATIVE AND UNDERESTIMATED THE POTENTIAL COSTS OF A TITLE II REGIME

The speculation and erroneous theory underlying the FCC’s “gatekeeper” rationale for a sweeping increase in regulation is compounded by the Commission’s disappointing decision to ignore *actual, observed* positive economic outcomes in the provision of Internet services that have resulted from twenty years of light-touch regulation. Instead of the artificially constrained output, high prices and lack of innovation typically observed in monopoly markets, the broadband ecosystem has been characterized by the opposite behavior.¹⁹

The most basic measures of output in the communications industry are centered on connectivity (the proportion of society that is connected to the network) and use (the extent to which consumers utilize the network). In both regards, the output of broadband services has grown at staggering rates over the past twenty years. By the end of 2013, broadband access had grown to over 290 million connections, up from a mere 380,000 in 2005.²⁰ In short, consumer connectivity and usage point incontrovertibly to the economic success of broadband deployment.

¹⁶ *Id.* at ¶98.

¹⁷ *Id.* at ¶98 n. 211.

¹⁸ *Open Internet Order: Switching Realities*, CTIA (Mar. 18, 2015), available at <http://blog.ctia.org/2015/03/18/open-internet-switching-realities/>.

¹⁹ Only a small number of economically harmful actions have even been alleged—among literally millions of opportunities for such behavior—and these have been dealt with expeditiously and forcefully under existing regulatory mechanisms, without comprehensive Title II regulation. See, e.g., Larry Downes, *Unscrambling the FCC’s Net Neutrality Order: Preserving the Open Internet-But Which One?*, 20 *CommLaw Conspectus* 83, 100-105 (2011-2012); Gerald Faulhaber, *What Hath the FCC Wrought?*, Regulation (Summer 2015), at 5; Hal Singer, *Mandatory Interconnection: Should the FCC Serve as Internet Traffic Cop?*, PPI Policy Brief, PPI (May 2014), at p. 5, available at http://www.progressivepolicy.org/wp-content/uploads/2014/05/2014.05-Singer_Mandatory-Interconnection_Should-the-FCC-Serve-as-Internet-Traffic-Cop.pdf (showing that major interconnection disputes have lasted between 0 and seven days).

²⁰ *Internet Access Services: Status as of December 31, 2013*, *supra* at Figure 1; *Internet Access Services: Status as of June 30, 2009* at Table 1, FCC, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-301294A1.pdf. And broadband-enabled

Even as output has expanded dramatically, prices for broadband services have fallen precipitously. From 2002 to 2013, the price of Internet access services fell by roughly 40 percent compared to the overall Consumer Price Index.²¹

In response to the light-touch regulatory environment, investment and innovation—the means by which firms put infrastructure in place for satisfying not only current but also future consumers—have likewise been nothing short of extraordinary. In 1996, ISPs invested \$24.8 billion, yet by 2013 annual broadband-related investments had reached a staggering \$75 billion.²²

For nearly a century prior to the Act, retail-level innovation in the communications industry was unremarkable. While telephones were differently shaped and the rotary dial had been replaced with a touchtone keypad, the wireline telephone and its features were fundamentally unchanged from 1920 to 1996. Since 1996, however, countless innovations have occurred within both the networks and consumer devices used to access them. As a result, consumers are now able to toggle seamlessly between voice, data and video services using both fixed and mobile broadband infrastructure. Such innovation does not happen in a vacuum—it is a product of the institutional environment created by policymakers.²³ It is, in short, no coincidence that the explosion of innovation that has come to define the communications sector over the past twenty years overlaps perfectly with the period of light-touch regulation.

In light of these economic successes, it is difficult if not impossible to envision a compelling economic rationale for the FCC's finding that consumers and the American economy will be better served by public-utility regulation of the Internet than by continuing to regulate the Internet in a manner much closer to that imposed on typical businesses. Non-utility industries are hardly outside the scope of public oversight, being subject to a wide range of consumer and competition protection laws and regulations,

smartphone data usage has skyrocketed. *Seventeenth Report* at ¶172, FCC, available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1862A1.pdf.

²¹ *Consumer Price Index*, Bureau of Labor Statistics, Series IDs: CUUR0000SA0, CUUS0000SA0, and CUUR0000SEEE03.

²² *Investment, Capital Spending and Service Quality in U.S. Telecommunications Networks: a Symbiotic Relationship*, TIA, available at http://www.tiaonline.org/policy_/publications/filings/documents/Nov13-2002_CapEx_QoS_Final.pdf; *Broadband Investment*, US Telecom, available at <http://www.ustelecom.org/broadband-industry/broadband-industry-stats/investment>.

