WILLIAMS, *Senior Circuit Judge*, concurring in part and dissenting in part: I agree with much of the majority opinion but am constrained to dissent. In my view the Commission's Order must be vacated for three reasons:

I. The Commission's justification of its switch in classification of broadband from a Title I information service to a Title II telecommunications service fails for want of reasoned decisionmaking. (a) Its assessment of broadband providers' reliance on the now-abandoned classification disregards the record, in violation of its obligation under *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009). Furthermore, the Commission relied on explanations contrary to the record before it and failed to consider issues critical to its conclusion. *Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). (b) To the extent that the Commission relied on changed factual circumstances, its assertions of change are weak at best and linked to the Commission's change of policy by only the barest of threads. (c) To the extent that the Commission justified the switch on the basis of new policy perceptions, its explanation of the policy is watery thin and self-contradictory.

II. The Commission has erected its regulatory scheme on two statutory sections that would be brought into play by reclassification (if reclassification were supported by reasoned decisionmaking), but the two statutes do not justify the rules the Commission has adopted.

Application of Title II gives the Commission authority to apply § 201(b) of the Communications Act, 47 U.S.C. § 201(b). The Commission invokes a new interpretation of § 201 to sustain its ban on paid prioritization. But it has failed to offer a reasonable basis for that interpretation. Absent such a basis, the ban is not in accordance with law. 5 U.S.C. § 706(2)(A) & (C).

Application of Title II also removes an obstacle to most of the Commission's reliance on § 706 of the Telecommunications Act of 1996, 47 U.S.C. § 1302, namely any rules that have the effect of treating the subject firms as common carriers. See *Verizon Communications Inc. v. Federal Communications Commission*, 740 F.3d 623, 650 (2014). But the limits of § 706 itself render it inadequate to justify the ban on paid prioritization and kindred rules.

I discuss § 201(b) and § 706 in subparts A and B of part II.

III. The Commission's decision to forbear from enforcing a wide array of Title II's provisions is based on premises inconsistent with its reclassification of broadband. Its explicit refusal to take a stand on whether broadband providers (either as a group or in particular instances) may have market power manifests not only its doubt as to whether it could sustain any such finding but also its pursuit of a "Now you see it, now you don't" strategy. The Commission invokes something very like market power to justify its broad imposition of regulatory burdens, but then finesses the issue of market power in justifying forbearance.

Many of these issues are closely interlocked, making it hard to pursue a clear expository path. Most particularly, the best place for examining the Commission's explanation of the jewel in its crown—its ban on paid prioritization—is in discussion of its new interpretation of 47 U.S.C. § 201. But that explanation is important for understanding the Commission's failure to meet its obligations under *Fox Television*, above all the obligation to explain why such a ban promotes the "virtuous cycle," which (as the majority observes) is the primary justification for reclassification under Title II. Thus a discussion critical to part I of this opinion is deferred to part II. I ask the reader's indulgence for any resulting confusion.

* * *

I should preface the discussion by acknowledging that the Commission is under a handicap in regulating internet access under the Communications Act of 1934 as amended by the Telecommunications Act of 1996. The first was designed for regulating the AT&T monopoly, the second for guiding the telecommunications industry from that monopoly into a competitive future. The 1996 Act begins by describing itself as:

> An Act [t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.

Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. Two central paradoxes of the Commission's position are (1) its use of an Act intended to "reduce regulation" to instead increase regulation, and (2) its coupling adoption of a dramatically new policy whose rationality seems heavily dependent on the existing state of competition in the broadband industry, under an Act intended to "promote competition," with a resolute refusal even to address the state of competition. In the Commission's words, "Thus, these rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential." Order ¶ 11 n.12.

I

I agree with the majority that the Commission's reclassification of broadband internet as a telecommunications service may not run afoul of any statutory dictate in the Telecommunications Act. But in changing its interpretation, the Commission failed to meet the modest requirements of *Fox Television*.

Fox states that an agency switching policy must as always "show that there are good reasons for the new policy." 556 U.S. at 515. But in special circumstances more is required. An "agency need not always provide a more detailed justification than what would suffice for a new policy created on a blank slate. [But s]ometimes it must—when, for example, its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account." *Id*.

Here the Commission justifies its decision on two bases: changed facts and a new policy judgment. To the extent it rests on new facts, *Fox* requires us to examine whether there is really anything new. *Fox* also, of course, requires us to consider reliance interests, regardless of what the Commission has said about them. Thus novel facts and reliance interests are plainly at issue. The Commission also argues that its policy change would be reasonable even if the facts had not changed. Order ¶ 360 n.993 ("[W]e clarify that, even assuming, *arguendo*, that the facts regarding how [broadband] is offered had not changed, in now applying the Act's definitions to these facts, we find that the provision of [broadband] is best understood as a telecommunications service, as discussed [elsewhere] . . . and disavow our prior interpretations to the extent they held otherwise."). In sum then, at a minimum, we must inquire whether the Commission gave reasonable attention to petitioners' claims of reliance interests, how much the asserted factual change amounts to, and finally whether the Commission has met the minimal burden of showing "that there are good reasons for the new policy." I address them in that order.

a) *Reliance*. The Order deals with reliance interests summarily, noting, "As a factual matter, the regulatory status of broadband internet access service appears to have, at most, an indirect effect (along with many other factors) on investment." Order ¶ 360. The Commission's support for the conclusion is weak and its pronouncement superficial.

To the extent that the Commission's judgment relies on the presence of "many other factors," it relies on an irrelevance. The proposition that "many other factors" affect investment is a truism. In a complex economy there will be few phenomena that are entirely driven by a single variable. Investment in broadband obviously reflects such matters as market saturation, the cost of capital, obsolescence, technological innovation, and a host of macroeconomic variables. Put more generally, the presence of causal factors X and Y doesn't show the irrelevance of factor Z. The significance of these factors tells us little about how much the relatively permissive regime that has hitherto applied accounts for the current robust broadband infrastructure. At least in general terms, the Commission elsewhere seems to answer that the old regime accounts for much. In an introductory paragraph it commends "the 'light-touch' regulatory framework that has facilitated the tremendous investment and innovation on the Internet." Order ¶ 5.

For its factual support, the Commission essentially lists several anecdotes about what happened to stock prices and what corporate executives said about investment in response to Commission proposals for regulatory change. For example, the Order notes that, after the Commission proposed tougher rules, the stocks of telecommunications companies outperformed the broader market. Order ¶ 360. This might be interesting if the Commission had performed a sophisticated analysis trying to hold other factors constant. In the absence of such an analysis, the evidence shows only that the threat of regulation was not so onerous as to precipitate radical stock market losses. The Order also has a quotation from the Time Warner Cable COO saying, in response to an FCC announcement of possible Title II classification (accompanied by some vague Commission assurances), "So . . . *yes, we will continue to invest*." *Id.* n.986 (emphasis added by the Commission). Citation of this remark would be an apt response to a strawman argument that there would have been *no* investment in broadband if the new rules had always applied, but not to the argument that a significant portion of the current investment was made in reliance on the old regime. Further, it is reasonable to expect that corporate executives—with their incentives to enhance the firm's appearance as an attractive investment opportunity and thus to keep its cost of capital down—would take the most favorable view of a new policy consistent with their obligations to investors not to paint too rosy a picture.

A more important (and logically prior) question is why this evidence matters at all. I take *Fox*'s position on reliance interests to be addressed to both fairness and efficiency. If a regulatory switch will significantly undercut the productivity and value of past investments, made in reasonable reliance on the old regime, rudimentary fairness suggests that the agency should take that into account in evaluating a possible switch. And a pattern of capricious change would undermine any agency purpose of encouraging future investment on the basis of new rules. But the effect of past policy on past investment is quite different from future levels of investment. For example, the Environmental Protection Agency's new regulations on coal-fired power plants very well might spur investment in energy by making legacy coal-fired plants less feasible to operate, thus encouraging investment in renewable energy to replace them. But that tells us little about whether the prior regulations on coal-fired plants and their alternatives, adjusted in light of reasonably foreseeable change, had a material impact on prior energy investments.

The Commission also argues that "the regulatory history regarding the classification of broadband Internet access service would not provide a reasonable basis for assuming that the service would receive sustained treatment as an information service in any event." Order ¶ 360. In short, the Commission says that reliance was not reasonable. The statement misreads the history of the classification of broadband. In March 2002, the Commission classified cable broadband as an information service, see *In the Matter of Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities* (the "*Cable Modem Declaratory Ruling*"), 17 F.C.C. Rcd. 4798 (2002); soon after that Order was affirmed by the Supreme Court in *National Cable & Telecommunications Ass'n v. Brand X Internet Service*, 545 U.S. 967 (2005), the Commission reclassified the transmission component of DSL service as an information service as well. See *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities et al.* (the "*Wireline Broadband Classification Order*"), 20 F.C.C. Rcd. 14853 (2005). The Commission continued to hold that view until 2010, when in the 2010 Notice, Notice of Inquiry, *Framework for Broadband Internet Service*, 25 F.C.C. Rcd. 7866 (2010), it sought comment on reclassification (though rejecting it in the ultimate 2010 Order). I'm puzzled at the Commission's implicit claim, Order ¶ 360, that *judicial* uncertainly—dating back to the 9th Circuit's 2000 decision in *AT&T Corp. v. City of Portland*, 216 F.3d 871 (9th Cir. 2000), reading the statute to compel classification as a telecommunications service—

made it unreasonable for firms investing in provision of internet access to think that the Commission would persist in its longheld commitment. The Commission offered fierce resistance to the 9th Circuit decision, resistance that culminated in its success in *Brand X*. It seems odd, in this context, to discount firms' reliance on the Commission's own assiduously declared views.

According to data that Commission itself uses, Order ¶ 2, broadband providers invested $343 billion[1] during the five years after *Brand X*, from 2006 through 2010. This amounts to about $3,000 on average for every American household. U.S. Census Bureau, Quickfacts, https://www.census.gov/quickfacts/table/PST045215/00.[2] For the Commission to ignore these sums as investment in reliance on its rules is to say it will give reliance interests zero weight.

No one supposes that firms' past investment in reliance on a set of rules should give them immunity to regulatory change. But *Fox* requires an agency at least to make a serious assessment of such reliance. The Commission has failed to do so.

[1] Broadband Investment – Historical Broadband Provider Capex, United States Telecom Association, available at https://www.ustelecom.org/broadband-industry-stats/investment/historical-broadband-provider-capex.

[2] This uses the average number of households between 2010 and 2014 (116 million), which gives an average of $2,951 per household. Between 2006 and 2010, there were fewer households, so the average is likely above $3,000 per household.

b) *Changed facts*. The Commission identifies two changes, neither of which seems very radical or logically linked to the new regime. First, it argues that consumers now use broadband "to access third party content, applications and services." Order ¶¶ 330, 346-47. But that is nothing new. In the Order from well over a decade ago that *Brand X* affirmed, the Commission said that consumers "may obtain many functions from companies with whom the cable operator has not even a contractual relationship" instead of from their cable internet service provider. *Declaratory Ruling and Notice of Proposed Rulemaking*, 17 F.C.C. Rcd. 4798 ¶¶ 25, 38 & n.153 (2002) ("*Declaratory Ruling*").

Second, the Order points to the emphasis that providers put on the "speed and reliability of transmission separately from and over" other features. Order ¶¶ 330, 351. Again, there is nothing new about these statements from broadband providers, who have been advertising speed for decades. See Dissenting Statement of Commissioner Ajit Pai to Order ("Pai Dissent") at 357-58; Dissenting Statement of Commissioner Michael O'Rielly to Order at 391. As Justice Scalia put it in an undisputed segment of his *Brand X* dissent, broadband providers (like pizzerias) "advertise[] quick delivery" as an "advantage[] over competitors." 545 U.S. at 1007 n.1 (Scalia, J., dissenting).

At no point does the Commission seriously try to quantify these alleged changes in the role or speed of internet service providers. Even if there were changes in degree in these aspects of the internet, the Commission doesn't explain why an increase in consumer access to third-party content, or an increase in competition to offer high-speed service, would make application of Title II more appropriate as a policy matter now than it was at the time of the *Declaratory Ruling* at issue in *Brand X*.

