IN THE MATTER OF SAFEGUARDING AND SECURING THE OPEN INTERNET, BEFORE THE FEDERAL COMMUNICATIONS COMMISSION, NOTICE OF PROPOSED RULEMAKING, WC DOCKET NO. 23-320, OCTOBER 23, 2023

COMMENTS OF THE CONSUMER FEDERATION OF AMERICA

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December 14, 2023

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EXECUTIVE SUMMARY

The Consumer Federation of America (CFA) appreciates the opportunity to file comments on the above captioned proceeding that we call the 2023 Open Internet Order. Above all we appreciate and applaud the effort of the Federal Communications Commission to thoroughly and carefully restore the principles of an Open Internet after a brief and misguided effort to abandon regulatory oversight of the most important economic process of the 21st century, the virtuous cycle created by the principle of innovation without permission that governed the Internet economy for more than 50 years.

These comments are based on almost a quarter of a century of research and analysis of CFA, which is described in Table ES-1. In the Table we identify two types of documents – 10 reports published by CFA and available on its we site and a dozen and a half peer-reviewed journal articles, conference papers and book chapters published over that period. The CFA research papers, which provide empirical analysis data and theoretical discussions underlying our comments and supporting the FCC efforts, are hyperlinked as Attachments to these comments.

Table ES-2 shows the 80 issues we identify in Chapters I - IIII of the Notice of Proposed Rulemaking and how our prior research supports the tentative findings and conclusion that the FCC has made. Table ES-3 shows how these findings and conclusions support the classification of Broadband Internet Access Service (BIAS) as a telecommunications service.

The decision to classify BIAS as a telecommunications service was originally made in an order of the FCC we call the 2015 Open Internet Order, which was upheld by the Court in 2016. It was reflected over 50 years of regulatory oversight over the Internet, based on the principle that *ex ante* regulation ensured nondiscriminatory access (before the fact) to the Internet. It was this principle, applied by authority ancillary to Title I of the communications act that had produced the dramatic and virtuous cycle of economic development.

TABLE ES-1: CFA RESEARCH ON SECURING THE OPEN INTERNET AND UNIVERSAL SERVICE

Consumer Federation of America Papers attached

General Economic Concepts

Overcharged and Under Served: How a Tight Oligopoly on Steroids Undermines Competition and Harm Consumers in Digital Communications Markets, December 2016, Attachment A

Pragmatic, Progressive Capitalism Roadmap to a Remarkably Successful, Uniquely American Political Economy for Brandeis to Stiglitz & Beyond the 2020 Election, August 2020, Attachment B

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TABLE ES-2: CFA RESPONSES REJECTING THE FLIP-FLOP ORDER

Category	Issue	Ord	Rebuttal				Document						Category	Issue	Ord	Rebuttal				Document					
Issues	#	Para	A	B	C	D	E	F	G	H	I	J	Issues	#	Para	A	B	C	D	E	F	G	H	I	J
I. Introduction	**1**			x				x					Universal SVC.	42	49	x						x	x	x
Action	2			x				x					High cost	43	50	x	x					x	x	x
II. Background	**3**												Other Policies	44	51						x	x	x	
History	4					x	x						MTE	45	52						x	x		
Weak Competition	5	12	x	x	x			x					Expression	46	53									
Lax Antitrust	6		#	x	x			x					Equity, Inclusion	47	54		x							
Transparency	7							x					B. 5 Disabled											
Ex Post Complaint	*8*							x	x				Access	48	55		x					x	x	x
III. Proposed Reclass													B.6 Flip-Flop unjustified			x					x	x	x	
A. Nature of Svc. Title II/Sm. Bu	9							x		x	x	x	Investment	49	56	x				x				
Recent changes	10	17						x					Long-term Inv.	50-51	57	x	x			x				
Future	11	17						x		x	x	x	Title II incentives	52	58	x				x				
Title II def.	12	18						x					C. Def. of BIAS											
Advertising	13	19							x				Scope BIAS	53	59	x				x				
Bundles	14	19						x	x				Mass Mkt Def.	54	60	x				x				
3rd Party	15	20						x	x				Technology	55	61	x				x				
B. Universal Svc.	16	21	x							x	x	x	Personal use	56	61	x				x				
Addtnal Policy	17	22											Other locations	57	62	x				x				
B. 1. Openness	18	23	x			x		x					Other Svcs	58	63	x				x				
Nationwide	19	24						x					Excl. Non-bias us	59	64	x				x				
B. 2 Nat. Security													Monitor non-bias	60	65	x				x				
Title II impact	20	26											Internet Traffic	61	66	x				x				
Sect. 214	21	27											Other Exclusions	62	67	x				x				
Other Security	22	28											D. Telecom. Class											
Safeguard Comm.	23	29											1996 Act	63	68,69					x				
cybersecurity	24	30											Title II best	64	70					x				
Treat to BGP	25	31											DNS 1	65	71					x				
Bolster authority	26	32											Transform.	66	72					x				
Public safety use	27	34											Control of form	67	73					x				
1st responders	28	35											Not info svc.	68	74					x				
Supplement 911	29	36											DNS 2	69	75					x				
Public safety Info	30	37											DNS 3	70	76					x				
Non-emergencies	31	38											DNS 4	71	77					x				
Ntwk resiliency	32	39											Caching	72	78					x				
B. 3 Privacy & Data	33	40	x	x		x			x				Web pages	73	79					x				
Data	34	42	x	x		x			x				Other functions	74	80					x				
Sect. 222	35	43							x				Major questions	75	81					x				
Foreign	36	44							x				Relevant factors	76	82					x				
Robo Calls	37	45							x				Appl. of Maj. Qs.	77	83									
B .4 Access to Svc.	38	46							x	x	x	x	Congress	78	84									
Facl. Deplymnt/	39	47	x	x					x				E. Return to CMR	79	85-93					x				
Infrastructure	40	48	x	x					x				F. Preemption	80	94-97					x				
Wireless	41	49	x						x	x	x	x													

Dramatic Change in circumstances
Perpetual Cyberwar
Intense Int'l Threats
Covid Pandemic
demonstrates a need for improved public safety

These authorities were critical to weaken of abandon in the first place.

TABLE ES-3: COURT RULINGS AND FCC REASONING IN SUPPORT OF THE PROPOSED 2023 OPEN INTERNET ACTIONS AND RULES

Issues	Issue in Table I. 2	Court Rulings *Mozilla,* USTA Verizon*, Page #	FCC Reasoning 2030 Open Internet Order Para.
Erroneous Economic Framework	**1-8, 12-14, 49-52**		
Unrealistic Economics		***87, 94,95***	**14**
Lax Antitrust		***59***	**139**
Lack of Competition			**128**
***ex-post* complaint v. *ex-ante* rule**		***61***	**119, 137**
Investment		***51,52***	**12,56,109**
Analytic Weakness	**20,38-44, 51-62**		**12**
Cost/Benefit Analysis		***59-63,65-70***	**47,106,109**
Timing of Rules &Business Decisions			
Key Unsupported Functions	**16-17, 20-37, 42-44, 46-48, 49-55**	***18***	**13**
Public Safety		***59-63***	**3,13**
Infrastructure Investment		***65-67***	**13, 47**
Universal Service		***69***	**49,94,109,110**
Internet Economics/Virtuous Cycle	**18-19, 49-52**	**707, 644***	**129,131-132,160**
Self-preferencing incentives		**645-646***	**158-160**
All Other Harmful Practices			**151-157**
Broadband only		***108-109,* 653***	**47,65,186**
Role of Edge Demand		**644***	**129**
Switching Costs			**139**
Transparency is not enough			**160**
Infrastructure Act & Broadband Labels			**169-170**
Content, Misclosure, Means			**171-181**
Legal Authorities: Right to Classify	**10-11, 16-17, 42-43, 63-75,79-80**	***Many per note 232***	**18, 66-67**
Title II		**USTA**	**1, 10**
Preemption		***74***	**13,93**
Patchwork			**145**
Forbearance		**726-733**	**100**
706 Authority		**733-734,635-642***	**194**
Conflict Between Courts		***46 v.* 635-649***	**196-198**
Selective Hypocrisies: 706 v. 257			**195**
254(e) v. 254(c)			**49**
Evolution of Rules	**10-11,17,25-32, 44,58,64,76**		
Flexibility for changed circumstances		**734-739**	**155,166**
ISP requesting waiver			**161**
Public Benefit + No Harm to Openness			**162**
Definitions and Adaptations			**188-189**
Advisory Opinion Procedure		**738-739**	**190-191**

For over a decade the principle of *ex ante* regulation under Title I was under attack and the FCC finally had no alternative to preserve the principle but to declare BIAS a telecommunications service. The Court upheld that decision restoring order to the Internet. Unfortunately, the FCC tried to abandon that decision less that two years later, abandoning

effective oversight of the Internet and leaving protection of nondiscrimination to an *ex-post* complaint process and antitrust agencies, in what we call the Flip-Flop Order, or the Title 0 order. The FCC turned its back on over 50-years of success and abandoned the promise of nondiscrimination to a process at the FCC and agencies that lacked the ability or will to ensure the virtuous cycle. The abandonment of oversight over the Internet was brief and the agency has now sought to restore it in the 2023 Open Internet Order.