²³ Luke A. Stewart, *The Impact of Regulation on Innovation in the United States: A Cross-Industry Literature Review*, Info. Tech. & Innovation Found. (June 2010), available at <http://www.itif.org/files/2011-impact-regulation-innovation.pdf>.

including the Federal Trade Commission Act.²⁴ Even if additional oversight were necessary, this court made clear that the FCC has the authority to impose *ex post* remedies without resorting to the more restrictive Title II.²⁵ The incontrovertible economic benefits that have unfolded in the post-Act era of light-touch regulation easily overwhelm any hypothetical benefits of imposing common carrier, public utility-style Title II regulation. But rather than seeking a less-restrictive, truly light-touch regulatory approach, the Order seeks to disguise the Title II wolf in the sheep's clothing of light-touch regulation. This gambit won't work. Despite protestations that Title II will itself be applied in a "light touch" manner,²⁶ and promises to forbear from its most egregious regulatory requirements, the Order retains all the economic regulation embodied in Sections 201 and 202. These sections are the heart of Title II's regulatory requirements crafted in 1934 for monopoly public utilities. Even if the Commission continues to forbear, the Order will nonetheless subject the Internet to the very type of economic regulations that Congress rejected in 1996.

By ignoring the overwhelming evidence of twenty years of truly virtuous market performance, the Order ignores the Act's basic tenets. And by imposing the most restrictive form of regulation at its disposal on this well-functioning market, the FCC substantially understates the costs that can reasonably be anticipated to result from the imposition of Title II regulation.

THE ORDER DISMISSES REAL THREATS TO INNOVATION, INVESTMENT AND OUTPUT THAT WILL FOLLOW THE IMPOSITION OF OVER-REACHING REGULATION

Multiple studies focused on communications regulation find that increased regulation deters investment and innovation. For example, one rigorous economic analysis examined the rate at which new communications services were introduced by regulated firms during a period when the FCC experimented with lighter regulation. The study found that the number of services created during the period of lighter regulation was 60-99 percent higher than the model predicted if stricter regulation had remained in place.²⁷ Cross-national studies have also found that regulatory stringency has had the effect

²⁴ Ironically, by reclassifying the provision of Internet access service as a common carrier under Title II, the Order actually preempts the consumer and competition policy protections of the Federal Trade Commission, which exempt common carriers. See, e.g., 15 U.S.C. § 45(a)(2).

²⁵ *Verizon v FCC*, 740 F.3d 623 (D.C. Cir. 2014).

²⁶ The phrase "light-touch regulation" is not defined by either statute or regulation. The phrase has, however, most often been used as an affirmation of the Act's establishment of a "pro-competitive, de-regulatory national policy framework". See footnote 5, *supra*. It is that standard to which we hold the phrase. In this light, the imposition of common-carriage regulation under Title II is inconsistent with "light-touch regulation." It is neither "pro-competitive" (as any gains to competition from its imposition are speculative and rest on unfounded theory) nor "de-regulatory" (as even with specific exemptions the weight of Title II regulation will certainly increase regulation of internet access services).

²⁷ See James E. Prieger, *Regulation, Innovation, and the Introduction of New Telecommunications Services*, 84(4) Review of Economics and Statistics 704-15 (2002).

of decreasing investment, innovation and productivity growth. The OECD found, for example, that deregulatory decisions in the United States and Japan in the late 1980s and early 1990s were followed by faster growth in new communications patents relative to Germany, France, and the United Kingdom, which did not relax regulatory controls.²⁸ And in a large cross-national study that included the United States, prominent economists found that regulatory stringency led to decreased investment both generally and specifically in the communication industry.²⁹ This literature makes clear that increased regulatory stringency in the communications sector will likely dampen investment and innovation.

Turning specifically to the imposition of Title II regulation, the Order fails to heed the lessons of a natural experiment that occurred between 1996 and 2005 regarding disparate regulatory approaches to cable modem and DSL service. During that period, telephone companies providing Internet access using existing telephone network “last-mile” transmission facilities were subject to Title II for that aspect of their broadband Internet access service, while cable companies were not. Using modern econometric methods, one study demonstrated that the application of Title II slowed telephone company investment by roughly \$1 billion per year, a 5.5 percent decline relative to the companies’ 1996 capital expenditures.³⁰

Additional research estimates the impact of Title II obligations on core investment by categorizing ISP capital investment in two parts: the portion subject to Title II regulation and the portion unencumbered by Title II.³¹ Using econometric techniques to control for common factors among the two parts, the authors estimate that Title II rules could reduce the ISPs’ future wireline investments by between 17.8 percent and 31.7 percent per year.³²

²⁸ See OECD, *Communications Outlook 1995*.

²⁹ Alberto Alesina, Silvia Ardagna, Giuseppe Nicoletti & Fabio Schiantarelli, *Regulation and Investment*, 3 *Journal of the European Economic Association* 791 (2005).