I confess I do not understand the majority's view that the section of *Fox* on changed circumstances, quoted above, is not triggered so long as the agency's current view of the circumstances is sustainable. Maj. Op. 47. Whatever the soundness of such a view, it seems inapplicable where, as here, the agency explicitly invokes changed circumstances: "Changed factual circumstances cause us to revise our earlier classification of broadband Internet access service." Order ¶ 330.

c) *New reasoning*. Perhaps recognizing the frailty of its claims of changed facts, the Commission tries to cover its bases by switching to the alternative approach set forth in *Fox*, a straightforward disavowal of its prior interpretation of the 1996 Act and related policy views. See, e.g., Order ¶ 360 n.993.

The Commission justifies its reclassification almost entirely in terms of arguments that provision of such services as DNS and caching, when provided by a broadband provider, do not turn the overall service into an "information service." Rather, those functions in its view fit within § 153(24)'s exception for telecommunications systems management. Order ¶ 365-81. Thus, the Commission set for itself a highly technical task of classification, concluding that broadband internet access could fit within the literal terms of the pertinent statutory sections. And it accomplished the task. That it could do so is hardly surprising in view of the broad leeway provided by *Brand X*, which gave it authority to reverse the policy judgment it had made in the decision there under review, the *Declaratory Ruling*.

But in doing so the Commission performed *Hamlet* without the Prince—a finding of market power or at least a consideration of competitive conditions. The *Declaratory Ruling* sustained in *Brand X* invoked serious economic propositions as the basis for its conclusion. For example, the *Brand X* majority noted that in reaching its initial classification decision the Commission had concluded that "broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market." *Id.* ¶ 5, quoted by *Brand X*, 545 U.S. at 1001 (internal quotation marks omitted). But the Commission has now discovered, for reasons still obscure, that a "minimal regulatory environment," far from promoting investment and innovation, retards them, so that the Commission must replace that environment with a regime that is far from "minimal."

And when parties claimed that the *Declaratory Ruling* was inconsistent with the Commission's decision to subject facilities-based enhanced services providers to an obligation to offer their wires on a common-carrier basis to competing enhanced-services providers, *In re Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry)*, 104 F.C.C. 2d 958, 964 ¶ 4 (1986), the *Brand X* Court responded by looking to the policy reasons that the Commission itself had invoked, reasons grounded in concern over monopoly. The Court said:

> In the *Computer II* rules, the Commission subjected facilities-based providers to common-carrier duties not because of the nature of the "offering" made by those carriers, but rather because of the concern that local telephone companies would abuse the monopoly power they possessed by virtue of the "bottleneck" local telephone facilities they owned. . . . The differential treatment of facilities-based carriers was therefore a function not of the definitions of "enhanced service" and "basic service," but instead of a choice by the Commission to regulate more stringently, in its discretion, certain entities that provided enhanced service.

545 U.S. at 996. Thus the Court recognized the Commission's practice of regarding risks of "abuse [of] monopoly power" as pivotal in *Computer II*. While the 1996 Act by no means conditions classification under Title II on a finding of market power, *Brand X* shows that the Court recognized the relevance of market power to the Commission's classification decisions. See *Declaratory Ruling* ¶ 47 (resting the classification decision in part on the desire to avoid "undermin[ing] the goal of the 1996 Act to open all telecommunications markets to competition").

Of course the Court's citation of these instances of Commission reliance on the economic and social values associated with competition are just examples brought to our attention by *Brand X*. In addressing activities on the periphery of highly monopolized telephone service, the Commission has for nearly four decades made the presence or prospect of competition the touchstone for refusal to apply Title II. The *Computer II* decision, for example, says of the *Computer I* decision, "A major issue was whether communications common carriers should be permitted to market data processing services, and if so, what safeguards should be imposed to insure that the carriers would not engage in anti-competitive or discriminatory practices." *In re Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C. 2d 384, 389-90 ¶ 15 (1980) ("*Computer II*"). In the *Computer II* decision, it is hard to go more than a page or so without encountering discussion of competition. The decision concludes that, "In view of all of the foregoing evidence of an effective competitive situation, we see no need to assert regulatory authority over data processing services." *Id.* at 433, ¶ 127. The competitiveness of the market was in large part what the inquiry was *about*. See Jonathan E. Nuechterlein & Philip J. Weiser, *Digital Crossroads* 190-91

(2d ed. 2013) (explaining link of *Computer II*'s unbundling rules to FCC's concern over monopoly).

Yet in the present Order the Commission contradicted its prior strategy and explicitly declined to offer any market power analysis: "[T]hese rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or potential." Order ¶ 11 n.12. In fact, as we'll see, many of the Commission's policy arguments assert what sound like claims of market power, but without going through any of the fact-gathering or analysis needed to sustain such claims.

The Order made no finding on market power; in order to do so it would have to answer a number of basic questions. Most notably, as shown in Figure 1 below, there are a fairly large number of competitors in most markets, with 74% of American households having access to at least two fixed providers giving speeds greater than 10 Mbps and 88% with at least two fixed providers giving access to service at 3 Mbps. *In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable & Timely Fashion, & Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, 30 F.C.C. Rcd. 1375 ¶ 83 (2015) ("*2015 Broadband Report*"). Furthermore, 93% of Americans have access to three or more mobile broadband providers—access which at least at the margin must operate in competition with suppliers of fixed broadband. *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993: Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, Seventeenth Report*, 29 F.C.C. Rcd. 15311 ¶ 51, Chart III.A.2 (2014).

Figure 1: American Households' Access to
Fixed Broadband Providers

Source: *2015 Broadband Report*, Chart 2.

The Commission emphasizes how few people have access to 25 Mbps, but that criterion is not grounded in any economic analysis. For example, Netflix—a service that demands high speeds—recommends only 5 Mbps for its high-definition quality service and 3 Mbps for its standard definition quality. Netflix, *Internet Connection Speed Recommendations*, https://help.netflix.com/en/node/306. A likely explanation for why there has not been more rollout of higher speeds is that many people are reluctant to pay the extra price for it. Indeed, the *2015 Broadband Report* indicates that fewer than 30% of customers for whom 25 Mbps broadband is available actually order it. *2015 Broadband Report* ¶ 41 (including Table 3 and Chart 1).

That many markets feature few providers offering service at 25 Mbps or above is hardly surprising. In a competitive world of rapidly improving technology, it's unreasonable to expect that all firms will simultaneously launch the breakthrough services everywhere, especially in a context in which more than 70% of the potential customers decline to use the latest, priciest service.

The Commission established the 25 Mbps standard in its *2015 Broadband Report* ¶ 45. Its explanations seem superficial at best. For example, it relies on the marketing materials of broadband providers touting the availability and benefits of speeds at or greater than 25 Mbps. *Id*. ¶ 28. Perhaps the authors of the Order have never had the experience of a salesperson trying to sell something more expensive than the buyer inquired about—and, not coincidentally, more lucrative for the salesperson. The Commission also justifies the standard by arguing that 10 Mbps would be insufficient to "participate in an online class, download files, and stream a movie at the same time" and to "[v]iew 2 [high-definition] videos." *Id*. ¶ 39. This is like setting a standard for cars that requires space for seven passengers. The data seem to suggest that many American families are unwilling to pay the extra to be sure that all members can have continuous, simultaneous, separate access to high-speed connectivity (perhaps some of them read? engage in conversation?). The fact that the Commission strains so much to justify its arbitrary criterion shows how out of line with reality such a criterion is. The weakness of the Commission's reasoning suggests that its main purpose in setting the "standard" may simply be to make it appear that millions of Americans are at the mercy of only one supplier, or at best two, for critically needed access to the modern world. All without bothering to conduct an economic analysis!

Of course, if the Commission had assessed market power, it would have needed to define the relevant market, to understand the extent to which providers of different speeds and different services compete with each other. When defining markets for purposes of assessing competition, the Department of Justice and Federal Trade Commission use the "small but significant and non-transitory increase in price" ("SSNIP") test. The test tries to determine whether a market actor can benefit from a hypothetical increase in price, indicating market power. U.S. Department of Justice and the Federal Trade Commission, *Horizontal Merger Guidelines* 9 (2010) ("*Horizontal Merger Guidelines*"). But the Commission did not conduct such a test, and we cannot say how it would come out.

Because broadband competition is geographically specific, simple market share data at a national level are of limited value. But firms that provide service to large numbers of consumers, albeit not everywhere, seem likely to rank as potential competitors quite broadly. With these limits in mind, we can look at U.S. subscriber numbers for each of the firms in the market, Leichtman Research, *About 645,000 Add Broadband in the Third Quarter of 2015*, http://www.leichtmanresearch.com/press/111715release.html, and construct a Herfindahl–Hirschman Index, which in fact is 1,445 points. This level is in the Department of Justice's Range for "Unconcentrated Markets"—that is, markets where no firm has market power. *Horizontal Merger Guidelines* at 18-19. I report below the data used to construct the index. In fact, this number is biased upward (and thus biased toward finding market power), since the data for several smaller companies are grouped as if for only one, making it seem as if there is more concentration than there in fact is.

Similarly, the Commission scoffs at what it regards as low turnover in customers' use of mobile service providers, but the rate of turnover actually looks quite substantial. The Commission points to average monthly churn rates of 1.56% in mobile broadband across four leading providers. Order ¶ 98 n.211. Assuming that a single person does not switch more than once in a year, that rate of churn means that 18.72% of customers switch providers each year, suggesting quite robust competition. Interestingly, the Commission is especially hard on declines in churn rate, *id*., which in the absence of increased concentration or some new obstacle to switching might well suggest increased consumer satisfaction.

To bolster its switching data claims, the Commission points to documents in which parties to the rulemaking make conclusory assertions purportedly showing that 27 percent of mobile broadband consumers do not switch though "dissatisfied" with their current carriers. Order ¶ 98. Without a plausible measure of "dissatisfaction" (none is offered), the number is meaningless.

Table 1: Fixed Broadband Subscribers by Provider

	Subscribers	
	Number	Percent
Cable Companies		
Comcast	22,868,000	25.55%
Time Warner Cable	13,016,000	14.54%
Charter	5,441,000	6.08%
Cablevision	2,784,000	3.11%
Suddenlink	1,202,400	1.34%
Mediacom	1,067,000	1.19%
WOW (WideOpenWest)	712,300	0.80%
Cable ONE	496,865	0.56%
Other Major Private Cable Companies	6,675,000	7.46%
Total Cable	54,262,565	60.62%
Telephone Companies		
AT&T	15,832,000	17.69%
Verizon	9,223,000	10.30%
CenturyLink	6,071,000	6.78%
Frontier	2,415,500	2.70%
Windstream	1,109,600	1.24%
FairPoint	313,982	0.35%
Cincinnati Bell	281,300	0.31%
Total Telephone	35,246,382	39.38%
Total Broadband	89,508,947	100.00%

Source: Leichtman Research.

Even though never making any finding on market power, the Commission seems almost always to speak of fixed and mobile broadband separately. Of course to a degree the statute requires this. But if the Commission were the least bit serious about the market dysfunction that might provide support for its actions, it would consider competition between the two. The frequent articles in the conventional press about fixed broadband customers' "cutting the cord" in favor of complete reliance on mobile suggests it would be an interesting inquiry.

None of the above is intended to suggest that the Commission could not have made a sustainable finding that every firm in every relevant market has market power. My aim is simply to make two points: (1) that such a degree of market power cannot be assumed, as the Commission itself seems to acknowledge in its disclaimer of interest in market power, Order ¶ 11 n.12; and (2) that the Commission's reliance on consumers' "high switching costs," *id*. ¶ 81 (discussed below in part II), which is an implicit assertion that the providers have market power, poses an empirical question that is susceptible of resolution and is in tension with the Commission's assertion that it is not addressing "market power or its abuse, real or potential."

In a move evidently aimed at circumventing the whole market power issue (despite Title II's origin as a program for monopoly regulation), the Commission rests on its "virtuous cycle" theory, to wit the fact that "innovations at the edges of the network enhance consumer demand, leading to expanded investments in broadband infrastructure that, in turn, spark new innovations at the edge." Order ¶ 7. The Commission clearly expects the policy adopted here to cause increases in broadband investment.