The 100 pages of comments, incorporating almost 1000 pages of supporting research in the attachments, constitutes a large quantity of evidence in support of the 2023 Open Internet Order. To summarize that material, we use the major headings from Table ES-3, pointing back to the details provided in Table ES-2. It is important to feature Table ES-3 because the FCC has cited the rulings in all three court cases that have reviewed the effort to deal with the Open Internet in the past decade. While only one of them, USTA, was fully supportive of the Title II classification, the other two reflect strong concerns about restoring the fundamental approach to Internet Oversight and the legal basis for doing so. Understanding the concerns of the Courts, in the second column presents a firm legal background for the responses of the FCC in the third column. Needless to say, the individual findings in Table ES-2 support the FCC conclusions in Table ES-3.

The discussion begins with two broad categories of errors in the framework the Flip-Flop Order used.

Errors in Economic Framework v. Internet Reality (Issues 1-8, 12-14, 49-52 in Table ES-2)

The economic framework is "highly unrealistic" and simply wrong on all counts. The claim that competition in the market can protect consumers, backup up by an *ex post* framework

where complaints after the fact can discipline ISPs or antitrust agencies is dubious at best and leaves the core underlying process of Internet dynamics likely to fail.

Markets are not vigorously competitive, with over one-third being monopolies, and the remainder being duopolies or tight oligopolies. As our research has shown, in fact, they are tight oligopolies with "market power on steroids, increased by product segmentation, technological specialization and bundles built around "must have" core products. Particularly important here are the bundling and advertising practices of the dominant firms. The fact that dominant network owners (aka ISPs) and Big Data Platforms both engage in these practices is not an excuse to let network owners (aka ISPs) abuse their market power. The correct solution to prevent both sets of actors from abusing their market power.

The antitrust agencies on which the Flip-Flop order relies have been extremely lax in their enforcement of competition policy and ill-suited to conduct the oversight necessary to police the abuse of market power on a daily basis.

Consumers are at a severe disadvantage in the complaint process, which will provide little relief from anti-competitive, anti-consumer practices.

Thus, the abdication of responsibility is likely to result in increased exploitation of market power to the detriment of consumers and the Internet economy.

Analytic Weakness (Passim but Issues 20,38-44, 51-62 in particular)

The weak economic framework, including conclusions about the effect of Title II classification of BIAS on investment with "little probative value," runs into another problem within the analytic framework the FCC (failed to) adopt in the Flip-Flip Order. Even if one could claim some small investment benefits of the information service classification, those benefits had to be assessed in the context of a broader cost benefit (CB) analysis. The Flip-Flop

order with not engage in a rigorous balancing analysis. The harm to non-economic goals, the risk that consumers and application developers faced in an *ex-post* world was never assessed.

Key Unsupported Functions (Issues 16-17, 20-37, 42-44, 46-48, and 49-55 in Table ES-2)

Even if the marketplace claims were more plausible, the abandonment of authority means that the non-economic goals that the law demands the FCC pursue with the communications market would fail. Markets are not well-suited to provide national security, public safety, universal service, and build out of infrastructure. The first two, national security and public safety, are externalities that network owners (aka ISPs) take into account in their decision making. The latter two – servicing lower income consumers or higher cost rural areas – simply do not yield a rate of profit that attracts them. The challenge of non-economic externalities also applies to privacy and data collection, expression, inequality and inclusion. Privacy and data are areas where the FCC had clear authority (until it was abandoned) and the 2023 Open Internet Order asks about how the impact of exercising this authority could grow in the future.

While the FCC has labored to pursue these non-economic goals in the past, their importance has grown dramatically as a result of international developments and the Covid-19 pandemic. The need has increased, while the ability has been diminished by abandonment of authority.

The comments also make the point that the assumptions about universal service the FCC have been using are wrong. The economics for programs to move more quickly toward universal service is far better than the "normal" economic model. The FCC should consider the decline in costs that could be achieved when market power is controlled and the increase in benefits that will be delivered.

Virtuous Cycle (Issues 18-19, 49-52 in Table ES-2)

The 2023 Open Internet Order mentions the virtuous cycle 14 times once very early in the notice (para. 9) and 13 times in the second half. The conclusion is that the framework adopted by the FCC in the Flip-Flop Order would not provide adequate oversight to protect the virtuous cycle. The incentives of the network Owners (aka ISPs) would prevent them from seeing the external benefits of the virtuous cycle and they would follow their short-term interests which are antithetical to the consumers and edge providers.

Role of Edge Demand, Transparency is not enough (

The role of consumer demand is clear in the discussions of the virtuous cycle, as is the weakness of the FCC Flip-Flop approach. While it is important to recognize the important role that transparency can play in highlighting abuse practices, the 2023 Open Internet Order also highlights the limitation of transparency in preventing the abuse of market power.

Legal Authorities: (Chapters IV-VI, and Issues 10-11, 16-17, 42-43, 63-75, 8-80 in Table ES-2; Right to Classify as Title II, Preemption, Forbearance, 706 Authority)

The first sentence of the notice makes it crystal clear what this proceeding is about: "Today we propose to reestablish the Federal Communications Commission's (Commission) authority over broadband Internet access service by classifying it as a telecommunications service under Title II of the Communications Act of 1934, as amended (Act)."[1] Moreover, the 2023 Open Internet Order made it clear that there were multiple sources of legal authority for doing so.[2] The complaint of the Court was not that the FCC went too far in classifying BIAS as

[1] In the matter of Safeguarding and Securing the Open Internet, Before the Federal Communications Commission, Notice of Proposed Rulemaking, WC Docket No. 23-320, October 23, 2023. Hereafter referred to as the 2023 Open Internet Order.2023 Open Internet Order, para. 1.

[2] 2023 Open Internet Order, para. 10, The Commission grounded its open Internet rules in multiple sources of legal authority, including both section 706 of the Telecommunications Act and Title II of the Act. As it had done previously, the Commission exercised its authority to interpret ambiguous language in the Act regarding the classification of broadband services,

a Title II service, but that it had had exercised too much forbearance authority, giving up too much oversight.[3] The FCC defends all of the possible legal authorities, particularly 706.

The analysis of the FCC's Chief Economist at the time showing that all of the technologies used to implementation implement Internet access are not reasons supporting deregulation but support the classification of Internet access as a Tile II serve is particularly important.

Evolution of Rules (Issues 10-11,17,25-32, 44,58,64,76, in Table I.2 claiming or reflecting Flexibility)

The commission recognizes that flexibility is important. The evolution of the rules must be considered based on changed circumstances, which had made the oversight even more important, but also possible changes that could reduce the scope of oversight. It is important that flexibility and evolution works both ways. Recent events have increased the need to classify BIAS as a telecommunications service. Since that was justified before recent events it is unlikely that the telecommunications classification will not be justified any time soon. The FCC needs a well-articulated process for making such decisions. The "smaller" decisions on how to ring-fence the Title II classification with forbearance should be subject to a similar process. The FCC is right to start from the 2015 Open Internet Order. It should consider any increases or decreases in the forbearance ring-fence through that process, with advocates of change bearing the burden of proof.

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and classified broadband Internet access services, including Internet traffic exchange services (or Internet interconnection services), as telecommunications services under Title II of the Act.25 Concurrently, the Commission exercised its forbearance authority to forbear from application of 27 provisions of Title II of the Act and over 700 Commission rules and regulations… The Commission also reclassified mobile broadband service as a commercial mobile service.

[3] U.S. Telecom Ass'n v. FCC, 825 F.3d 674 (D.C. Cir. 2016) (USTA), reh'g denied, 855 F.3d 381 (D.C. Cir. 2017), cert. denied, 139 S. Ct. 453 (2018). (hereafter USTA)

I. INTRODUCTION

The Consumer Federation of America (CFA) welcomes the opportunity to file comments in the above captioned order.[4] The Federal Communications Commission (FCC) terms the 2018 order of the FCC, the *RIF, Order*.[5] With a quarter of a century of experience dealing with these matters, as documented in Table 1, we believe that the FCC's term in the *2023 Open Internet Order* for the *RIF Order* is far too timid and an incorrect description of what the 2018 order contained. We call it the Flip-Flop Order (or Title 0 Order) because it abandoned the bulk of FCC authority over high-speed communications (abandoning Title I and Title II and adopting essentially a "Title 0" approach). In so doing, it turned its back on four decades of successful FCC policy that had been strengthened in the *2015 Open Internet Order*, which was upheld by the courts shortly after it was released.[6]

Table 1 lists two types of documents on which these comments are built. With ten lengthy CFA papers, totaling almost 1,000 pages, and a dozen and a half peer-reviewed pieces, the amount of material is immense. For the purposes of these comments, we use paragraph citations to the 2023 *Open Internet Order* and then identify the CFA documents that support our conclusions. Page references for specific citations are given in the footnote to the text. Many of the points are stated throughout the analyses. Citations to the specific findings of the reports are

[4] In the matter of Safeguarding and Securing the Open Internet, Before the Federal Communications Commission, Notice of Proposed Rulemaking, WC Docket No. 23-320, October 23, 2023. Hereafter referred to as the 2023 Open Internet Order.2023 Open Internet Order.

[5] *Restoring Internet Freedom*, WC Docket No. 17-108, Declaratory Ruling, Report and Order, and Order, 33 FCC, Rcd 311 (2017) (*RIF Order*). Hereafter referred to as the Flip-Flop Order.