³⁰ Hal Singer, *Three Ways the FCC’s Open Internet Order Will Harm Innovation*, PPI (May 19, 2015), <http://www.progressivepolicy.org/publications/policy-memo/three-ways-the-fccs-open-internet-order-will-harm-innovation/>.

³¹ Kevin A. Hassett and Robert J. Shapiro, *The Impact of Title II Regulation of Internet Providers On Their Capital Investments*, Sonecon (Nov. 2014), available at http://www.sonecon.com/docs/studies/Impact_of_Title_II_Reg_on_Investment-Hassett-Shapiro-Nov-14-2014.pdf.

³² The Order acknowledges this research, but is critical of its methodology. The Commission’s criticisms are, however, ill-founded. For instance, the Commission argues that the study incorrectly assumed that no wireless services are Title II services. This is, however, incorrect. The nuance of the FCC’s different treatment of wireless voice and broadband services are discussed on page 7 of that study. The Order also criticizes the study for leaving out “important determinants of the dependent variables” such as “the level of the firm’s demand for wireline services and its predicted rate of growth.” Order ¶420 (JA__). This criticism, however, is inapt as it is unclear that the authors’ omission biases the statistical inferences drawn in the study, and, in any event, neither of these variables is readily observable. The Commission also criticizes the study for failing to account for the Order’s forbearance from the most pernicious elements of Title II. *Id.* It is a truism that regulation can be modeled to have no effect on investment if one assumes that the regulation will never be enforced and all relevant players believe that assumption. A reasonable working assumption for economic policy analysis, however, is that regulation will be binding on firms.

The Order acknowledges a potential threat to investment and innovation from regulation generally, but argues that the Title II reclassification will prove the exception to the rule established by the existing economic literature.³³ The FCC offers three primary rationales for this counter-intuitive conclusion.

First, the Commission argues that demand and competition are key drivers of investment and that these factors will continue to drive demand even in the presence of Title II regulation. This argument is misplaced. The relevant policy question is not whether some economic factors will continue to drive investment, but whether the proposed regulation will reduce baseline levels of investment. In fact, a new study indicates that the imposition of Title II regulation will both increase costs and depress investment.³⁴ The authors explain that the new rules “could reduce the efficiency of most network arrangements that depend on Internet platforms, devalue the investments made in those platforms or based on them, and force many organizations to reorient their enterprises in ways that would minimize the costs of the regulation rather than maximizing efficient operations.”³⁵

Second, the Order draws on casual observations to conclude that “sensible regulation and robust investment are not mutually exclusive.” Specifically, the Order points to observed increases in investment following the Act despite increased interconnection and line-sharing regulations imposed at the time on local exchange carriers. This claim, however, fails to isolate the effects of the increases in regulation imposed on local exchange companies—which has been shown to depressed investment—from the critical pro-investment reductions in barriers to entry that were also part of the Act. As such, the aggregate increases in investment in the wake of the Act cannot be taken as convincing evidence that increasing regulation, as will occur with the application of Title II, will not adversely affect investment.

Third, the Commission argues that Title II reclassification will create “regulatory predictability,” offsetting investment-dampening effects that would otherwise stem from dramatically increased regulation. Setting aside the issue of whether the imposition of Title II increases or decreases regulatory uncertainty,³⁶ the argument does not support the Title II regime. The question is not whether Title II provides regulatory predictability but rather whether it does so in a manner that minimizes disruptions

³³ Order ¶ 414.

³⁴ Kevin A. Hassett and Robert J. Shapiro, *Regulation and Investment: A Note on Policy Evaluation under Uncertainty, With an Application to FCC Title II Regulation of the Internet*, Georgetown Center (July 14, 2015), available at http://cbpp.georgetown.edu/wp-content/uploads/HassettShapiro_Policy-EvaluationunderUncertainty.pdf.

³⁵ *Id.* at 14.

³⁶ But see *Id.* for a compelling argument that Title II does increase regulatory uncertainty with consequent dampening effects on investment.

to investment and innovation. The Order's salute to "regulatory predictability" ignores the potential for any other policy alternative to similarly create "regulatory predictability" with lower risk to investment.

The Commission has thus wrongly dismissed evidence of the almost-certain reduction in future broadband investment that will result from the imposition of a Title II regime, significantly underestimating its cost to the American economy.

TAKEAWAYS

Innovation is the hallmark of the Internet industry. American consumers and producers are immensely better off for the dynamic Internet environment that has unfolded in the absence of common-carrier regulation. Given that success, it would seem natural to continue Congress's demand for light-touch regulation of the Internet. An overt and pronounced shift in that policy should require at a minimum a clear and reasoned finding that common-carrier regulation of the Internet will produce *better* results—more innovation, more investment, and more consumer benefits. In the present case, this is a high burden, one that, when viewed through an economic lens, the Commission has failed to meet.