I see no problem with the general idea. Indeed, it seems to me it captures an important truth about any sector of the economy. Though the subsectors may compete over rents, the prosperity of each subsector depends on the prosperity of the others—at least it does so unless some wholly disruptive technology replaces one of the subsectors. American wheat producers, American railroads, steamship lines, and wheat consumers around the globe participate in a virtuous cycle; medical device inventors, hospitals, doctors, and patients participate in a virtuous cycle. Innovation, to be sure, is especially robust in the information technology and application sectors, but a mutual relationship between subsectors pervades the economy.

There is an economic classification issue that the Commission does not really tackle: whether broadband internet access is like transportation or is a platform in a two-sided market, i.e., a business aiming to "facilitate interactions between members of . . . two distinct customer groups," David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POLICY INTERNATIONAL 151, 152 (2007), which in this case would be edge providers and users. (Two-sided markets are barely discussed at all, with the only mentions of any sort in the Order at ¶¶ 151 n.363, 338 & n.890, 339 n.897.) Although the Commission seems at one point to characterize broadband internet access as a two-sided market, see *id*. ¶ 338, it nowhere develops any particular consequences from that classification or taps into the vast scholarly treatment of the subject. The answer to the question may well shed light on the reasonableness of the regulations, but in view of the Commission's non-reliance on the distinction we need not go there.

I do not understand the Commission to claim that its new rules will have a *direct positive* effect on investment in broadband. The positive effect is expected from the way in which, in the Commission's eyes, the new rules encourage demand for and supply of content, which it believes will indirectly spur demand for and investment in broadband access.

The direct effect, of which the Commission doesn't really speak, seems unequivocally negative, as petitioner United States Telecom Association ("USTA") argues. USTA Pet'rs' Br. 4 ("Individually and collectively, these rules will undermine future investment by large and small broadband providers, to the detriment of consumers."); see also *id*. 54. Besides imposing the usual costs of regulatory compliance, the Order increases uncertainty in policy, which both reason and the most recent rigorous econometric evidence suggest reduce investment. Scott R. Baker, Nicholas Bloom & Steven J. Davis, *Measuring Economic Policy Uncertainty*, 131 QUARTERLY JOURNAL OF ECONOMICS (forthcoming 2016). (Though the paper is focused on economy-wide policy uncertainty and effects, it is hard to see why the linkage shown would not apply in an industry-specific setting.) In fact, the Order itself acknowledges that vague rules threaten to "stymie" innovation, Order ¶ 138, but then proceeds to adopt vague rules.

Here, a major source of uncertainty is the Internet Conduct Standard, which forbids broadband providers to "unreasonably interfere with or unreasonably disadvantage" consumer access to internet content. 47 C.F.R. § 8.11. All of these terms—"unreasonably," "interfere," and "disadvantage"—are vague ones that increase uncertainty for regulated parties. Indeed, the FCC itself is uncertain what the policy means, as indicated by the FCC Chairman's admission that even he "do[esn't] really know" what conduct is proscribed. February 26, 2015 Press Conference, *available at* http://goo.gl/oiPX2M (165:30-166:54). The Commission does announce a "nonexhaustive list" of seven factors to be used in assessing providers' practices, including "end-user control," "consumer protection," "effect on innovation," and "free expression." Order ¶¶ 138-45. But these factors themselves are vague and unhelpful at resolving the uncertainty.

The Commission made an effort to palliate the negative effect of its "standards" by establishing a procedure for obtaining advisory opinions. Order ¶¶ 229-39. It delegated authority to issue such opinions to its Enforcement Bureau, perhaps thereby telegraphing its general mindset on how broadly it intends its prohibitions to be read. But the Bureau has complete discretion on whether to provide an answer at all. Order ¶ 231. Further, any advice given will not provide a basis for longterm commitments of resources: the Bureau is free to change its mind at will, and as the opinions will be issued only at the staff level, the Commission reserves its freedom to act contrary to the staff's conclusions at any time. Order ¶ 235. I do not understand this to mean that the Commission will seek penalties against parties acting in reliance on an opinion while it is still in effect, but parties in receipt of a favorable opinion are on notice that they may be forced to shut down a program the minute the Bureau reverses itself or the Commission countermands the Bureau.

Besides affording rather fragile assurance, the advisory process promises to be slow. "[S]taff will have the discretion to ask parties requesting opinions, as well as other parties that may have information relevant to the request or that may be impacted by the proposed conduct, for additional information." *Id*. ¶ 233. Given these possible information requests from various parties, including adverse ones, it is unsurprising that the Commission is unwilling to give any timeliness commitment, explicitly "declin[ing] to establish any firm deadlines to rule on [requests for advisory opinions] or issue response letters." *Id.* ¶ 234.

The palliative effect of these procedures may be considerable for the very large service providers. They are surely accustomed to having their lawyers suit up, research all the angles, participate in proceedings after notice has been given to all potentially adversely affected parties, and receive, after an indefinite stretch, a green light or a red one. For the smaller fry, the internet service provider firms whose growth is likely to depend on innovative business models (precisely the sort that seem likely to run afoul of the Commission's broad prescriptions; see part II.B), the slow and costly advisory procedure will provide only a mild antidote to those prescriptions' negative effect. This of course fits the general pattern of regulation's being more burdensome for small firms than for large, as larger firms can spread regulation's fixed costs over more units of output. See Nicole V. Crain & W. Mark Crain, *The Impact of Regulatory Costs on Small Firms* 7 (2010). And in evaluating the impact on investment in broadband, which the Commission assures us the Order will stimulate, quality is surely relevant as well as quantity.

Further, given the breadth and vagueness of the standards, many of the acts for which firms are driven to seek advice will likely be rather picayune. As head of the Civil Aeronautics Board in its what proved to be its waning days, Alfred Kahn got a call in the middle of the night from an airline trying to find out whether its application to transport sheep from Virginia to England had been approved. "The matter was urgent, because the sheep were in heat!" Susan E. Dudley, *Alfred Kahn, 1917-2010, Remembering the Father of Airline Deregulation*, 34 REGULATION 8, 10 (2011). The internet we know wasn't built by firms requesting bureaucratic approval for every move.

Furthermore, 47 U.S.C. § 207, which applies to broadband providers once they are subject to Title II, increases uncertainty yet more. Section 207 allows "[a]ny person claiming to be damaged by any common carrier . . . [to] either make complaint to the Commission . . . , or . . . bring suit for the recovery of the damages for which such common carrier may be liable under the provisions of this chapter." In other words, reclassification exposes broadband providers to the direct claims of supposedly injured parties, further increasing uncertainty and risk. In short, the Order's probable direct effect on investment in broadband seems unambiguously negative.

As to the hoped-for indirect effect, the idea that it will be positive depends on the supposition that these new rules (the specific and the general) will cure some material problem, will avert some threat that either is now burdening the internet or could reasonably be expected to do so absent the Commission's intervention. Why, precisely, the observer wants to know, has the Commission repudiated the policy judgment it made in 2002, that "broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market"? *Declaratory Ruling* ¶ 5. The answer evidently turns on the Commission's conclusion that broadband providers have indulged (or will indulge) in behavior that threatens the internet's "virtuous cycle." Indeed, the majority points to the need to reclassify broadband so that the Commission could promulgate the rules as the Commission's "'good reason' for [its] change in position," Maj. Op. 43, and indeed its only reason. But the record contains multiple reasons for thinking that the Commission's new rules will retard rather than enhance the "virtuous cycle," and the Commission's failure to answer those objections renders its decision arbitrary and capricious. I now turn to those arguments, first in the context of 47 U.S.C. §§ 201, 202 (part II.A) and then in the context of § 706 of the 1996 Act (part II.B).

II

Having reclassified broadband service under Title II, the Commission has relied on two specific provisions to sustain its actions: § 201(b) of the Communications Act, 47 U.S.C. § 201(b), and § 706 of the Telecommunications Act of 1996, 47 U.S.C. § 1302. The petitioners contend that neither provides adequate support for the Commission's actions. Furthermore, as just mentioned, the Commission's arguments here bear directly on the reasonableness of the reclassification decision itself.

A

Petitioners Alamo Broadband Inc. and Daniel Berninger ("Alamo-Berninger") argue that even if Title II could properly be applied to broadband service, that Title gives the Commission no authority to prohibit reasonable rate distinctions. Alamo-Berninger Br. 17-19. Berninger is a would-be edge provider working on new technology that he believes could provide much enhanced telephone service—but *only* if he could be assured that "latency, jitter, and packet loss in the transmission of a communication will [not] threaten voice quality and destroy the value proposition of a high-definition service." Declaration of Daniel Berninger, October 13, 2015, at 2. He is ready to pay for the assurance of high-quality service, and asserts that the Commission's ban on paid prioritization will obstruct successful commercial development of his innovation. Berninger appears to be exactly the sort of small, innovative edge provider that the Commission claims its Order is designed to assist. In the words of Shel Silverstein's children's song, "Some kind of help is the kind of help we all can do without."

For our purposes, of course, the question is whether, as the Alamo-Berninger brief argues, the section of the statute invoked by the Commission under Title II, namely § 201(b), authorizes the ban, or, more precisely, whether the Commission has offered any reasonable interpretation of § 201(b) that would encompass the ban.

A number of points by way of background: First, nothing in the Order suggests that the paid prioritization ban allows any exception for rate distinctions based on differing costs of transmission, time-sensitivity of the material transmitted, or congestion levels at the time of transmission, all variables historically understood to justify distinctions in rates. Alfred E. Kahn, *The Economics of Regulation* (1988), at 63 (different costs), 63-64 (different elasticities of demand, as would be reflected in time sensitivity), 88-94 (congestion). The Alamo-Berninger brief cites the FCC chairman's observation in Congress, "There is nothing in Title II that prohibits paid prioritization," Hearing before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce, and Technology of the United States House Commission," Video at 44:56 (May 20, 2014), available at http://go.usa.gov/3aUmY, but that need not detain us. More important, general principles of public utility rate regulation have always allowed reasonable rate distinctions, with many factors determining reasonableness. Kahn, *The Economics of Regulation*, at 63 (noting that, "from the very beginning, regulated companies have been permitted to discriminate in the economic sense, charging different rates for various services"). But the ban adopted by the Commission prohibits rate differentials for priority handling regardless of factors that would render them reasonable under the above understandings. Although the Order provides for the possibility of waiver, it cautions, "An applicant seeking waiver relief under this rule faces a high bar. We anticipate granting such relief only in exceptional cases." Order ¶ 132.

Second, in a case discussing the terms "unjust" and "unreasonable" as used in § 201(b) and in its fraternal twin § 202(a), we said that those words "open[] a rather large area for the free play of agency discretion." *Orloff v. FCC*, 352 F.3d 415, 420 (D.C. Cir. 2003); see also *Global Crossing Telecomms., Inc. v. Metrophones Telecomms., Inc.*, 550 U.S. 45 (2007) (recognizing the Commission's broad authority to define "unreasonable practice[s]" under § 201(b)). But "large" is not infinite.

Third, in the order under review in *Orloff* the Commission focused on § 202 but mentioned § 201. We summarized it as holding that "if a practice is just and reasonable under § 202, it must also be just and reasonable under § 201." *Orloff*, 352 F.3d at 418 (citing *Orloff v. Vodafone AirTouch Licenses LLC d/b/a Verizon Wireless*, 17 F.C.C. Rcd. 8987, 8999 (2002) ("Defendants . . . offer[] the same defenses to the section 201(b) claim as they do to the section 202(a) claim. We reject Orloff's section 201(b) claim. As noted, section 201(b) declares unlawful only 'unjust or unreasonable' common-carrier practices. For the reasons discussed [regarding section 202(a)], we find Defendants' concessions practices to be reasonable.")).