[6] Protecting and Promoting the Open Internet, WC Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5603, para. 4 (2015) (2015 Open Internet Order), pet. for review denied, U.S. Telecom Ass'n v. FCC, 825 F.3d 674 (D.C. Cir. 2016) (USTA), reh'g denied, 855 F.3d 381 (D.C. Cir. 2017), cert. denied, 139 S. Ct. 453 (2018). Hereafter referred to as the 2015 Open Internet Order.

given in footnotes to these comments. These can be traced in the CFA documents attached via hyperlink. The page number given is generally the beginning of a lengthier discussion.

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Since CFA holds the copyright to this material, the Attachments provide links to the full papers available on the CFA web site. In the text below, we state the main themes of the analysis, rejecting or criticizing the Flip-Flop order and supporting the 2023 return to Open Internet rules and regulations. Since eight of the ten attachments were part of the effort to secure and defend an "open Internet, we present direct quotes as adaptations of the earlier research and advocacy.[7]

There is a fundamental difference between Table I.2 and I.3. In Table I.2, where the details of the critique and rejection of the Flip-Flop Order are "teed" up, we present the refutation of every detail. In Table I.3, where the 2023 *Open Internet* proposed rule is presented, there are also many questions, but a full statement of the answers and arguments from the critique would be redundant. Therefore, we present the groupings of major categories of elements of the proposed rule and state why the principles embodied therein are appropriate. Tables I. 2 and 1.3 give references to the issue in the background, as well as the individual elements noted in Table 1.2.

To be crystal clear about our broad support for the 2023 Open Internet Order, as we have said in Attachment F. The FCC never wavered in its commitment to nondiscrimination under the '34 Act over four decades. It took a decade to get from the formal repeal of the Computer Inquiries in the 2005 Wireline Broadband Order to Title II reclassification. Over that period the FCC tried several approaches to asserting its authority – ancillary authority, § 706 authority, ultimately Title II. The fact that the courts upheld Title II before the Trump/Pai flip-flop which would like to repeal it, makes the legal classification all the more important and open to a "policy-based" outcome.

[7] The two exceptions are the work on universal service from the 2002 and earlier period.

TABLE I. 2: CFA RESPONSES REJECTING THE FLIP-FLOP ORDER

Category	Issue	Ord	Rebuttal				Document						Category	Issue	Ord	Rebuttal				Document					
Issues	#	Para	A	B	C	D	E	F	G	H	I	J	Issues	#	Para	A	B	C	D	E	F	G	H	I	J
I. Introduction	**1**			x				x					Universal SVC.	42	49	x						x	x	x
Action	2			x				x					High cost	43	50	x	x					x	x	x
II. Background	**3**												Other Policies	44	51						x	x	x	
History	4					x	x						MTE	45	52						x	x		
Weak Competition	5	12	x	x	x			x					Expression	46	53									
Lax Antitrust	6		#	x	x			x					Equity, Inclusion	47	54		x							
Transparency	7							x					B. 5 Disabled											
Ex Post Complaint	*8*							x	x				Access	48	55		x					x	x	x
III. Proposed Reclass													B.6 Flip-Flop unjustified			x					x	x	x	
A. Nature of Svc. Title II/Sm. Bu	9							x		x	x	x	Investment	49	56	x					x			
Recent changes	10	17						x					Long-term Inv.	50-51	57	x	x				x			
Future	11	17						x		x	x	x	Title II incentives	52	58	x					x			
Title II def.	12	18						x					C. Def. of BIAS											
Advertising	13	19							x				Scope BIAS	53	59	x					x			
Bundles	14	19						x	x				Mass Mkt Def.	54	60	x					x			
3rd Party	15	20						x	x				Technology	55	61	x					x			
B. Universal Svc.	16	21	x							x	x	x	Personal use	56	61	x					x			
Addtnal Policy	17	22											Other locations	57	62	x					x			
B. 1. Openness	18	23	x			x		x					Other Svcs	58	63	x					x			
Nationwide	19	24						x					Excl. Non-bias us	59	64	x					x			
B. 2 Nat. Security													Monitor non-bias	60	65	x					x			
Title II impact	20	26											Internet Traffic	61	66	x					x			
Sect. 214	21	27											Other Exclusions	62	67	x					x			
Other Security	22	28											D. Telecom. Class											
Safeguard Comm.	23	29											1996 Act	63	68,69						x			
cybersecurity	24	30											Title II best	64	70						x			
Treat to BGP	25	31											DNS 1	65	71						x			
Bolster authority	26	32											Transform.	66	72						x			
Public safety use	27	34											Control of form	67	73						x			
1st responders	28	35											Not info svc.	68	74						x			
Supplement 911	29	36											DNS 2	69	75						x			
Public safety Info	30	37											DNS 3	70	76						x			
Non-emergencies	31	38											DNS 4	71	77						x			
Ntwk resiliency	32	39											Caching	72	78						x			
B. 3 Privacy & Data	33	40	x	x		x			x				Web pages	73	79						x			
Data	34	42	x	x		x			x				Other functions	74	80						x			
Sect. 222	35	43							x				Major questions	75	81						x			
Foreign	36	44							x				Relevant factors	76	82						x			
Robo Calls	37	45							x				Appl. of Maj. Qs.	77	83									
B .4 Access to Svc.	38	46							x	x	x	x	Congress	78	84									
Facl. Deplymnt/	39	47	x	x					x				E. Return to CMR	79	85-93						x			
Infrastructure	40	48	x	x					x				F. Preemption	80	94-97						x			
Wireless	41	49	x						x	x	x	x													

Dramatic Change in circumstances
Perpetual Cyberwar
Intense Int'l Threats
Covid Pandemic
demonstrates a need for improved public safety

These authorities were critical to weaken of abandon in the first place.

TABLE 1.3: COURT RULINGS AND FCC REASONING IN SUPPORT OF THE PROPOSED 2023 OPEN INTERNET ACTIONS AND RULES

Issues	Issue in Table I. 2	Court Rulings *Mozilla,* USTA Verizon*, Page #	FCC Reasoning 2030 Open Internet Order Para.
Erroneous Economic Framework	**1-8, 12-14, 49-52**		
Unrealistic Economics		***87, 94,95***	**14**
Lax Antitrust		***59***	**139**
Lack of Competition			**128**
***ex-post* complaint v. *ex-ante* rule**		***61***	**119, 137**
Investment		***51,52***	**12,56,109**
Analytic Weakness	**20,38-44, 51-62**		**12**
Cost/Benefit Analysis		***59-63,65-70***	**47,106,109**
Timing of Rules &Business Decisions			
Key Unsupported Functions	**16-17, 20-37, 42-44, 46-48, 49-55**	***18***	**13**
Public Safety		***59-63***	**3,13**
Infrastructure Investment		***65-67***	**13, 47**
Universal Service		***69***	**49,94,109,110**
Internet Economics/Virtuous Cycle	**18-19, 49-52**	**707, 644***	**129,131-132,160**
Self-preferencing incentives		**645-646***	**158-160**
All Other Harmful Practices			**151-157**
Broadband only		***108-109,* 653***	**47,65,186**
Role of Edge Demand		**644***	**129**
Switching Costs			**139**
Transparency is not enough			**160**
Infrastructure Act & Broadband Labels			**169-170**
Content, Misclosure, Means			**171-181**
Legal Authorities: Right to Classify	**10-11, 16-17, 42-43, 63-75,79-80**	***Many per note 232***	**18, 66-67**
Title II		**USTA**	**1, 10**
Preemption		***74***	**13,93**
Patchwork			**145**
Forbearance		**726-733**	**100**
706 Authority		**733-734,635-642***	**194**
Conflict Between Courts		***46 v.* 635-649***	**196-198**
Selective Hypocrisies: 706 v. 257			**195**
254(e) v. 254(c)			**49**
Evolution of Rules	**10-11,17,25-32, 44,58,64,76**		
Flexibility for changed circumstances		**734-739**	**155,166**
ISP requesting waiver			**161**
Public Benefit + No Harm to Openness			**162**
Definitions and Adaptations			**188-189**
Advisory Opinion Procedure		**738-739**	**190-191**

There are other factors that underscore the importance of preserving the Title II classification at this point. As noted earlier, Title II is the primary location of all of the goals of

the ’34 Act, not just non-discrimination. Extension of service and support for universal service, consumer protection, privacy and security are centered there. The administrative repeal of Title II in the flip-flop orders seeks to abandon or reduce FCC authority in all of these matters.[8]

The importance of FCC authority, which could only be framed in the new environment as Title II classification, was fundamental and longstanding. The FCC’s Flip-Flop Order came less than two years before the onset of the Covid 19 pandemic. It was a particularly inopportune moment for the administrative abandonment and transfer of FCC authority to weak alternatives and ill-suited agencies.

Broadband was penetrating rapidly as a service and growing into an essential telecommunications service, even without the pandemic which accelerated and reinforced the vital nature of BIAS. FCC oversight and authority was needed more than ever, and the abdication had even less justification, if it ever had a hint of one.

After the onset of the pandemic Congress passed vital legislation that made the job of the FCC more important and made the abdication of authority and responsibility even less sense.[9] What the FCC would have done under Agit Pai’s leadership in response to these changes is uncertain, but his reaction to the court ruling suggests he would have done little if anything and it is very unlikely that he would have flipped back to supporting and implementing FCC oversight.

GENERAL OBSERVATIONS ON THE WEAKNESSES OF THE FLIP-FLOP ORDER

We begin this discussion of the background of the 2023 Open Internet Order with a touch of political economy about the decisions. We conclude that the FCC abandoned the essence of FCC oversight of the Internet, embodied in the principle of the *ex-ante* guarantee of

[8] Attachment F, pp. 65-66.

[9] 2023 Open Internet Order, p. 1 points to the *Infrastructure Investment and Jobs Act,* as well as five actions taken in response to the pandemic, p. 3.

nondiscrimination in access to the Internet for consumers and developers of applications as a key component of the "public interest" in open communications networks. This principle of "network- neutrality" ensured that the Internet was open, creating what the Open Internet Order referred to as a virtuous cycle of innovation.[10] In that cycle, users demanded the ever-more innovative applications offered by developers, which drove the incumbent network owners (aka ISPs) to invest in upgrades to their networks to accommodate the new uses. The cycle was continuously repeated over half a century.[11] Innovation without permission was the term used.

The 2023 Open Internet Order notes the "four freedoms" touted by Chairman Powell in in his ongoing effort to reduce FCC oversight over the Internet. It does not note his first speech upon being appointed to the FCC in which he denigrated the "public interest," a key element in the 2023 Open Internet Order. Nor does it note his first speech as chair of the FCC in which he belittled the digital divide, claiming it was really a "Mercede Benz" divide. Agit Pai, Trump's chair of the FCC carried Powell's attack on the digital divide and the FCC's obligation to promote universal service to another level, declaring that to explicit charge made by congress under section 706 of the Act was "hortatory."[12]

Finally, it does not note that Powell was forced to use Title II like powers against Madison River Communications just before he codified his "principles," to prevent discriminatory behavior.[13] He claimed the normal working of the marketplace would take care of the universal service problem (if indeed there was one) and anticompetitive behaviors by

[10] The Order uses the concept 14 times.
[11] One can mark the beginning of the process with several decisions in 1968 that continued until 2018.
[12] 2023 Open Internet Order at p. 5.
[13] Consent Decree, 2005, In the Matter of Madison River Communications, LLC and affiliated companies, Before the Federal Communications Commission, File No. EB-05-IH-010, Acct. No. FRN: EB-0004334082

network owners (aka ISPs). Two decades later, the problems still exist and need public policy, contrary to Powell's claim.

Powell's *ad hoc* partial deregulation led the court to question the Title I authority that had been used for forty years, in a case brought by Comcast. The wording of Title I is relevant and important here, not only for the commitment to universal service, which came first, but also for the Commission's duties on national defense and public safety.

> For the purpose of regulating interstate and foreign commerce in communications by wire and radio so as to make available, so far as possible, to all people of the United States a rapid, efficient nationwide and world-wide wire and radio communications service with adequate facilities at reasonable charges, for the purposes of national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications.[14]

The search was on for a firm legal basis that would allow the FCC to do its duty under the law.[15] The 2010 Open Access order which tried to stay within the existing legal framework was challenged in court by Verizon, and again overturned. It is noteworthy that the challengers of an open Internet were the dominant network owners (aka ISPs). Ultimately, the FCC was forced to adopt broader Title II authority to fulfill its obligations in the Open Internet Order of 2015, which was upheld by the Courts in 2016.

The only question is, why did it take the FCC so long to arrive at this compelling line of reasoning that leads to a Title II classification?

The answer is, for the first three decades of the birth and growth of the Internet, the FCC did not need this authority. The courts had accepted a legal theory in which the FCC claimed

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[14] U.S. Code, 47 U.S.C. § 1/. The 2023 Open Internet Order mentions national security and public safety, most explicitly in terms of Title I on page 9.

[15] Network neutrality, which involved the relationship between Title I and §s 201 and 202 of Title II, shows the interconnection between the Titles and has attracted the greatest attention. See Attachment F, p. 9.

broad jurisdiction under Title I of the Act to take actions that emulated (invoked) Title II authority. The FCC had long claimed that the broad goals expressed in Title I of the Act enabled them to use authorities in other Titles in the Act – "ancillary authority" – even though they applied to specific services defined in those Titles. The 1996 Act did not change that. However, the court changed its view, adopting a much dimmer view of the exercise of this ancillary authority. The FCC struggled with this shift.

When the first Open Internet Order was overturned, the FCC was at a turning point. The FCC had to choose between abandoning the principle of nondiscrimination that had been in force for 40 years or building that principle on a firmer basis within the law. Ultimately, the FCC chose the latter, and the court upheld its Title II decision.[16]

The FCC had to lay a firm basis for all of its obligations in Title I. The only thing it could do to carry out its duties was to classify BIAS as a Title II service, where the mechanism of oversight of telecommunications were specified in furtherance of Title I. Nevertheless, Agit Pai, Trump's FCC chairman, tried to escape form the court's order and pushed the argument much farther with its Flip-Flop order.

THE DUBIOUS ECONOMICS OF THE FLIP-FLOP ORDER

The theory of economics that the FCC invoked in the Flip-Flop Order not only flew in the face of the 2016 court ruling, but it was also contrary to decades of remarkable development of the Internet, rejected by decades of economic analysis, and contrary to the legal principles under which the Internet was built, which has embraced by Congress in the Telecommunication Act of 1996, and upheld by the courts in 2016. The theory used to overturn this long tradition of

[16] Attachment F. p. 59.

successful oversight and all but abandon it authority was based on four elements, none of which could replace the simple rule of nondiscrimination:

> Weak competition that claimed two competitors, or even the threat of entry by a second competitor
> Lax antitrust enforcement by the FTC
> A touch of transparency, and
> *Ex post* complaints by consumers or competitors that they had been discriminated against.

This theory, which we have described elsewhere as Free Market Fundamentalism,[17] is wrong, shown over the course of a century that its claim that it can protect competition and consumers with weak competition and lax enforcement is incorrect as a general proposition.[18] It is especially inoperative and harmful to the interests of consumers and competition in the Internet environment because innovation is dynamic and particularly dependent on the guarantee of nondiscrimination, which will be stifled by *ex post* process established by the flip-flop order of waiting for discrimination to occur, filing of a complaint, which will certainly be resisted by network owners (aka ISPs) and (perhaps) to "later" be weeded out by the FCC.

On the Internet there is no "later.' Applications developers that are liable to be "held up" by incumbent network operators, will not enter or will disappear while the dispute is being adjudicated. Consumers are denied the immediate and long- term benefits of innovation and the virtuous cycle is interrupted.

The Open Internet Order of 2015 laid out this reasoning in detail and the courts upheld it in 2016. The abandonment of this structure in the Flip-flop order was based on the misguided theory described above. Ironically, the appeals court upheld the flip-flop order out of deference

[17] See Brandeis, Attachment B.
[18] See Mark Cooper, *The Golden Age of Capitalism: Fact or Fiction,* Available from the author upon request.

to the FCC's expertise even though it had many concerns about issues that had not been adequately addressed, and fundamental doubts about the reasoning. It upheld the order primarily because it assumed that the Supreme Court would give (Chevron) deference to the FCC's judgement.

The FCC's Flip-Flop order can and should be reversed for four reasons.

The abandonment of oversight was blatantly illegal under the existing law and would only serve the interests of the dominant incumbents, not the public or consumer interests and certainly not competition or the virtuous cycle.

The same deference that led the court to uphold the order must be accorded to the current order which reinstates the *Open Internet Order.*

The FCC has been careful in its analysis to restate the reasoning behind the Open Internet Order that was upheld by the court, while it has teed up for comment each of the arguments the FCC made erroneously, as well as any questions that may be posed to its current order reinstituting and improving the *Open Internet Order.*

Ex post complaints by consumers or competitors that they had been discriminated against.

While the Fip-Flop order was upheld by the court, it had its own problems. The challenge was brought by Mozilla, a firm with a small share of a key application (search) just above the layer in which the network owners (aka ISPs) derived their market power. Mozilla's primary problem was the bottleneck market power of Big Data Platforms,[19] but it was still leery

[19] Mozilla supported the legislation that would have revitalized antitrust I generally, with a special target of the Big Data Platforms (Urmika Devi Shah, 2022, Mozilla supports the American Innovation and Choice Online Act (AICOA). The time for change is now**,** Blog, June 14.

of the market power of the network owners (aka ISPs). This court case underscores another important observation. Mozilla was rightly concerned with both sources of market power, and it made no sense to argue that because the Big Data Platforms had market power the network owners (aka ISPs) should be able to exercise their market power. "Two wrongs do not make a right" – all sources of market power should be addressed by public policy. A similar observation will be applied to privacy below.

The 2023 Open Internet Order notes "a number of shortcomings and limitations" in the Flip-Flop order. In all, six important issues were "close" calls in the opinion of the Court. On three issues the court upheld the Flip-Flop Order "just barely."