Fourth, the Commission (at least for the moment) allows ISPs to provide *consumers* differing levels of service at differing prices. As it says in its brief, "The *Order* does not regulate rates—for example, broadband providers can (and some do) reasonably charge consumers more for faster service or more data." Commission Br. 133. The statement is true (for now) vis-à-vis rates to consumers. But the ban on paid prioritization obviously regulates rates—the rates paid by edge providers; it insists that the *incremental rate* for assured or enhanced quality of service must be zero. Although I cannot claim that the parties' exposition of the technology is clear to me, it seems evident that the factors affecting quality of delivery to a consumer include not only whatever service characteristics go into promised (and delivered) speed at the consumer end but also circumstances along the route. "Paid peering" (discussed below) would be unintelligible if it were otherwise.

With these background points in mind, I turn to the Commission's treatments of "unjust" and "unreasonable" under §§ 201 and 202. Its principal discussions of the concept have occurred in the context of § 202(a), which bars "any unjust or unreasonable discrimination in charges, practices. . . ," etc. Section § 201(b), relied on by the Commission here, is very similar but does not include the word "discrimination." § 201(b) ("All charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful . . . .") The Order's language explaining its view of § 201(b) doesn't mention this difference, so evidently the Commission's interpretation doesn't rely on it.

The Commission's decisions under § 202 have plainly recognized the permissibility of reasonable rate differences. In *In re Dev. of Operational, Tech. & Spectrum Requirements for Meeting Fed., State & Local Pub. Safety Agency Commc'n Requirements Through the Year 2010*, 15 F.C.C. Rcd. 16720 (2000), for example, the Commission issued an order declaring that premium charges for prioritized emergency mobile services were not unjust and unreasonable. In full accord with the usual understanding of rate regulation, the

Commission said, "Section 202 . . . does not prevent carriers from treating users differently; it bars only *unjust* or *unreasonable* discrimination. Carriers may differentiate among users so long as there is a valid reason for doing so." *Id*. at 16730-31(emphasis in original)). It reasoned that, "in emergency situations, non-[emergency] customers simply are not 'similarly situated' with [emergency] personnel" because "the ability of [the latter] to communicate without delays during emergencies is essential." *Id*. at 16731. Even when the Commission engages in full-scale rate regulation (which it purports to eschew in the Order), it explicitly recognizes that reasonable price differentials are appropriate where the services in question are unlike. See, e.g., *In re AT&T Communications Revisions to Tariff F.C.C. No. 12*, 6 F.C.C. Rcd. 7039 ¶ 8 (1991).

Tellingly, in its prioritized emergency mobile services decision the Commission did not see fit to discuss § 201 at all. The principle underlying the Commission's understanding of § 202 was a broad one—that allowance of differential rates based on "valid reasons" advances the public interest. Whatever explains the lack of any reference to § 201, the Commission's recognition that differential rates were not inherently unjust or unreasonable under § 202 requires, as a minimum of coherent reasoning, that it offer some explanation why the same words in § 201 should preclude such differentials. See *Orloff v. Vodafone AirTouch Licenses LLC d/b/a Verizon Wireless*, 17 F.C.C. Rcd. 8987, 8999 (finding reasonableness and justness under § 202 to be sufficient for finding the same under § 201). Of course this is no more than a recognition of the principle, prevailing throughout the era of federal regulation of natural monopolies, that it is just and reasonable that customers receiving extra speed or reliability should pay extra for it. A classic and pervasive example is the differential in natural gas transmission between firm and interruptible service. See, e.g., *Fort Pierce Utilities Auth. of*

City of Fort Pierce v. FERC, 730 F.2d 778, 785-86 (D.C. Cir. 1984).

I note that the ban here is simply on *differences* in rates, an issue normally addressed under statutory language barring discrimination. So it is at least anomalous that the Commission here relies on § 201(b), which says nothing about discrimination, rather than § 202(a), which does. The only reason I can discern is that the Commission's interpretation of § 202 was more clearly established, and obviously didn't ban reasonable discriminations. Accordingly, the Commission jumped over to § 201(b), about which it had said relatively little.

In the passage where the Order claims support from § 201(b), the Commission appears to acknowledge that it has never interpreted that section to support a sweeping ban on quality-of-service premiums, but, speaking of its anti-discrimination decisions (evidently under both §§ 201(b) and 202(a)), it says that "none of those precedents involved practices that the Commission has twice found threaten to create barriers to broadband development that should be removed under section 706." Order ¶ 292. This is an odd form of statutory interpretation. Finessing any effort to fit the agency action within the statutory *language*, it only claims that the banned practice threatens broadband deployment. Maybe the theory works, but it can do so only by a sturdy showing of how the banned conduct posed a "threat." As we'll see, the Commission has made no such showing, let alone a sturdy one.

Indeed, I can find no indication—and the Commission presents none—that any of the agencies regulating natural monopolies, such as the Interstate Commerce Commission, Federal Energy Regulatory Commission, or Federal Communications Commission—has ever attempted to use its mandate to assure that rates are "just and reasonable"[3] to invalidate a rate distinction that was not unreasonably discriminatory. To uproot over a century of interpretation—and with so little explanation—is truly extraordinary.

In its interpretation of § 201 the Commission rests its claim of a "threat" to the "virtuous cycle" theory mentioned above: "innovations at the edges of the network enhance consumer demand, leading to expanded investments in broadband infrastructure that, in turn, spark new innovations at the edge," Order ¶ 7, and the cycle repeats on and on.

The key question is what underlies the Commission's idea that a ban on paid prioritization will lead to more content, giving the cycle extra spin (or, equivalently, reducing the drag caused by paid prioritization). Order ¶ 7. In what way will an across-the-board ban on paid prioritization increase edge provider content (and thus consumer demand)? Or, putting it in terms of a "threat," how does paid prioritization threaten the flourishing of the edge provider community (and thus consumer demand, and thus broadband deployment)?

[3] See, e.g., Interstate Commerce Act of 1887, 24 Stat. 379, § 1 ("All charges made for any service rendered or to be rendered in the transportation of passengers or property as aforesaid, or in connection therewith, or for the receiving, delivering, storage, or handling of such property, shall be reasonable and just; and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful."); Federal Power Act, 16 U.S.C. § 824d ("All rates and charges made, demanded, or received by any public utility for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.")

In fact, as we'll see, the Commission's hypothesis that paid prioritization has deleterious effects seems not to rest on any evidence or analysis. Further, the Order fails to address critiques and alternatives.

I look first to the support offered by the Commission for its claim. The Order asserts that "[t]he Commission's conclusion [that allowance of paid prioritization would disadvantage certain types of edge providers] is supported by a well-established body of economic literature, including Commission staff working papers." Order ¶ 126. This claim is, to put it simply, false. The Commission points to four economics articles, none of which supports the conclusion that all distinctions in rates, even when based on differentials in service, will reduce the aggregate welfare afforded by a set of economic transactions.[4] Indeed, the Commission plainly didn't look at the articles. None of them even addresses price distinctions calibrated to variations in quality of service; rather they are devoted to the sort of price differences addressed by the Robinson-Patman Act, 15 U.S.C. § 13, targeting sellers who sell the *same good* of the *same quality* at different prices. Three say that in some circumstances rules against price differentials *can* be beneficial (to repeat, the articles speak of rules against differentials *not* related to

[4] Michael L. Katz, *Price Discrimination and Monopolistic Competition*, 52 ECONOMETRICA 1453, 1453-71 (1984) ("*Price Discrimination*"); Michael L. Katz, *Non-Uniform Pricing, Output and Welfare under Monopoly*, 50 REV. ECON. STUD. 37, 37-56 (1983) ("*Output and Welfare*"); Michael L. Katz, *The Welfare Effects of Third-Degree Price Discrimination in Intermediate Good Markets*, 77 AM. ECON. REV. 154, 154-167 (1987); Yoshihiro Yoshida, *Third Degree Price Discrimination in Input Markets: Output and Welfare*, 90 AM. ECON. REV. 240, 240-246 (2000) ("*Third Degree Price Discrimination*").

quality of service), not that they *are* beneficial.[5] The fourth paper, still within the sphere of non-quality-related price distinctions, is still worse for the Commission, concluding that "a flat ban" on price discrimination (even assuming no differential in cost and quality, unlike the Commission rule) "could have adverse welfare consequences," and that "the analysis does not reveal whether there is any implementable form of regulation that would be welfare-improving." Katz, *The Welfare Effects*, at 165.

It is probably no coincidence that the author of three of these articles, Michael Katz, a former chief economist at the Commission, filed a declaration in this proceeding opposing the type of regulation adopted in the Order as overly broad, especially given that the behavior banned was at most responsible for only hypothetical harms. Protecting and Promoting Consumer Benefits Derived from the internet: Declaration of Michael L. Katz, July 15, 2014 ("Katz Declaration"), at 2-3. I will discuss his critique and the alternatives he offers shortly.

The Order also points to two old Commission reports that it claims support its argument. Order ¶ 126 n.297. They do not. One, Jay M. Atkinson & Christopher C. Barnekov, *A Competitively Neutral Approach to Network Interconnection*, OPP Working Paper Series, No. 34, at 15 (2000), deals with network interconnection pricing and advocates a "bill and

[5] Katz, *Price Discrimination*, at 1454 ("uniform pricing is more efficient than price discrimination when the number of uninformed consumers is small"); Katz, *Output and Welfare*, at 37 ("there may be scope for improving market performance through regulation" of price discrimination); Yoshida, *Third Degree Price Discrimination*, at 244 ("[i]n general, we cannot expect" the condition required for regulation to improve welfare to be true).

keep" system ("under which carriers split equally those costs that are solely incremental to interconnection, and recover all remaining costs from their own customers," according to the report, *id*. at ii). Unlike the articles cited, it does address variations in quality of service, but only to argue that the ability of one provider to lower its quality doesn't undermine the case for "bill and keep" because the quality-lowering provider will bear "the main impact itself." *Id*. at 20. This is an interesting proposition, but, assuming its truth, it doesn't connect in any obvious way to a flat ban on paid prioritization; if the Commission knows a way to make that connection, it hasn't revealed it.

The second, Gerald W. Brock, *Telephone Pricing to Promote Universal Service and Economic Freedom*, OPP Working Paper Series, No. 18 (1986), is an interesting consideration of the possible welfare losses that may follow from pricing that collects a high proportion of fixed costs from usage fees. As with the Atkinson & Barnekov paper, its connection to paid prioritization is unclear, and the Commission's opinion writers have made no effort even to identify a connection, much less explain it. In discussing a possible anti-discrimination rule, the paper posits one under which a firm may adopt "any combination of two-part tariffs, volume discounts, and so forth but is required to offer the same set of prices to all customers." *Id*. at 44. Although it isn't clear that the paper gives an endorsement to such a rule, such an endorsement would not support the Commission's ban on quality-of-service based differentials.

I apologize for taking the reader through this parade of irrelevancies. But it is on these that the Commission has staked its claim to analytical support for the idea that paid prioritization poses a serious risk to broadband deployment.

The Commission does point to episodes supposedly supporting its view that paid prioritization constitutes a significant threat. Order ¶ 69, 79 n.123. It is, however, merely pointing to a handful of episodes among the large number of transactions conducted by many broadband providers. Furthermore, neither in this Order nor in the 2010 Broadband Order, 25 F.C.C. Rcd. at 17915-26, ¶¶ 20-37, cited by this Order as support, Order ¶ 79 n.123, does the Commission sift through the evidence to show that any episode impaired the ability of the internet to maximize consumer satisfaction and the flourishing of edge providers in the aggregate, as opposed to harm to a particular edge provider. Nor does it show whether, if there was harm, a far narrower rule would not have handled the problem. (For example, if a broadband provider throttled an edge provider's content at the same time as the broadband provider provided similar content, then—assuming no justification—grounds for action against such behavior could be discerned. Compare § 616(a)(3) of the Communications Act, 47 U.S.C. § 536(a)(3).) In his dissent to the Order, Commissioner Pai, using terms perhaps feistier than would suit a court, summarized it as follows:

> The evidence of these continuing threats? There is none; it's all anecdote, hypothesis, and hysteria. A small ISP in North Carolina allegedly blocked VoIP calls a decade ago. Comcast capped BitTorrent traffic to ease upload congestion eight years ago. Apple introduced FaceTime over Wi-Fi first, cellular networks later. Examples this picayune and stale aren't enough to tell a coherent story about net neutrality. The bogeyman never had it so easy.