- It argued on Title II classification deserved deference to the agency, although the evidence supporting the claim that it would "depress network investment had "quite modest probative value."[20]
- The Court stated that the reliance on the "ability of antitrust and consumer protection law to obviate the need for Commission regulatory authority "was no model of agency decision making" that "barely survived arbitrary and capricious review.
- Two of the judges agree that "The Commission's technological and marketplace evaluation of BIAS was "unhinged from reality," but the Court was not free "to require the Commission to bring the law into harmony with the realities of the modern broadband marketplace.

Three issues were remanded for the "failure to adequately evaluate the potential negative implications of moving away from Tile II on the Commission's ability to

- deal with public safety,
- whistled past the graveyard on pole attachments, and
- "backhanded" the issue of Lifeline Support

Thus, the order was shaky at best on six key issues, investment in the network, the ability to protect consumers in the absence of agency policies, the BIAS marketplace, public safety, pole attachments and universal service (lifeline support). Even on the remand issues the FCC

[20] 2023 Open Internet Order, para. 12,

stuck with its Flip-Flop Order, "refusing to depart from its determinations," so all six issues were teed up for review by the FCC in the 2023 Open Internet Order.

APPRECIATING THE REVOLUTIONARY ECONOMICS OF AN OPEN INTERNET

Before we move on to the specifics of the 2023 Open Internet Order, we pause for a moment to consider why the policy of *ex ante* open access to the Internet was so successful. Here we rely on the analysis presented by the National Research Council. The Internet became the dominant means of communications because of its vastly superior efficiency and ability to unleash innovation at the edges. This outcome was made possible by the end-to-end principles which allowed communications to flow from any endpoint to any other endpoint without the permission of the network operators. We noted this in one of our earlier papers.

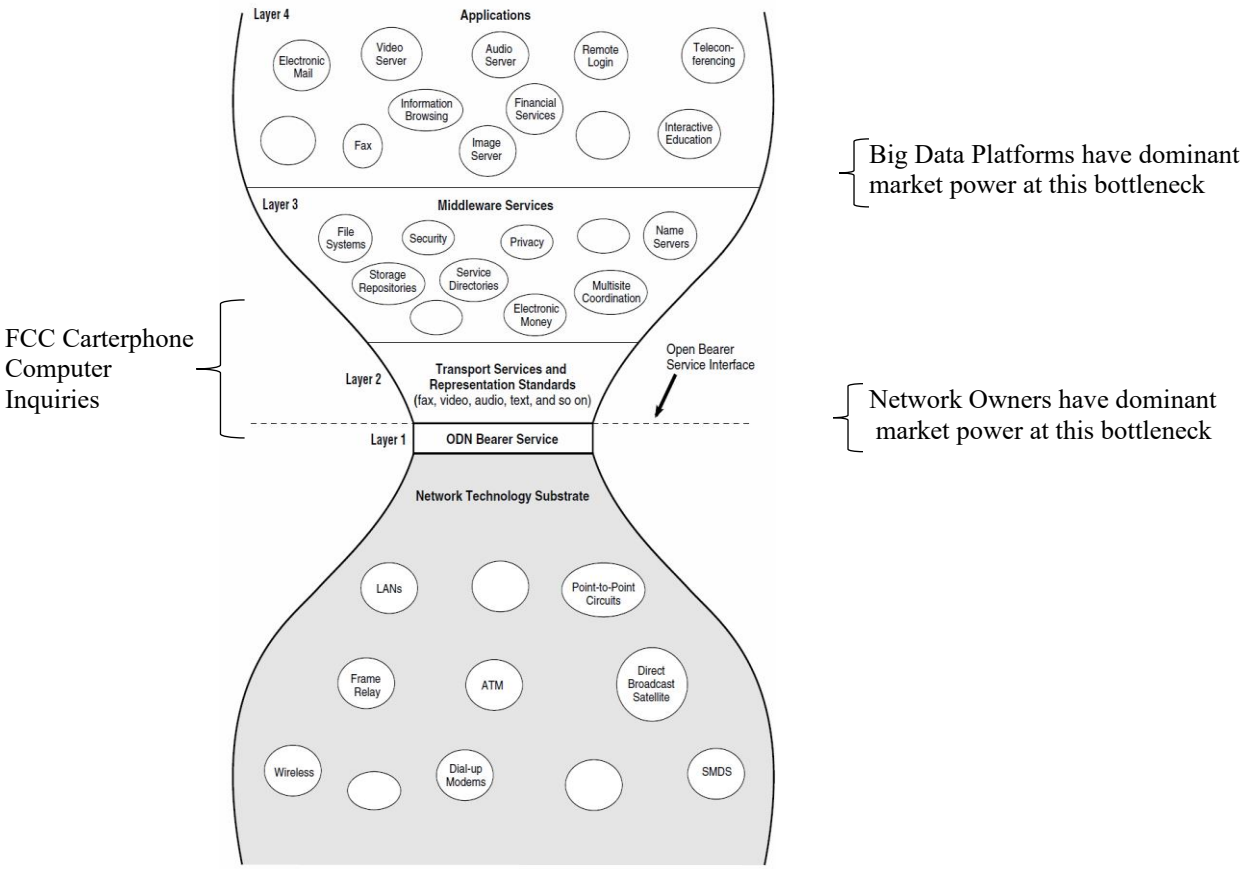
The macroeconomic virtuous cycle framework posits that innovation and investment at the edge of the network are inextricably linked to innovation and investment in the communications network itself in a recursive, reinforcing feedback loop. Development of applications, devices, and content stimulates demand for communications, which drives innovation and investment in the supply of communications network capacity and functionality. In turn, improving network functionalities and expanding capacity make new applications possible, which stimulates new demand and allows the cycle to repeat.[21]

The architecture that supported this principle was based on a modular, standardized layered approach, which was described by the National Academy of Sciences in hourglass. [22] The number of layers used by different analysts varies from three to seven, but these analysts agree that the key is the modular, standardized, open nature of the layers. Figure II.1 draws

[21] Attachment F, p. 11.
[22] Id., p. 12.

attention to the fact that the open data network (ODN) and protocols at the neck of the hourglass provide the link between diverse networks and a broad range of applications.

FIGURE I.1: HOURGLASS ARCHITECTURE: POLICY CREATES OPEN STANDARDS AND LAYERS THAT LEADS TO INNOVATION AT THE EDGES WITHOUT PERMISSION



Sources: CTSB, NRC, *The Internet Coming of Age (2001)*, pp. 127-128

The principles of openness the hourglass identified bear repeating:

Open to users. The network does not force users into closed groups or deny access to any sectors of society, but permits universal connectivity, as does the telephone network.
Open to providers. The network provides an open and accessible environment for competing commercial and intellectual interests. It does not preclude competitive access for information providers.
Open to network providers. The network makes it possible for any network provider to meet the necessary requirements to attach and become a part of the aggregate of interconnected networks.
Open to change. The network permits the introduction of new applications and services over time. It is not limited to only one application, such as TV distribution. It also

> permits new transmission, switching, and control technologies to become available in the future.[23]

Not surprisingly, the NRC chose the then current example (1994) to make its point: "The telephone system is an example of an open network, and it is clear to most people that this kind of system is vastly more useful than a system in which the users are partitioned into closed groups based, for example, on the service provider or the user's employer."[24] The network to which they were referring was a common carrier network and it was exactly that arrangement that Congress had in mind when it wrote the 1996 Act. Keeping the waist open and separate was a key architectural feature that took on immense legal significance in the 20-year battle over network neutrality.

In particular, the concept of a distinct bearer service contributes to meeting the key objective of separating the information service provider from the network service provider in order to allow all potential service providers the opportunity to flourish in an ODN environment. Its existence as a separate layer… provides a critical separation between the actual network technology and the higher-level services that actually serve the user.[25]

The concept of a bearer service in *telecommunications*, to which the NRC referred is defined in Wikipedia in exactly the way we define network neutrality, as follows: Bearer Service or data service is a service that allows transmission of information signals between network interfaces. These services give the subscriber the capacity required to transmit appropriate signals between certain access points, i.e. user network interfaces.[26]

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[23] Id., p-. 12.
[24] Id., p.
[25] Id., pp. 5…51.
[26] Wikipedia.

Scott Jordan, the FCC's Chief Technologist during the successful effort to classify broadband as a Title II service described the power of the architecture as follows: Modularity and standardization of interfaces is exactly what makes the Internet possible. One result of modularity and standardization of interfaces is that edge providers can design applications without the need for coordination with or permission from broadband Internet access service providers who offer the lower layer IP packet transfer service. Another result of modularity and standardization of interfaces is that device manufacturers can design Internet-connected devices without the need for coordination with or permission from broadband Internet access service providers.[27]

Nicolas Economides, a leading network economist and defender of nondiscriminatory access, provides a formal economic analysis in which layers play a key role. "The Internet is based on three basic separate levels or functions of the network: the hardware/electronics level of the physical network; the (logical) network level where basic communication and interoperability is established; and the applications/services level."[28] Interestingly, Economides frequently emphasizes not only that the centralization that characterizes the physical layer is anathema to the dynamic nature of digital communications, but also that the distinction between the logical and applications layers is critically important to understanding the success of the Internet. Thus, the Internet separates the network interoperability level from the applications/services level. Unlike earlier centralized digital electronic communications networks, such as CompuServe, AT&T Mail, Prodigy, and early America Online (AOL), the

[27] Attachment F, p. 26,

[28] Economides, Nicolas, 2008 , "Net Neutrality, Non-Discrimination, and Digital Distribution of Content Through the Internet," I/S: A Journal of Law and Policy for the Information Society, p. 505.