Pai Dissent at 333. And Judge Silberman's observations about the episodes marshalled to support the precursor order vacated in *Verizon* seem as applicable today as then:

> That the Commission was able to locate only four potential examples of such conduct is, frankly, astonishing. In such a large industry where, as Verizon notes, billions of connections are formed between users and edge providers each year, one would think there should be ample examples of just about any type of conduct.

Verizon, 740 F.3d at 664-65 (Judge Silberman, dissenting from the decision's dicta).

The short of it is that the Commission has nowhere explained why price distinctions based on quality of service would tend to impede the flourishing of the internet, or, conversely, why the status quo ante would not provide a maximum opportunity for the flourishing of edge providers as a group—or small innovative edge providers as a subgroup.

It gets worse. Having set forth the notion that paid prioritization poses a threat to broadband deployment—so much so as to justify jettisoning its historic interpretation of §§ 201(b), 202(a), and resting that notion on conclusory assertions of parties and irrelevant scholarly material—the Commission then fails to respond to criticisms and alternatives proposed in the record, in clear violation of the demands of *State Farm*, 463 U.S. at 43, 51.

I start with comments in the record explaining the problems that the ban on paid prioritization could cause in the broadband market. The comments suggest that by effectively banning pricing structures that could benefit some people substantially, but impose minimal (and seemingly quite justifiable) costs on others, the ban on paid prioritization could replace the virtuous cycle with a vicious cycle, in which regulatory overreach reduces the number and quality of services available, reducing demand for broadband, and in turn reducing the content and services available owing to the reduced number of users. Investment would suffer as the number of users declines (or fails to grow as it otherwise would have).

For example, the joint comment by the International Center for Law & Economics and TechFreedom paints a picture in which innovation and investment could be substantially harmed by the ban on paid prioritization:

> With most current [internet service] pricing models, consumers have little incentive or ability (beyond the binary choice between consuming or not consuming) to prioritize their use of data based on their preferences. In other words, the marginal cost to consumers of consuming high-value, low-bit data (like VoIP [transmitting voice over the internet], for example) is the same as the cost of consuming low-value, high-bit data (like backup services, for example), assuming neither use exceeds the user's allotted throughput. And in both cases, with all-you-can-eat pricing, consumers face a marginal cost of $0 (at least until they reach a cap). The result is that consumers will tend to over-consume lower-value data and under-consume higher-value data, and, correspondingly, content developers will over-invest in the former and under-invest in the latter. The ultimate result—the predictable consequence of mandated neutrality rules—is a net reduction in the overall value of content both available and consumed, and network under-investment.

Comments of International Center for Law & Economics and TechFreedom at 17 (July 17, 2014).

In other words, paid prioritization would encourage ISP innovations such as providing special speed for voice transmission (for which timeliness and freedom from latency and jitter—delays or variations in delay in delivery of packets—are very important), at little or no cost to services where timeliness (especially timeliness measured in milliseconds) is relatively unimportant. Similarly, pricing for extra speed would incentivize edge providers to innovate in technologies that enable their material to travel faster (or reduce latency or jitter) even in the absence of improved ISP technology. To be sure, usage caps (which are permissible for now under the Order) provide some incentive for edge providers to invest in innovations enabling faster transit without extra Mbps and thus enable their customers to enjoy more service at less risk of exceeding the caps. But the usage caps are a blunt instrument, as their burden is felt by all consumers, whereas the sort of pricing increment forbidden by the Commission would be focused (de facto) on the edge providers for whom speed and other quality-of-service features are especially important. Thus paid prioritization would yield finely tuned incentives for innovation exactly where it is needed to relieve network congestion. These innovations could improve the experience for users, driving demand and therefore investment. The Order nowhere responds to this contention.

At oral argument it was suggested that with paid prioritization the speed of the high rollers comes at the expense of others. This is true and not true. Consider ways that the United States government applies paid prioritization in two monopolies that it runs, Amtrak and the U.S. Postal Service. Both offer especially fast service at a premium. If the resources devoted to providing extra speed for the premium passengers and mail were spread evenly among all passengers and mail, the now slower moving passengers and mail could travel a bit faster. But the revenues available would be diminished for want of the premium charges, and in any event it is hard to see how coach passengers or senders of ordinary mail are injured by the availability of speedier, costlier service.

Of course one can imagine priority pricing that could harm consumers. The record contains a declaration recognizing the possibility and opposing the Commission's solution. It is by the author of three of the very economics papers that the Commission says support its position, Michael Katz, who was a chief economist of the Commission under President Clinton. Pointing to the risk of distorting competition and harming customers through banning pricing strategies and "full use of network management techniques," Katz urged disallowing conduct "only in response to specific instances of identified harm, rather than imposing sweeping prohibitions that throw out the good with the bad." Katz Declaration at 2-3.

Perhaps the Commission has answers to this. But despite going out of its way to rely on papers by Katz that were irrelevant, the Commission never deigned to reflect on the concerns he expressed about harm to innovation and consumer welfare.

Furthermore, in its single-minded focus on innovation at the "edge" (and only some kinds of innovation at that), the Commission ignored arguments that the process of providing broadband service is itself one where innovation, not only in technology but in pricing strategies and business models, can contribute to maximization of the internet's value to all users. A comment of Professor Justin Hurwitz makes the point:

> Current research suggests that traditional, best-effort, non-prioritized routing may yield substantially inefficient use of the network resource. It may well

> turn out to be the case that efficient routing of data like streaming video requires router-based prioritization. It may even turn out that efficient routing of streaming video data is necessarily harmful to other data—it may not be possible to implement a single network architecture that efficiently handles data with differentiated characteristics. If this is the case, then it may certainly be "commercially reasonable" that streaming video providers pay a premium for the efficient handling of their data, in order to compensate for the negative externalities that those uses impose upon other users and uses.

Comments of Justin (Gus) Hurwitz at 17 (July 18, 2014). (Professor Hurwitz may have been mistakenly operating on the belief that the Commission would allow for "commercially reasonable" practices. The Commission ultimately rejected a ban on "commercially unreasonable" practices, Order ¶ 150, but created no defense of commercial reasonableness for any of its bans. The Commission did create an exception for "reasonable network management" for rules other than the ban on paid prioritization. Order ¶ 217.)

Generalizing the point made by Professor Hurwitz: Unless there is capacity for all packets to go at the same speed and for that speed to be optimal for the packets for which speed is most important, there must be either (1) prioritization or (2) identical speed for all traffic. If all go at the same speed, then service is below optimal for the packets for which speed is important. If there is unpaid prioritization, and it is made available to the senders of packets for which prioritization is important, then (1) those senders get a free ride on costs charged in part to other packet senders and (2) those senders have less incentive to improve their packets' technological capacity to use less transmission capacity.

Allowance of paid prioritization eliminates those two defects of unpaid prioritization.

One prominent critic of the ban on paid prioritization—Timothy Brennan, the Commission's chief economist at the time the Order was initially in production, who has called the rules "an economics-free zone"[6]—offered an alternative that addressed these concerns. His argument goes as follows. If some potential content providers might refrain from entry for fear that poor service might stifle advantageous interactions with other sites (thus thwarting the virtuous cycle), that fear could be assuaged by requiring that ISPs meet minimum quality standards. Brennan writes that

> a minimum quality standard does not preclude above-minimum quality services and pricing schemes that could improve incentives to improve broadband networks and facilitate innovation in the development and marketing of audio and video content. Moreover, a minimum quality standard should reduce the costs of and impediments to congestion management necessary under net neutrality.

Comments of International Center for Law & Economics and TechFreedom at 48; see also *id*. at 47. This is a proposal based on the notion that consumers value the things prevented by the Order, but it offers an alternative that solves a (perhaps hypothetical) problem at which the Order is aimed (relieving content providers of the fear discussed above and thus ensuring the virtuous cycle), without such significant costs as

[6] See http://www.wsj.com/articles/economics-free-obamanet-1454282427.

those the commentators discussed. The Order offers no response.

Notice that the drag on innovation to which these commentators allude has a clear adverse effect on the virtuous cycle invoked by the Commission. To be sure, as a general matter investment at the edge provider and the ISP level will be mutually reinforcing, but sound incentives for innovation at both levels will provide more benefit enhancements to consumers per dollar invested.

I've already noted with bemusement the Commission's utter disregard of arguments by two of its former chief economists, Michael Katz and Tim Brennan, that were submitted into the record. Lest the point be understated, I should also mention that the views of yet a third, Thomas W. Hazlett, also appear in several submissions. CenturyLink points to Thomas W. Hazlett and Dennis L. Weisman, *Market Power in U.S. Broadband Industries*, 38 REVIEW OF INDUSTRIAL ORGANIZATION 151 (2011), for the proposition that there is no evidence that broadband providers are earning supra-normal rates of return. This may be another clue why the Commission steers clear of any claim of market power.

And the Comments of Daniel Lyons (July 29, 2014), *Net Neutrality and Nondiscrimination Norms in Telecommunications*, 1029 ARIZ. L. REV. 1029 ("Lyons Comments") at 1070, cite Thomas W. Hazlett & Joshua D. Wright, *The Law and Economics of Network Neutrality*, 45 IND. L. REV. 767, 798 (2012), for the argument that there is much to be learned from antitrust law, which treats vertical arrangements on a rule-of-reason basis. To the argument that antitrust enforcement is costly, time-consuming and unpredictable, Hazlett and Wright acknowledge the point but argue that it has been responsible for some of the genuine triumphs in the telecommunications industry, such as the break-up of AT&T. The Lyons submission finds confirmation in the Department of Justice's Ex Parte Submission in the 2010 proceeding, arguing that "antitrust is up to the task of protecting consumers from vertical contracts that threaten competition."[7]

The silent treatment given to three of its former chief economists seems an apt sign of the Commission's thinking as it pursued its forced march through economic rationality.

The Commission does invoke justifications other than the "virtuous cycle" to support its Order. For example, it asserts that "[t]he record . . . overwhelmingly supports the proposition that the Internet's openness is critical to its ability to serve as a platform for speech and civic engagement," for which it cites comments from three organizations. Order ¶ 77 & n.118. The Order makes no attempt, however, to explain how these particular rules, and the language of § 201, relate to these goals. A raw assertion that the internet's openness promotes free speech, while in a general sense surely true (at least on some assumptions about the meaning of "openness"), is not enough reasoning to support a ban on paid prioritization.

Further, having eschewed any claim that it found the ISPs to possess market power, Order ¶ 11 n.12 ("[T]hese rules do not address, and are not designed to deal with, the acquisition or maintenance of market power or its abuse, real or

[7] Lyons Comments at 1070 (quoting Thomas W. Hazlett & Joshua D. Wright, *The Law and Economics of Network Neutrality*, 45 IND. L. REV. 767, 803 (2012)). See also *In re Economic Issues in Broadband Competition: A National Broadband Plan for Our Future, Ex Parte Submission of the United States Department of Justice*, 2010 WL 45550 (2010).

potential"), the Commission invokes a kind of "market-power-lite." The argument fundamentally is that ISPs occupy a "gatekeeper" role and may use that role to block content whose flow might injure them: They might *want* to do this in order to prioritize their content over that of other content providers (or perhaps other purposes inconsistent with efficient use of the net). And they might *be able* to do this because impediments to customers' switching will enable them to restrict others' content without incurring a penalty in the form of customer cancellations. Order ¶¶ 79-82.

The Commission's reliance on market-power-lite is puzzling in a number of ways. First, the Commission's primary fact—the existence of switching costs—begs the question of why the Commission did not look at other forms of evidence for market power. See Horizontal Merger Guidelines, 11 (saying that "the costs and delays of switching products" are taken into account in implementing the hypothetical monopolist test). If the Commission relies on one possible source of market power, one wonders why it would not seek data that would pull together the full range of sources, including market concentration. It may be that the Department of Justice's submission in the Notice of Inquiry that ultimately led to the Order, see *In re A National Broadband Plan for Our Future,* 24 F.C.C. Rcd. 4342 (2009), reviewing some of the data but reaching no conclusion, led the Commission to believe that a serious inquiry would come up empty. *In re Economic Issues in Broadband Competition: A National Broadband Plan for Our Future, Ex Parte Submission of the United States Department of Justice*, 2010 WL 45550 (2010).