Internet allows a large variety of applications and services to be run 'at the edge' of the network and not centrally. [29]

Innovation without permission on the supply-side is linked to the fact that the "Internet's tremendous success has also been based on harnessing and benefiting from networks effects."[30] Removing the network operator as an intermediary who can impose conditions and require negotiations is crucial to dynamic efficiency.[31] There are two sides to the effect – demand and supply – that interact to create the virtuous cycle. The value of a user's experience depends on and increases with the amount of content and applications available on the Internet. The value of content and applications on the Internet, in turn, increases with the number of users connected. This creates a virtuous cycle that dramatically expands the value of the network as its size grows. Greenstein argues that "The key lessons are learned if the question is: how and why did the operation of economic archetypes, the adoption of government policies, and the influence of institutions encourage or discourage innovation from the edges?"[32] The architecture allowed highly distributed and therefore unconcentrated decision-making power.

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29 Id., see also Economides, Nicolas, 2008, "Public Policy in Network Industries," Handbook of Antitrust Economics.

30 Economides, Nicolas, 2011, "Why Imposing New Tolls on Third-Party Content and Applications Threatens Innovation and Will Not Improve Broadband Providers' Investment," Net Neutrality: Contributions to the Debate, p. 87:

31 Id., pp. 87-88,

32 Greenstein, Shane, 2010, "Innovative Conduct in Computing and Internet Market," in Bronwyn H. Hall and Nathan Rosenberg (eds), *Handbook of the Economics of Innovation* (Volume 1), (Amsterdam, The Netherlands: North-Holland). See also, Greenstein, Shane, 2015, *How the Internet Became Commercial: Innovation, Privatization and the Birth of a New Network* (Princeton).

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II. BACKGROUND

THE PROBLEM OF ABUSE OF MARKET POWER AND LAX ANTITRUST ENFORCEMENT OF TIGHT OLIGOPOLIES ON STEROIDS

While the unique characteristics of the Internet and the digital economy pose a "new" challenge for economic oversight, there are more traditional issues that the FCC's Flip-Flop order failed to take into account, rendering its economic analysis even more unrealistic and likely to fail.

The troubling absence of competition in the BIAS market was noted and given full recognition by the Commission in the 2023 Open Internet Order. Over one third of households lack a competitive option with 70 percent of those in rural areas suffering from the monopoly situation. [33] The implication is that over one quarter of urban household lack a competitive option.[34] At higher speeds (gigabit service) were the internet is headed over 95 percent of households lack a competitive alternative.[35] Although competition in "the mobile BIAS market is somewhat more significant, fixed and mobile services have not proven to be substitutable. These statistics are supportive of the analysis in Attachment A.

Interestingly, the Commission notes that a finding of market power is not necessary to determine that it should exercise jurisdiction, it asks what is the significance of the lack of competition. Attachment A indicates that the network owners (aka ISPs) have the typical incentives of those who possess market power, and their clear abuse of that market power affects the basic obligations of the FCC under the Communications Act.[36] We have described the situation in the communications industry as a tight oligopoly on steroids (see Table II.1).

[33] 2023 Open Internet Order, para. 128.
[34] Assuming 17.5% of the population is rural.
[35] 2023 Open Internet Order, para. 142.
[36] Id., para. 128.

TABLE II. 1: THE TIGHT OLIGOPOLY ON STEROIDS IN BIG DATA PLATFORMS

Tight Oligopoly Characteristic	Big Network Owners (aka,ISPs)	Big Data Platforms on Steroids		
High Concentration	Franchise	Economies of scale & scope, zero marginal cost, winner-take-a large part of markets		
Multi-market contact	Pervasive footprints foster recognition of mutual interests in dampening competition			
	Telco BDS, Wireless Cable MVPD, BIAS	Google Search	Facebook, Social media	Amazon, distribution
Technological Specialization	Point-to-point (landline) Cell Networks Star video	Algorithms Network value	Connectivity Network value	Efficiency --Distribution
Product Segmentation	Voice,wireless,video,BIAS self-preferencing	Advert targeting self-preferencing	Apps. targeting self- preferencing	"shelf-space" self-preferencing
Unique Product Traits Traits	Geographic Separation Local network Franchise origin	Must Have Content protected by lock-in, supply-side foreclosure and demand-side bundling with behavioral manipulation		

Source: The "tight oligopoly on steroids" was introduced in Mark Cooper, 2016, *Overcharged and Underserved*, The Roosevelt Institute. February 7.

Several areas of antitrust and regulation are difficult or impossible under current precedent to prevent abuse because of lax enforcement of existing authority and needing to be addressed – oligopoly, vertical and conglomerate mergers, unmanageable conflicts of interest, complex day-to-day oversight, market failures – come together in a need for much more oversight over Big Network Owners (aka ISPs) and Big Data Platforms

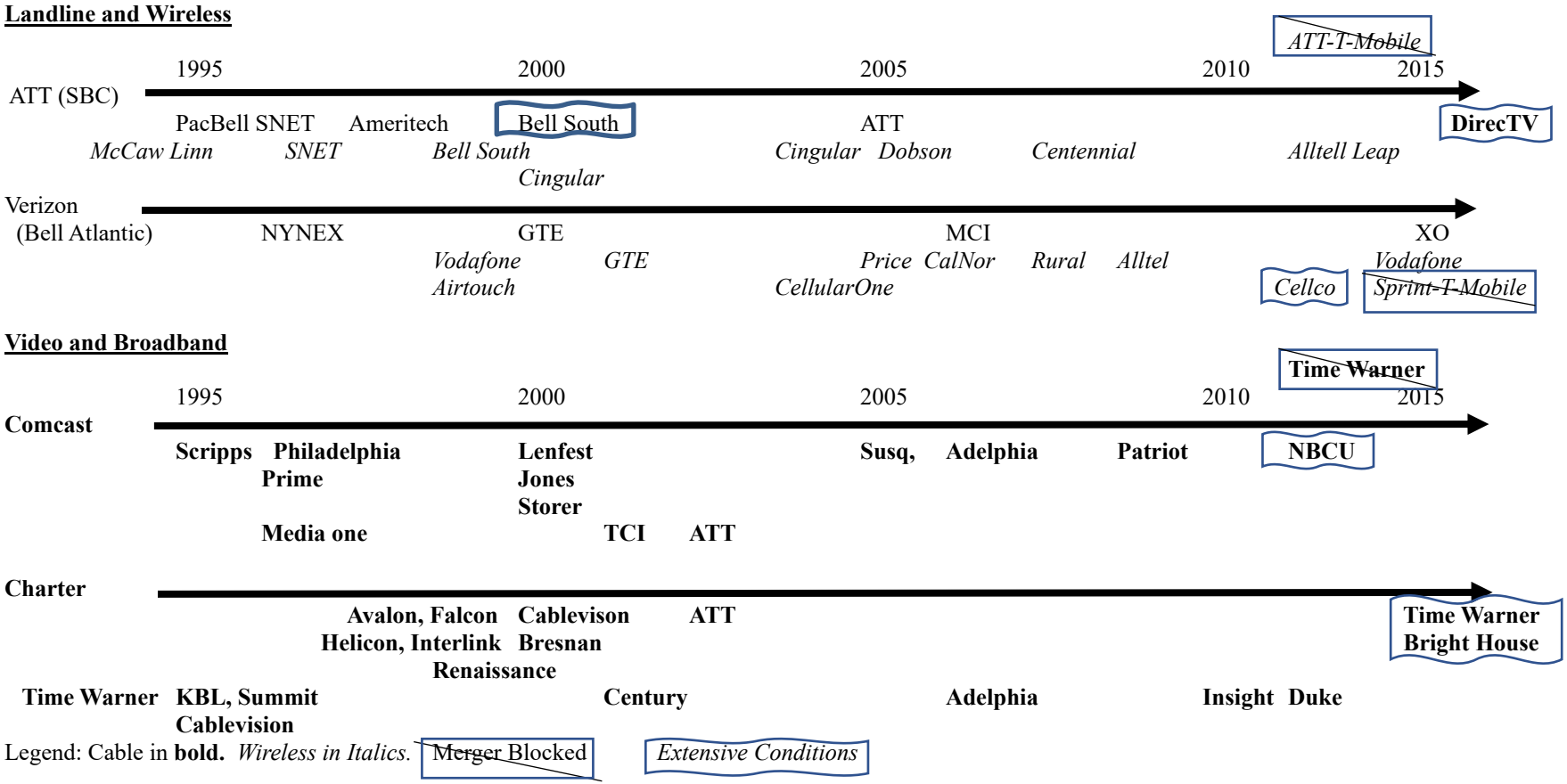
Starting with the Big Network Owners (aka ISPs) we find that in every case, by a wide margin, the four dominant firms exceed the level that is characterized as a tight oligopoly. This means that the potentially strongest competitors (those with expertise and assets that might be used to enter new markets) are few. This reinforces the geographic segregation between services from the monopoly period, since the best competitors have followed a non-compete strategy. In fact, the actual situation is worse than the traditional concentration analysis suggests. It is the same four consolidated, vertically integrated firms that dominate all the main product markets. These four firms alone constitute a tight oligopoly across all three markets.