Second, even a valid finding of market power would not be much of a step towards validating a ban on paid prioritization or linking it to § 201. Eight years before the Order, the Federal Trade Commission ordered a staff study and published the results. *Broadband Connectivity Competition Policy*, Federal Trade Commission (2007), *available*

at https://www.ftc.gov/sites/default/files/documents/reports/broadband-connectivity-competition-policy/v070000report.pdf. As with DOJ later, the report was non-committal on the issue of market power but reviewed (1) ISP incentives to discriminate and not to discriminate under conditions of market power, *id*. at 72-75, and (2) varieties of paid prioritization, assessing their risks and benefits, *id*. at 83-97. Instead of a nuanced assessment building on the FTC staff paper (or for that matter contradicting it), the Commission adopted a flat prohibition, paying no attention to circumstances under which specific varieties of paid prioritization would (again, assuming market power) adversely or favorably affect the value of the internet to all users. In the absence of such an evaluation, the Order's scathing terms about paid prioritization, used as a justification for the otherwise unexplained switch in interpretation of § 201(b), fall flat. Order ¶ 292.

Finally, the Commission's argument that paid prioritization would be used largely by "well-heeled incumbents," Order ¶ 126 n.286, not only is ungrounded factually (so far as appears) but contradicts the Commission's decision (and the reasoning behind its decision) not to apply its paid prioritization ban to types of paid prioritization that use caching technology.[8]

[8] Since I would conclude that the Commission acted arbitrarily and capriciously in its reclassification decision regardless of whether DNS and caching fit the telecommunications management exception, 47 U.S.C. § 153(24), I will not address that.

Caching is the storage of frequently accessed data in a location closer to some users of the data. The provider of the caching service (in some contexts called a content delivery network) thus increases the speed at which the end user can access the data. Order ¶ 372 & n.1052. In effect, then, it prioritizes the content in question. It is provided sometimes by ISPs (sometimes at the expense of edge providers) and sometimes by third parties. *Id.*

For example, Netflix has entered agreements with several large broadband providers to obtain direct access to their content delivery networks, i.e., cached storage on their networks. See Order ¶¶ 198-205, 200 n.504 (noting that Netflix has entered into direct arrangements with Comcast, Verizon, Time Warner Cable, and AT&T); see also http://www.bloomberg.com/bw/articles/2014-02-24/netflixs-deal-with-comcast-isnt-about-net-neutrality-except-that-it-is. Contracts under which caching is supplied by broadband providers or by third parties are often called paid peering arrangements. Regardless of the name, they involve expenses incurred directly or indirectly by an edge provider, using a caching technology to store content closer to end users, so as to assure accelerated transmission of its content via a broadband provider.

Although the Commission acknowledges that caching agreements raise many of the same issues as other types of paid prioritization, it expressly declines to adopt regulations governing them, opting instead to hear disputes related to such arrangements under §§ 201 & 202 and to "continue to monitor" the situation. Order ¶ 205. The Order defines paid prioritization as "the management of a broadband provider's network to directly or indirectly favor some traffic over other traffic, including through use of techniques such as traffic shaping, prioritization, resource reservation, or other forms of preferential traffic management, either (a) in exchange for consideration (monetary or otherwise) from a third party, or (b) to benefit an affiliated entity." Order ¶ 18. If caching is a form of preferential traffic management—and I cannot see why it is not—then paid access to broadband providers' caching facilities violates the paid prioritization ban, or at any rate would do so but for the Commission's decision in ¶ 205 that it will evaluate such arrangements on a case-by-case basis rather than condemn them root-and-branch.

Curiously, although the Commission seems to be absolutely confident in its policy view on paid prioritization, it recognizes that it actually lacks experience with the subject. One objector argued that the Commission could not apply § 201(b) to paid prioritization because "no broadband providers have entered into such arrangements or even have plans to do so." Order ¶ 291 n.748 (quoting NCTA Comments at 29). Instead of contradicting the premise, the Commission responded by noting that at oral argument in *Verizon* a provider had said that but for the Commission's 2010 rules it would be pursuing such arrangements. *Id.* So all the claims about the harm threatened by paid prioritization are at best projections. We saw earlier the irrelevance of the studies on which the Commission relied to make those projections. As to caching, with which it has plenty of familiarity, the Commission uses the temperate wait-and-see approach. See Order ¶ 203.

The Commission never seriously tries to reconcile its hesitancy here with its claims that harms arising from paid prioritization are so extreme as to call for an abandonment of its longtime precedents interpreting §§ 202(a) and 201(b). See Order ¶ 292.

The Commission does note that the disputes over caching "are primarily between sophisticated entities." Order ¶ 205. But as it never says how that affects matters, we remain in the dark on the distinction. Indeed, the size and sophistication of the entities involved might exacerbate concerns that ISPs are likely to create a fast lane for large edge providers.

The Commission also notes that deep packet inspection—along with other similar types of network traffic management that rely on packet characteristics—is the technical means underlying the paid prioritization that it condemns. With that technology, it says, an ISP can examine the content of packets of data as they go by and prioritize some over others. See Order ¶ 85. If the Commission believes that this technical factor plays a role in justifying different treatment, it fails to explain why. Insofar as it suggests that packet inspection might be abused, *id*., it never explains why rules against such abuse would not fit its historic understanding of unreasonable or unjust discrimination (and that of the historic price regulatory systems).

The oddity of the Commission's view is nicely captured in its treatment of a pro-competition argument submitted by ADTRAN opposing the ban on paid prioritization. ADTRAN argued that the ban (1) would hobble competition by disabling some edge providers from securing the prioritization that others obtain via Content Delivery Networks ("CDNs") (the premise is that some edge providers, perhaps because of relatively low volume, do not have access to CDNs; the Commission does not contest the premise), ADTRAN Comment at 7, J.A. 275, and (2) would "cement the advantages enjoyed by the largest edge providers that presently obtain the functional equivalent of priority access by constructing their own extensive networks that interconnect directly with the ISPs." Order ¶ 128 (quoting ADTRAN Reply Comments at 18 (September 15, 2014)). The

Commission never answers the first objection (except insofar as it is entangled with the second). As to the second it says only that it does "not seek to disrupt the legitimate benefits that may accrue to edge providers that have invested in enhancing the delivery of their services to end users." Order ¶ 128. That answer seems to confirm ADTRAN's complaint: the Commission's split policy will "cement the advantages" secured by those who invested in interconnecting networks. Oddly, the Commission supports the ban on paid prioritization as tending to prevent "the bifurcat[ion] of the Internet into a 'fast' lane for those willing and able to pay and a 'slow' lane for everybody else," and as protecting "'user-generated video and independent filmmakers' that lack the resources of major film studios to pay priority rates." Order ¶ 126; see also *id*. n.286 (quoting a commenter's concern over advantages going to "well-heeled incumbents"). In short, then, the Commission is against slow lanes and fast lanes, and against advantages for the established or well-heeled—except when it isn't.

The Commission's favored treatment of paid peering (wait-and-see) over paid prioritization (banned) brings to mind the Commission's practice of sheltering the historic AT&T monopoly from competition. See Nuechterlein & Weiser, 11-12, 40. Contrary to the conventional notion that only regulatees enjoy the benefits of unreasoned agency favor, the Order here suggests a different selection of beneficiaries: dominant edge providers such as Netflix and Google. See Order ¶ 197 n.492.

Another question posed by the Order but never answered is the Commission's idea that if superior services are priced, their usage will track the size and resources of the firms using them. One would expect, instead, that firms would pay extra for extra speed and quality to the extent that those transit enhancements increased the value of goods and services to the end user. Firms do not ship medical supplies by air rather than rail or truck because the firms are rich and powerful (though doubtless some are). They use air freight where doing so enhances the effectiveness of their service enough to justify the extra cost. This obvious point explains why Berninger is a petitioner here.

The Commission's disparate treatment of two types of prioritization that appear economically indistinguishable suggests either that it is ambivalent about the ban itself or that it has not considered the economics of the various relevant classes of transactions. Or perhaps the Commission is drawn to its present stance because it enables it to revel in populist rhetorical flourishes without a serious risk of disrupting the net.

Whatever the explanation, the Order fails to offer a reasoned basis for its view that paid prioritization is "unjust or unreasonable" within the meaning of § 201, or a reasoned explanation for why paid prioritization is problematic, or answers to commenters' critiques and alternatives. I note that all these objections would be fully applicable even as applied to ISPs with market power.

It is true that the Commission has asserted the conclusion that the supposed beneficent effect of its new rules on edge providers as a class will (pursuant to its virtuous cycle theory) enhance demand for internet services and thus demand for broadband access services. See Order ¶ 410.[9] The

[9] The Commission also makes several other claims about the impact of the Order on investment. See Order ¶ 412 (on the expected growth in Internet traffic driving investment); Order ¶ 414 (claiming a lack of the impact of Title II regulation in other circumstances); Order ¶ 416 (on indications from a major infrastructure provider that it would continue investing under Title

Commission's predictions are due considerable deference, but when its decision shows no sign that it has examined serious countervailing contentions, that decision is arbitrary and capricious.

Accordingly, its promulgation of the rules under § 201 is, absent a better explanation, not in accordance with law. 5 U.S.C. § 706(2)(A) & (C).

B

Alamo-Berninger raise two objections to the Commission's reliance on § 706 of the 1996 Act, 47 U.S.C. § 1302, as support for its new rules, especially the bans on paid prioritization, blocking and throttling (i.e., the statutory theory offered by the Commission as an alternative to its reliance on § 201). First, Alamo-Berninger develop a comprehensive claim that § 706 grants the Commission no power to issue rules. Alamo-Berninger Br. 9-16. On its face the argument seems quite compelling, see also Pai Dissent, at 370-75, but I agree with the majority that the *Verizon* court's ruling on that issue was not mere dictum, but was necessary to the court's upholding of the transparency rules. Maj. Op. 95.

Second, Alamo-Berninger raise, albeit in rather conclusory form, the argument that "the purpose of section 706 is to move away from exactly the kind of common-carrier duties imposed by this *Order*. Thus . . . the rules [adopted in the Order] frustrate the purpose of the statute and are therefore unlawful." Alamo-Berninger Br. 15.

II). None of these addresses the incremental effects of the specific rules that the Commission adopted.

On this issue, the passages of *Verizon* giving § 706 a broad reading—"virtually unlimited power to regulate the Internet," as Judge Silberman observed in dissent, 740 F.3d at 662—and endorsing the Commission's applications of its "virtuous cycle" theory, were dicta, as Alamo-Berninger argue. Alamo-Berninger Br. 16. With the narrow exception of the transparency rules, the *Verizon* court *struck down* the rules at issue on the ground that they imposed common-carrier duties on the broadband carriers, impermissibly so in light of 47 U.S.C. §§ 153(51) (providing that a telecommunications carrier can be treated "as a common carrier under this [Act] only to the extent that it is engaged in providing telecommunications services") & 332(c)(2) (similar limitation as to persons engaged in providing "a private mobile service"). 740 F.3d at 650. The sole rules *not* struck down were the transparency rules. Although Judge Silberman would have upheld them on the basis of 47 U.S.C. § 257, see 740 F.3d at 668 n.9, they are equally sustainable as ancillary to a narrow reading of § 706, confining it, as Judge Silberman would have, to remedying problems derived from market power. See *id*. at 664-67. Of course, on no understanding could *Verizon* provide direct support for the Commission's ban on paid prioritization, as that was not before the court.

Although the Alamo-Berninger argument here is conclusory, the briefing that led to the *Verizon* dicta was extensive, Brief for Appellant Verizon at 28, 31, *Verizon*, 740 F.3d; Reply Brief for Appellant Verizon at 14, *Verizon*, 740 F.3d, so concern for the Commission's opportunity to reply is no basis for disregarding the issue. The Commission's reliance on § 706 poses questions of both statutory interpretation and arbitrary and capricious rulemaking. Further, paralleling the inadequacies in the Commission's reliance on § 201(b), the reasonableness of the regulations under § 706 is important not only on its own but also for its relevance to the reasonableness of reclassification under Title II.