Moreover, as shown in Figure II.1, each of the firms has preserved its dominance of its "franchise" services. They also exhibit technological specialization. Given the small number of firms, their geographic segmentation, technological specialization and repeated contact in multiple markets, it is easy to engage in parallel and reciprocal actions that dampen competition. Duopoly and tight oligopoly would both be properly descriptive of some aspects of digital communications markets. Reinforced with geographic separation, technological specialization and product segmentation, the market power these firms enjoy goes beyond the simple oligopoly concept we find in the analytical frameworks.

Given the significant and repeated examples of coordination – sometime explicit, frequently parallel, and the reinforcing behaviors in multiple market, it is proper to call the current situation a "virtual cartel" or a "tight oligopoly on steroids." Moreover, given the economic forces in the communications sector, it may well be that small numbers of suppliers will be typical. Therefore, the public policy problem is that we have dominant conglomerates in inadequately regulated, highly concentrated markets.

The failure to keep the faith expressed in competition in the 1996 Act is most readily seen in merger policy. In each of the communications services, we have arrived at a tight oligopoly through merger, even at the national level. One can argue that while these transmission networks are no longer "natural monopolies," they are a far cry from saying that they are workably competitive. They are at best, tight oligopolies. And the problem at the local level is even worse because the market opening policies either could not work due to the underlying economics or did not work because incumbents were able to frustrate the efforts to introduce competition. At the local level, they are barely duopolies.

FIGURE II. 1: MERGERS CREATED A TIGHT OLIGOPOLY ON STEROIDS IN THE DIGITAL COMMUNICATION SECTOR
THE OBAMA ADMINISTRATION SET A NEW DIRECTION FOR MERGER POLICY



Sources: Older mergers from: Eli Noam, *Media Ownership and Concentration in America,* 2009, pp. 77, 236, 237, 240, 246; Federal Communications Commission, *Competition Reports, Cable and Wireless,* various years; Wall Street Journal, "A Tangled Family Tree,"," Pew Research.org, Chart of the Week, based on Rani Molla, *Wall Street Journal.* U.S. Department of Justice, *Complaint, Competitive Impact Statement, United States v. Comcast Corp*., 808 F. Supp. 2d 145 (D.D.C. 2011) (No. 1:11-cv-00106); *Complaint, Competitive Impact Statement*, *United States v. AT&T Inc. and Deutsche Telecom, AG,* (No. 1:11-cv-01560), August 31; Competitive Impact Statement, *U.S, and the State of New York, v. Verizon Communications Inc., CEllCO Partnership d/b/a Verizon Wireless, Comcast Corp., Time Warner Cable Inc., Cos Communications, Inc., and Bright House Network, LCL,* No. 1:12-CV-01354, August 16, 2013; Competitive Impact Statement *Charter Communications, Inc., Time Warner Cable Inc., Advance/New House Partnership, and Bright House Networks, LLS. Civil Action No. 1:16-cv-00759 (RCL), May 10, 2016;* Jon Sallet, Federal Communications Commission General Counsel, Remarks to the "Telecommunications Policy Research Conference: "The Federal Communications Commission and Lesson of Recent Merger & Acquisition Review, September 25, 2015., explains the FCC approach in several of the mergers.

Originally developed to describe big broadband networks, it applies equally to Big Data Platforms.[37] The Big Data Platforms have taken on a gatekeeper role that is just as potent as the gatekeeper role of the communications networks. They exhibit high levels of concentration, multimarket contact, product segmentation for their main product, technological specialization and product insulation from competition. While geographic separation was an important element in "moat" building in physical space, on the Internet, with the "death of distance,"[38] the key issue is "where" can you get services? Although frequently the result of franchise monopolies in physical communications networks, in the digital communications economy, the separation is more a result of technology and product dominance. What would you have to give up if you tried to switch services? Where would you find the many things you want? If you want information and advertising, it is hard to avoid Google. If you want social interaction, it is very hard to give up Facebook. If you want to order online and have goods delivered, it is hard to give up Amazon.

The Big Data Platforms have insulated their products from competition by bundling a "must-have" core product with an array of complements, accumulating a huge pool of data about customers, and excluding or controlling the provision of these complements and use of this data by potential competitors. And it gets harder everyday as the bundles around "must-have services" get bigger and bigger. The members of the "tight oligopoly on steroids" have gatekeeper control of chokepoints reinforced by steroids that give the small number of firms that

[37] This is the network neutrality issue described by Khan, Lina M., 2019, "The Separation of Platforms and Commerce," *Columbia Law Review,* 119

[38] Cairncross, Frances, 2001, The Death of Distance: How the Communications Revolution Is Changing Our Lives - Distance Isn't What It Used to Be, Harvard Business School

dominate the digital communications sector immense market power. They have demonstrated time and again that they have the willingness and ability to abuse that market power.

The first two items in Table II.1, above, are standard antitrust terms. The high concentration makes it likely that these entities will have market power, while the multimarket content makes the mutual benefit of dampening rivalry more compelling. Item 3a focuses on a very narrow definition of the relevant "must-have" market. This first step is necessary and may be sufficient for finding market power since it increases switching cost by expanding the products that are bundled and leveraged. The fourth characteristic (technological specialization) makes it unlikely that the members of the tight oligopoly will attempt to challenge one another. The final characteristic is a replacement for geographic separation since the internet means the "death of distance." The exclusion of competitors and the bundling of products raises switching costs. Backed up by specific contract provisions, they become a potent tool for avoiding competition.

While geographic separation was an important element in "moat" building in physical space, on the Internet, with the "death of distance," the key issue is "where" can you get services? The Big Data Platforms have insulated their products from competition by bundling a "must-have" core product with an array of complements, accumulating a huge pool of data about customers, and excluding or controlling the provision of these complements and use of this data by potential competitors. And it gets harder everyday as the bundles around "must-have services" get bigger and bigger. The members of the "tight oligopoly on steroids" have gatekeeper control of chokepoints reinforced by steroids that give the small number of firms that dominate the digital communications sector immense market power. They have demonstrated time and again that they have the willingness and ability to abuse that market power.

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American thinking about concentration and market power in the communications sector is reinforced by European concerns that exhibit a similar pattern. For example, an economic policy note from the Dutch Office of Post and Telecommunications Authority/Economic Analysis Team asked a specific question: *Is Two Enough?* The answer was an emphatic "no." Describing the unique facets of the communications market, the Body of European Regulators for Electronic Communications issued a "Report on Oligopoly Analysis" that recommended that tight oligopolies be explicitly identified as a source of concern by competition authorities. An informative qualitative perspective on the unique problem of a tight oligopoly on steroids can be gained by considering the market conditions that facilitate coordinated and unilateral effects in communications markets that exhibit characteristics of tight oligopolies (see Table II.3).

Just as the American authorities became more concerned about vertical leverage because a large and increasing number of products depended on access to communications platforms, so too did the European Competition authorities.

> Sometimes conduct by firms in closely related markets has a strong influence on the functioning of the relevant market. It is therefore insightful to identify these markets as well. We call such markets 'connected markets.' Behavior on these markets influence

the behavior on the relevant market. A connected market is a market that is horizontally or vertically related to the relevant market.[39]

Given the significant and repeated examples of coordination – sometimes explicit, frequently parallel – and the reinforcing behaviors in multiple markets, it is proper to call the current situation in the digital communications sector a "tight oligopoly on steroids." As such, there should be no pretense that competition is sufficient to protect consumers. The amount of scrutiny a tight oligopoly on steroids requires is magnified in the communications sector by the important role those firms play, along with their central location as chokepoints and bottlenecks in the digital communications sector and the digital economy.

TABLE II.3: TIGHT OLIGOPOLY AND COORDINATION IN ELECTRONIC COMMUNICATIONS

Facilitating a Tight Oligopoly	Facilitating coordination	Factors in Communications Markets
High concentration	Very Few Firms	Market Division
High barriers to entry	Absence of significant entrants	Constrained network effects
		Absence of potential maverick entrants
Capacity constraints (ambiguous)	Strategic variable	Lumpy but not whole-hog, repeated constraints
High Product Differentiation	Homogeneity of products	Moderate, bundled differentiated products
		Technological specialization, Geographic segmentation
No countervailing buyer power		Need for interconnection
		Customers small relative to total
Low price elasticity		Brand loyalty, lock in contracts
		Migrate to franchise product-centered bundle
High switching costs		Technological, Financial, Search
Mature technology		Structural links, Facilitating practices, History
Low demand growth	Focal point on high discount rate	
	Process: Transparency, Enforceability	Cournot process
	Repeated interaction	Interconnection
	Symmetry	Franchise service, geographic symmetry
	Vertical integration	Multiproduct

Source: Body of European Regulators for Electronic Communications, 2015, *Report on Oligopoly Analysis and Regulation,* December 14.

STIGLITZ'S ALTERNATIVE MODEL AND THE KEY ROLE OF POLICY IN CAPITALIST ECONOMIES

Stiglitz's critiques of free market fundamentalism have a very strong basis in the broad economics literature. Stiglitz expresses a strong sentiment that the neoclassical *laissez-faire*

[39] Canoy, Marcel and S. Onderstal, 2003. "Tight oligopolies: in search of proportionate remedies," CPB Document 29, CPB Netherlands Bureau for Economic Policy Analysis, February, p. 73.

model has been refuted at every level for the fundamental failure of its assumptions, explanations, and predictions. Therefore, the model can be rejected out of hand – a sentiment repeated almost verbatim by other analysts.