There is an irony in the Commission's coupling of its decision to subject broadband to Title II and its reliance on § 706. As the Alamo-Berninger brief argues, § 706 points away from the Commission's classification of broadband under Title II and its Order. Alamo-Berninger Br. 15. Title II is legacy legislation from the era of monopoly telephone service. It has no inherent provision for evolution to a competitive market. It fits cases where all hope (of competitive markets) is lost. Section 706, by contrast, as part of the 1996 Act and by its terms, seeks to facilitate a shift from regulated monopoly to competition. Indeed, the Telecommunications Act of 1996 begins by describing itself as

> [a]n Act [t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.

Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. Two central paradoxes of the majority's position are how an Act intended to "reduce regulation" is used instead to increase regulation and how an Act intended to "promote competition" is used at all in a context in which the Commission specifically forswears any findings of a lack of competition.

On top of the generally deregulatory pattern of the 1996 Act, a reading of § 706 as a mandate for virtually unlimited regulation collides with the simultaneously enacted 47 U.S.C. § 230. That section is directed mainly at making sure that internet service providers and others performing similar functions are not liable for offensive materials that users may encounter. But it also broadly states that it "is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." *Id*. § 230(b)(2). The Commission's use of § 706 to impose a complex array of regulation on all internet service provision seems a distinctly bad fit with that declared policy.

Furthermore, consider the specific measures that § 706 encourages:

> The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing, in a manner consistent with the public interest, convenience, and necessity, *price cap regulation, regulatory forbearance*, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.

Section 706(a), 47 U.S.C. § 1302(a) (emphasis added).

The two steps expressly favored are both deregulatory. Forbearance is obvious; it presupposes statutory authority to impose some burden on the regulated firms, coupled with authority to relieve them from that burden—and encourages the Commission to give relief.

Price cap regulation needs more explanation. It is normally seen as a device for at least softening the deadening effects of conventional cost-based rate regulation in natural monopolies. Such regulation dulls incentives by telling the regulated firm that if it makes some advance cutting its costs of service, the regulator will promptly step in and snatch away any profits above its normal allowed rate of return. Of course there will be a "regulatory lag" between the innovation and the regulator's clutching hand, but the regulatory process overall limits the incentive to innovate to a fraction of what it would be under competitive conditions. See *National Rural Telecom Association v. FCC*, 988 F.2d 174, 177-78 (D.C. Cir. 1993). Price cap regulation, by contrast, looks to general trends in the cost inputs for providers, typically building in (if trends support it) an assumption of steadily improving efficiency. Firms benefit from their innovation except to the extent that their successes may bring down average costs across the industry. *Id*.; for some details of application, see *United States Telephone Association v. FCC*, 188 F.3d 521 (D.C. Cir. 1999). So it is easy to see how a shift to price cap regulation might be a suitable transition move for a still uncompetitive industry. Allowing the firms such benefits would invite "advance[s]" in telecommunications capability and would "remove barriers to infrastructure investment," which § 706 posits as the goals of agency actions thereunder.

Section 706's broad language points in the same direction as the two examples. It speaks of removing "barriers to infrastructure investment." Writing in 1996, before the Commission developed its virtuous cycle theory, the drafters most likely had in mind the well-known barriers erected by conventional natural monopoly regulation—not only the bad incentive effects of cost-based rate regulation but also hurdles such as agency veto power over new entry into markets.

Section 706 also speaks of measures "that promote competition." But here the Commission saddles the broadband industry with common-carrier obligation, which is normally seen as a *substitute* for competition—as I mentioned earlier, for markets where all hope is lost. Where a shipper or passenger faces only one carrier, it makes some sense to require that carrier to accept all comers, subject to reasonable rules of eligibility. This is true even for historic innkeeper duties, which seem to presuppose a desperate traveler reaching an isolated inn in the dead of night.

In part II.A I reviewed the distortions likely to flow from the Commission's ban on paid prioritization, but here, considering the Commission's reliance on a statute that seems the antithesis of common-carrier legislation, we should consider the way the common-carrier mandate may thwart competition and thus contradict the purposes of § 706.

In ordinary markets a firm can enter the field (or expand its position) by preferential cooperation with one or more vertically related firms. Antitrust law clearly recognizes this avenue to enhanced competition. See XI Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application* ¶ 1811a2 (2006). For example, in *Sewell Plastics v. Coca-Cola*, 720 F. Supp. 1196 (W.D.N.C. 1989), *aff'd per curiam*, 1990-2 Trade Cas. ¶ 69,165, 912 F.2d 463 (4th Cir. 1990) (unpublished), the court considered under § 1 of the Sherman Act an arrangement among Coca-Cola bottlers to buy at least 80% of their plastic bottles from a new entrant—a joint venture of the bottlers themselves. The object was to circumvent the steadily rising prices charged by plaintiff Sewall Plastics, the largest supplier of plastic bottles in the country; the joint venturers saw the agreement as necessary to assure a steady market for their bottle-making operation and thus justify the investment, which Sewall could readily have undercut by dropping its prices. The court found the agreement pro-competitive because it enabled the new entry, which in turn lowered prices—just as ordinary economic understanding would predict. Speaking of requirements contracts but in terms that seem to match other exclusive vertical arrangements in workably competitive markets more generally, the Supreme Court has said that they are "of particular advantage to a newcomer to the field to whom it is important to know what capital expenditures are justified." *Standard Oil Co. of California v. United States*, 337 U.S. 293, 306-07 (1949). Hovenkamp makes the extension explicitly, seeing such cases as examples of "the procompetitive use of exclusive dealing to facilitate market entry where it might not otherwise occur at all." Hovenkamp ¶ 1811a2, at 153.

The Commission's common-carrier mandate, however, especially as implemented by the Order's Internet Conduct Standard, poses serious obstacles to comparable efforts by ISPs. It prohibits internet providers from "unreasonably interfer[ing] with or disadvantag[ing] . . . (1) end users' ability to select, access, and use . . . the lawful Internet content, applications, services, or devices of their choice, or (2) edge providers' ability to make lawful content, applications, services, or devices available to end users," Order ¶ 136, and is coupled with a multi-factor test, Order ¶¶ 138-145. Although the Commission for the moment purports to keep an open mind as to a variant of such preferential arrangements ("structured data plans"), Order ¶ 152, the Order at minimum casts a shadow over such arrangements.

Of course the Commission is not an antitrust enforcement agency. But consider exclusive deals of this sort in relation to its virtuous cycle theory. Special deals facilitating new entry among ISPs (or expansion of existing small firms) would enable investment and growth in broadband, which the Commission says is its goal (linked, of course, to the flourishing of edge providers). Yet the Commission says, without analytical support, that the new rules, generally requiring all broadband providers to follow a single business model, are just the ticket for broadband growth and investment. This seems antithetical to § 706, not to mention the post-DARPA decades in which innovative individuals and firms spontaneously developed the internet, creating new businesses and entirely new types of competition. This model of spontaneous creation is, interestingly, the very model of the internet sketched out in compelling terms by the FCC's current General Counsel before he assumed that post. See Jonathan Sallet, *The Creation of Value: The Broadband Value Circle and Evolving Market Structures* (2011).

In light of this textual analysis of § 706 and its relation to common carriage, and of Judge Silberman's arguments in *Verizon*, see especially 740 F.3d at 662, and considering the rules' antithetical relation to the goals set forth in § 706, I believe that a threshold to application of § 706 is either (1) a finding that the regulated firms possess market power or (2) at least a regulatory history treating the firms as possessing market power (classically as natural monopolies). Under this reading of § 706, then, the Commission's refusal to take a position on market power wholly undercuts its application of § 706.

I must now consider the role of § 706 even if we were to assume the view taken by the *Verizon* majority in dicta. Here all the problems I discussed as to paid prioritization in part II.A come into play, with the record full of highly plausible arguments—never so much as acknowledged by the Commission—as to the distortions that a ban on paid prioritization would generate (especially if made relatively coherent by removing the Commission's puzzling exception for caching and other paid peering). The Order fails to give any reasoned support for the notion that the ban on paid prioritization (or the affiliated and ancillary bans on blocking and throttling) would spin the virtuous cycle along and thereby promote investment. It does not respond to arguments that the ban on paid prioritization would result in increased network congestion, less innovation, less investment, and worse service, nor explain why alternatives offered in the rulemaking would not address the supposed problems with less collateral damage.

In short, the Commission has not taken the initial step of showing that its reading of § 706 as a virtually limitless mandate to make the internet "better" is a reasonable reading to which we owe deference. *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 & n.4 (2009). Without such an interpretation, the Commission's rules cannot be sustained under § 706, even without regard to the reasoning gaps that were a primary subject of part II.A.

III

Full Service Network challenges the Commission's decision to forbear from applying a host of Title II's provisions, most particularly 47 U.S.C. §§ 251-52, on the ground (among others) that forbearance, in the absence of a showing of competition between local exchange carriers (see 47 U.S.C. §§ 153(32), 153(54)), is arbitrary, capricious, and contrary to law. I agree to this extent: The Commission's forbearance decision highlights the dodgy character of the Commission's refusal, in choosing to reclassify broadband under Title II, to take any position on the question whether the affected firms have market power. The upshot is to leave the Commission in a state of hopeless self-contradiction.

In part II I noted that one reason for the Commission's evasion of the market-power question may well have been its intuition that the question might (unlike its handwaving about the virtuous cycle) be susceptible of a clear answer and that that answer would be fatal to its expansive mission. The issue raised by Full Service exposes another flaw in the Commission's non-decision. While a finding that the broadband market was generally competitive would, under Commission precedent, amply justify its forbearance decisions, here again the Commission refuses to take that position. Doing so would obviously undermine its decision to reclassify broadband under Title II. Strategic ambiguity best fits its policy dispositions. But strategic ambiguity on key propositions underlying its regulatory choices is just a polite name for arbitrary and capricious decisionmaking.

* * *

Full Service points out that in *justifying* application of Title II the Commission broadly repudiated its 2005 reliance on the emergence of "competitive and potentially competitive providers and offerings," see Order ¶ 330 n.864, saying instead that "the predictive judgments on which the Commission relied in the *Cable Modem Declaratory Ruling* anticipating vibrant intermodal competition for fixed broadband cannot be reconciled with current marketplace realities." Order ¶ 330; in support of this reading of the *Cable Modem Declaratory Ruling*, the Order cites the *Wireline Broadband Classification Order*, 20 F.C.C. Rcd. 14853 ¶ 50 (2005). Order ¶ 330 n.864; FSN Br. 18. Besides invoking the Commission's conclusory repudiation of its former view, Full Service stresses § 251's pro-competitive purposes, points to data accumulated by the Commission that it contends show widespread lack of competition among local distribution facilities, and argues that the state of competition is highly relevant to the Commission's exercise of forbearance under 47 U.S.C. § 160, at least with respect to provisions aimed at stimulating competition. FSN Br. 15, 18-20; 47 U.S.C. § 160(b) (requiring Commission to consider whether forbearance "will promote competitive market conditions"); cf. Maj. Op. 93-94. Moreover, Full Service specifically ties its argument to the statutory requirements, noting that, in 47 U.S.C. § 160(b), "Congress directed that the FCC evaluate the effect of forbearance on competition," FSN Br. 15, and that unbundling requirements were intended to promote competition, *id.* at 20. Full Service dedicates a subsection to this argument in its brief, *id.* at 18-20, concluding that Congress's intent to promote competition, together with evidence of a lack of competition nationwide, means that "47 U.S.C. § 160 surely requires more to support forbearance than an assertion by the F.C.C. that 'other authorities' are adequate and the public interest will be better served by enhancing the agency's discretion." Full Service pursued the same angle in oral argument, asserting that "you can't say that waiving Section 251 is about anything but competition, that's the whole purpose of that section." Oral Arg. Tr. 142.

47 U.S.C. § 251 requires local exchange carriers to provide competitors with various advantages, mostly notably "access to network elements on an unbundled basis." 47 U.S.C. § 251(c)(3); cf. Order ¶ 417 (referring to such access as "last-mile unbundling"). Full Service seeks such access to broadband providers' facilities (governed by the procedures set out in § 252 for negotiating these agreements), asserting that such access is necessary to its ability to compete in local markets for broadband internet. FSN Br. 13; see *U.S. Telecom Ass'n v. FCC*, 359 F.3d 554, 561 (D.C. Cir. 2004) ("The [1996 Act] sought to foster a competitive market in telecommunications. To enable new firms to enter the field despite the advantages of the incumbent local exchange carriers ("ILECS"), the Act gave the Federal Communications Commission broad powers to require ILECs to make 'network elements' available to other telecommunications carriers.").

As we shall see, the Commission's reasoning in the Order resembles that of the Environmental Protection Agency in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014) ("*UARG*"). There the Agency interpreted certain permitting requirements under the Clean Air Act to apply to greenhouse gases, but acknowledged that applying the thresholds that Congress specified in the relevant sections would regulate too many firms and create unacceptable costs. The agency therefore relied on its power to interpret ambiguous statutory terms to "tailor" the requirements, increasing the permitting thresholds from 100 or 250 tons to 100,000 tons (i.e., three orders of magnitude). *Id.* at 2444-45. The Court held that the agency's combined choice—construing an ambiguous statutory provision to apply while dramatically reducing its substantive application—was unreasonable. In so holding, it "reaffirm[ed] the core administrative-law principle that an agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate." *Id.* at 2446.

The Commission violates that core principle here, where it seeks to apply Title II to broadband internet providers while forbearing from the vast majority of Title II's statutory requirements. As did EPA in *UARG*, though perhaps with less candor, the Commission recognizes that the statutory provisions naturally flowing from reclassification of broadband under Title II do not fit the issues posed by broadband access service. "This is Title II tailored for the 21st Century. Unlike the application of Title II to incumbent wireline companies in the 20th Century, a swath of utility-style provisions (including tariffing) will *not* be applied. . . . In fact, Title II has never been applied in such a focused way." Order ¶ 38.

Although the 1996 Act requires the Commission to forbear from application of any of the provisions of Title 47's Chapter 5 when the conditions of 47 U.S.C. § 160(a) are met, Pub. L. 104-104, Title IV, § 401 (Feb. 8, 1996), the Commission's massive forbearance, without findings that the forbearance is justified by competitive conditions, demonstrates its unwillingness to apply the statutory scheme. Even if the Commission's forbearance itself were reasonable standing alone, that forbearance, *paired with the reclassification decision*, was arbitrary and capricious. Or, to note the reverse implication, the massive, insufficiently justified forbearance infects the decision to apply (or purport to apply) Title II. The logical inconsistency is fatal to both. (The Commission offers no opposition to USTA's contention that reclassification and forbearance are intertwined and therefore stand or fall together. USTA Intervenor Br. 21.)

While the statute explicitly envisions forbearance, it does so only under enumerated conditions. To forbear, the Commission must determine that enforcement of a provision is not necessary to ensure just, reasonable, and nondiscriminatory charges and practices or to protect consumers, 47 U.S.C. § 160(a)(1)-(2), and that forbearance "is consistent with the public interest," *id.* § 160(a)(3). In making these determinations, "the Commission shall consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services." *Id.* § 160(b). These conditions are broadly framed, but the emphasis on consumer protection, competition, and reasonable, nondiscriminatory rates is plainly intended to implement the 1996 Act's policy goal of promoting competition in a context that had historically been dominated by firms with market power, while assuring that consumers are protected.

The Commission relied in part on the idea that enforcement of unbundling rules would unduly deter investment, specifically that such enforcement would collide with its "duty to encourage advanced services deployment." Order ¶ 514. But, perhaps recognizing that this concern would apply universally to compulsory unbundling, the Commission also confronted claims that broadband providers often have local market power. But it responded to these claims not with factual refutation but with an assertion that "persuasive evidence of competition" is unnecessary as a predicate to forbearance. Order ¶ 439. This assertion is in line with the Commission's view that, "although there is some amount of competition for broadband Internet access service, it is limited in key respects." Order ¶ 444. The language is sufficiently vague to cover any state of competition between outright monopoly and perfect competition.

The Commission claimed that its current forbearance matches its past practice, offering a list of orders in which it forbore while giving competition little or no consideration. *Id*. ¶ 439 n.1305 (listing cases). But the cited orders do not vindicate the Commission. They fall into three groups: (1) orders forbearing from provisions not directly involving economic issues at all, such as reporting requirements, (2) orders of clear economic import but with no evident relationship to competition, and (3) orders evidently related to competition where the Commission analyzed competition intensely.

The first group is easily addressed. The Commission's grant of forbearance from seemingly noneconomic requirements is irrelevant to the arbitrariness of its forbearance from a provision aimed precisely at fostering competition.

The second set of orders posed economic concerns but no evident link to competition. In *In re Iowa Telecommunications Services, Inc.*, 17 F.C.C. Rcd. 24319 ¶¶ 17-18 (2002), the Commission granted forbearance to replace one set of rates with a different set of rates based on forward-looking cost estimates that it believed better reflected the petitioner's operating costs; no finding of competition was necessary to guide that replacement. In *In re Petition for Forbearance from Application of the Communications Act of 1934, As Amended, to Previously Authorized Servs.*, 12 F.C.C. Rcd. 8408 (1997), the Commission forbore from § 203(c), allowing the petitioner to refund excess charges to consumers. As the Commission pointed out in that brief order, forbearance served consumers and the public interest, since consumers would receive the refund. *Id.* ¶ 10.

The Commission's use of the third group suggests that its opinion-writing staff was asleep at the switch. The group comprises three rulings, *In re Implementation of Sections 3(n) & 332 of the Communications Act*, 9 F.C.C. Rcd. 1411 (1994),[10] *In re Petition of Qwest Corp. for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Omaha Metro.*
Statistical Area, 20 F.C.C. Rcd. 19415 (2005), and *In re Petition of Qwest Corp. for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metro. Statistical Area*, 25 F.C.C. Rcd. 8622 (2010). Yet in each decision the Commission conducted a detailed analysis of the state of competition. See 9 F.C.C. Rcd. 1411 ¶¶ 135-54 (considering numbers of competitors, falling price trends, etc., and concluding that "all CMRS service providers, other than cellular service licensees, currently lack market power," *id.* at ¶ 137, and, after an extensive recounting of factors, making a cautious finding that it could not find cellular "fully competitive," *id.* at ¶ 154); 20 F.C.C. Rcd. 19415 ¶¶ 28-38 (analyzing market shares, supply and demand elasticity, and firm cost, size and resources to assess competition); 25 F.C.C. Rcd. 8622 ¶¶ 41-91 (assessing whether incumbent firm had market power by careful consideration of market definition,

[10] This order was later quashed by another order, *In re Petition of Arizona Corp. Comm'n, to Extend State Authority Over Rate and Entry Regulation of All Commercial Mobile Radio Services & In re Implementation of Sections 3(N) & 332 of the Communications Act*, 10 F.C.C. Rcd. 7824 (1995). Unsurprisingly, that order also contains a detailed market analysis. See, e.g., *id.* at ¶¶ 42-68.

factors affecting competition, assessment of the effects of SSNIPs).

I am in no position to assess the quality of these analyses, but the entire batch of decisions cited in Order ¶ 439 n.1305 provides no support for the idea (indeed, undermines the idea) that the Commission has an established practice of neglecting market power in deciding whether to forbear from a provision such as § 251. (I discuss below an interesting exception, the order reviewed in *EarthLink v. FCC*, 462 F.3d 1 (D.C. Cir. 2006).)

Given the Commission's assertions elsewhere that competition is limited, and its lack of economic analysis on either the forbearance issue or the Title II classification, the combined decisions to reclassify and forbear—and to assume sufficient competition as well as a lack of it—are arbitrary and capricious. The Commission acts like a bicyclist who rides now on the sidewalk, now the street, as personal convenience dictates.

The inaptness of the Order's ¶ 439 n.1305 citations of its prior decisions is confirmed by forbearance decisions that have reached this court. In *U.S. Telecom*, 359 F.3d at 578-83, for example, we considered the Commission's decision to forbear from unbundling requirements for the high-frequency portion of copper and hybrid loops for broadband (but not from unbundling requirements for the narrowband portion of hybrid loops). In reviewing that forbearance decision, which was far narrower than the forbearance before us today, we gave detailed consideration to the Commission's analysis of the likely effects of more limited unbundling on both investment and competition. We concluded that this forbearance was not arbitrary and capricious partly because the Commission had offered "very strong record evidence" of "robust intermodal competition from cable [broadband] providers," who maintained a market share of about 60%. *Id.* at 582. Both we and the Commission took for granted that findings of competition were central to any such forbearance decision. The Commission justified its forbearance in terms of competition: "A primary benefit of unbundling hybrid loops—that is, to spur competitive deployment of broadband services to the mass market—appears to be obviated by the existence of a broadband service competitor with a leading position in the marketplace." *In re Review of the Section 251 Unbundling Obligations of Incumbent Local Exch. Carriers*, 18 F.C.C. Rcd. 16978 ¶ 292 (2003). Now, when forbearing from unbundling requirements far more broadly, the Commission asserts that no findings of competition are necessary. Rather than justifying its change in position, it denies having made any change.

It is unnecessary, in concluding that the Commission has failed to meet its *State Farm* obligation to reconcile its reclassification and forbearance decisions, to resolve whether the Commission has adequately considered competition for purposes of 47 U.S.C. § 160(b). See Order ¶¶ 501-02. The Commission's difficulty, in its mentions of competition, lies in its attempts to have it both ways. It asserts that there is too little competition to maintain the classification of broadband as an information service (remember, that is the sole function of its discussion of switching costs), but (implicitly) that there is enough competition for broad forbearance to be appropriate. This sweet spot, assuming the statute allows the Commission to find it, is never defined.

In responding to Full Service's narrow claim—that the Commission was required to do a competition analysis market by market—the Commission relies on our decision in *EarthLink v. F.C.C.*, 462 F.3d 1, 8 (D.C. Cir. 2006), where indeed we rejected a claim that forbearance from unbundling under 47 U.S.C. § 271 required such an analysis. On that narrow issue, *EarthLink* fully supports the Commission.

But there are considerable ironies in the Commission's supporting its Order here by pointing to *Earthlink* and the order reviewed there. The current Order manifests a double repudiation of the one under review in *EarthLink*: first, it now rejects its former interpretation of § 706, and second, it reflects the Commission's complete abandonment of its views on the force of intermodal competition.

In the *Earthlink* order, the Commission invoked § 706 for the proposition that *relieving* local distribution companies from regulation would encourage investment, and thus would let competition bloom, sufficiently to offset any loss to competition from refusing to order unbundling. Now, of course, the Commission invokes § 706 for the idea that *saddling* such firms with regulation will encourage investment.

And in the *Earthlink* order the Commission relied on its now repudiated idea that intermodal competition would play a big role in assuring adequate competition. See 462 F.3d at 7, citing *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c)*, 19 F.C.C. Rcd. 21,496 ¶¶ 21-23. Now, without undertaking the inconvenience of a market power analysis, the Commission has rendered its confidence in intermodal competition "inoperative" (to borrow a phrase from the Watergate proceedings) for purposes of reclassification, but (perhaps) not for unbundling.

In sum, the Commission chose to regulate under a Title designed to temper the effects of market power by close agency supervision of firm conduct, but forbore from provisions aimed at constraining market power by compelling firms to share their facilities, all with no effort to perform a market power analysis. The Order's combined reclassification-forbearance decision is arbitrary and capricious.

* * *

The ultimate irony of the Commission's unreasoned patchwork is that, refusing to inquire into competitive conditions, it shunts broadband service onto the legal track suited to natural monopolies. Because that track provides little economic space for new firms seeking market entry or relatively small firms seeking expansion through innovations in business models or in technology, the Commission's decision has a decent chance of bringing about the conditions under which some (but by no means all) of its actions could be grounded—the prevalence of incurable monopoly.

I would vacate the Order.