His political economic approach, along with the belief that the economist must advocate specific policies by showing the inadequacies of alternatives, leads him to a comprehensive analysis of the alternatives he finds inferior alongside policy recommendations for nations and sectors to improve their performance.

In *Wither Socialism,* Stiglitz takes this approach with an extensive critique of the theorems on which neoclassical (free market fundamentalism) **and** socialist (market socialism and socialism) theory rest. Because Stiglitz is engaged in a debate about capitalist markets, he introduces market failures early on. He identifies three different general views of market failures and three dozen problems that create challenges for any political economy. These are summarized in Table II. 4.

Table II. 4 shows the index page references to these challenges where they are defined and demonstrated with examples. Stiglitz cites higher-level market failures to explain the specific challenges, but there are frequently overlapping causes. It is safest and most correct to say that the new and "new, new" categories of market imperfection create a context in which market failures are pervasive.[40]

[40] Stiglitz, Joseph, 1994*,* Joseph Stiglitz, *Wither Socialism,* (MIT,); 2019, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent* (Norton).

TABLE II. 4: THE STIGLITZ VIEWS OF THREE TYPES OF MARKET FAILURE AND THREE DOZEN CHALLENGES FOR POLITICAL ECONOMIES

MARKET IMPERFECTIONS	CHALLENGES FOR ALL POLITICAL ECONOMIES	# of index citations	Financial Sector pg. #
OLD			
Public Goods	Public Goods Expanded	*21*	*211, 226*
Externalities	Broad concept of externalities	*14*	*212, 213*
Inequality	Inequality	*13*	*214*
	Redistribution	*10*	
	Education	*12*	*216*
Weak (insufficient) Competition	Imperfect Competition expanded	*15*	*217*
	Information	*34*	*209*
	Barriers to entry	*13*	*209*
	Rent seeking	*12*	*215*
	Policy	*17*	
NEW			
Institutions	Institutions		209, 216
	Banks	*24*	*209*
	Stock market	*21*	*228*
	Organizational structure	*4*	*226, 227*
TRANSACTION COSTS	Transaction costs	*10*	*209*
	Monitoring & control	*34*	*209, 224*
NEW, NEW			
Information	Innovation	*36*	*207*
Incomplete	R&D	*17*	
Asymmetric	Technology	*7*	
Costly	Resource Allocation	*10*	*208, 221*
Incomplete Market	Capital Allocation	*23*	*209*
Risk	Risk		209
Futures	Futures		209
	Perverse Incentives,	*63*	*212*
	Moral hazard,	*24*	*225*
	Principle agent	*8*	*227*
	Non-economic	*7*	
	Price- Cost	*58*	
	Non-price motivation	*21*	
	Selection	*9*	*209*
	Management independence	*40*	*219, 227*
	Property uncertainty	*14*	*225*
	Coordination	*15*	

Source: Joseph Stiglitz, *Wither Socialism,* (MIT, 1994)

The old view includes market failures generally recognized by economists, although it must be said that extreme market fundamentalists may not accept the widely recognized failures of the market (e.g., Trump), or may not accept the proposition that there is much government can do about them (e.g., Reagan). The second, newer view identifies a broader set of market failures

that stems from the important role institutions and transaction costs play in determining the nature and performance of the political economy. If one contemplates the 50 years of economic theory that Stiglitz claims have fundamentally altered thinking about markets and their performance, there are two strong threads in of criticism of neoclassical theory here: (1) the failure to predict the poor performance of markets, and (2) the ability of non-market institutions to meet the challenges that neoclassical economics had claimed only unfettered markets could resolve (i.e., Ostrom).

The array of market failures in Table II. 4 and the framework Stiglitz built from them predicts the inadequacy of economic systems that assume markets and competition alone will take care of the economy. The argument goes beyond the theoretical. While Stiglitz starts with a high-level view of market failure and imperfections—responding to and criticizing the standard market theories and explaining why market socialism suffers from the same afflictions— i.e. it is unable to respond to many of the challenges.

The pragmatic, progressive capitalist view finds significant support among a very august group of economists – Nobel laureates. This chapter provides the building blocks for major alternative schools of thought that have been recognized in a series of Nobel Prizes over the past quarter of a century. These critical schools of thought expand and strengthen the market failure analysis. Stiglitz has taken a leading role in combining them into a comprehensive analysis of challenges facing all political economies.

As shown in Table II. 5, Stiglitz is one of many Nobel laureates who made it clear that free market fundamentalism fails to depict the reality of market performance and is therefore a deficient theory of real-world behavior. Table III. 5 also shows the general correspondence of the critiques to the differences in fundamental economic models.

TABLE II. 5: NOBEL LAUREATES ON MARKET IMPERFECTIONS, WITH STIGLITZ REFERENCES

Structural & Societal Flaws	Endemic Tendencies	New Institutional & Transaction Cost Economics	Behavioral Economics	End of Value-free Economics/Return of Political Economy
Structural Flaws **Krugman, 2008*;** **Heckman, 2008;** **Deaton, 2015*** **Technological Change (innovation)** **Solow (1956)*** **Nordhaus, 2018,** **Romer, 2018**	**Stiglitz, 2001; Spence 2001; Tirole 2014; Hart & Holstrom, 2016**	**Coase, 1991; North, 1993 Fogel, 1993; Ostrom, 2009 ; Williamson, 2009**	**Human Behavior** **Simon (1957); Akerloff, 2001; Kahneman, 2002; Smith, 2002 Shiller, 2013;*** **Strategic Conduct:** **Nash 1991Selton, 1994; Harsanyi, 1994; Thaler, 2017***	**Sen, 1998*; Bannerjee, Duffo & Kremer, 2019**

MAJOR CATEGORIES OF MARKET IMPERFECTIONS (with citations to *Wither Socialism*)

SOCIETAL
Expanded Role of Externalities, *7, 41, 55*
Network Effects, *29*
Innovation Economics *29, 65-66*

STRUCTURAL
14, 34, 41, 66
Imperfect Competition *7, 12, 103-107*
ICE Problems
Technology
Marketing, Bundling
Cost-Price *66, 83-89*
Ownership *20, 63, 105*
Elasticity
Availability *67*

ENDEMIC
Information Asymmetry *8, 29-30, 35, 87-88*
Incentive Problem *14, 49, 59, 65-66, 87*
Perverse Incentives *11, 20, 30*
Inequality of Capital *7*
Financial *63, 90-102*
Physical *68, 83*
Human Capital
Macroeconomic Imbalances (*Keynes 22*)
Income
Demand
Insufficiency
Investment *9, 16, 23*
Instability

NEW INSTITUTIONAL/ TRANSACTION COST
33, 49, 91, 106
Search & Information Imperfections
Bargaining costs
Incomplete Markets
5, 6, 34, 38, 42-43
Risk *67*
Future *65*
Enfoncement *67-68*

BEHAVIOR *66, 103-105*
Motivation Values & Selfishness *68,70*
Satisficing *67*
Fairness/reciprocity
Social Group & Status
Perception
Social Influence
Calculation *67, 97-99*
Bounded Rationality
Heuristic Decision-making
Execution *67*
Bounded Willpower
Improper use

POLITICAL ECONOMY
3, 66, 83, 88-92.
Foundational Values
Wellbeing, capabilities
Declining marginal value of wealth
Distribution of surplus 7, *11*
Power
Legal Framework
Inequality *46-49*
Policy *7*
Taxation
Subsidies
Trade Protectionism
Antitrust Toward Regulation *7*

In addition to the laureates at the top of the Table, I define the specific market failures that define the schools in the bottom row. I put stars next to the laureates that Stiglitz references in his most recent book. Significantly, they are behavioral economists, which attests to the importance of the development of that school of thought. Only two of the laureates on the list predate the overall group, Solow and Simon, who are uniquely important. Stiglitz mentions Solow (his dissertation advisor) who was central to the reconsideration of innovation. Simon was an early practitioner behavioral economics, which became a central force transforming economics (undermining neoclassic economic assumptions) and many of the behavioral economists mention Simon.

The critiques are overwhelmingly American. Five-sixths of these Noble Prizes were awarded to economists identified with the United States (although a few also listed other nations). Of all prizes in economics awarded to those who list the U.S. as an identifier, just under half were for this critical work. The home-grown critique of conservative economics calls into doubt not only free market fundamentalism's assertions about market functioning, but also its assumptions about underlying economic motivations.

Moreover, the critique does not result in a rejection of markets. The broad critiques strengthen the case for considering the conditions under which markets perform poorly. It follows then that policy interventions are appropriate to correct market imperfections and market failures. In fact, few if any of these Nobel laureates abandon capitalist markets as central economic institutions. Their primary goal is to identify the sources of market failure with greater precision and prescribe policies to reduce market imperfections, all while preserving the positive, dynamic forces of markets. In terms of Table II. 5, the debate between market fundamentalists

and progressive capitalists overwhelmingly favors the latter. Stiglitz is in much more than just good company among these laureates.

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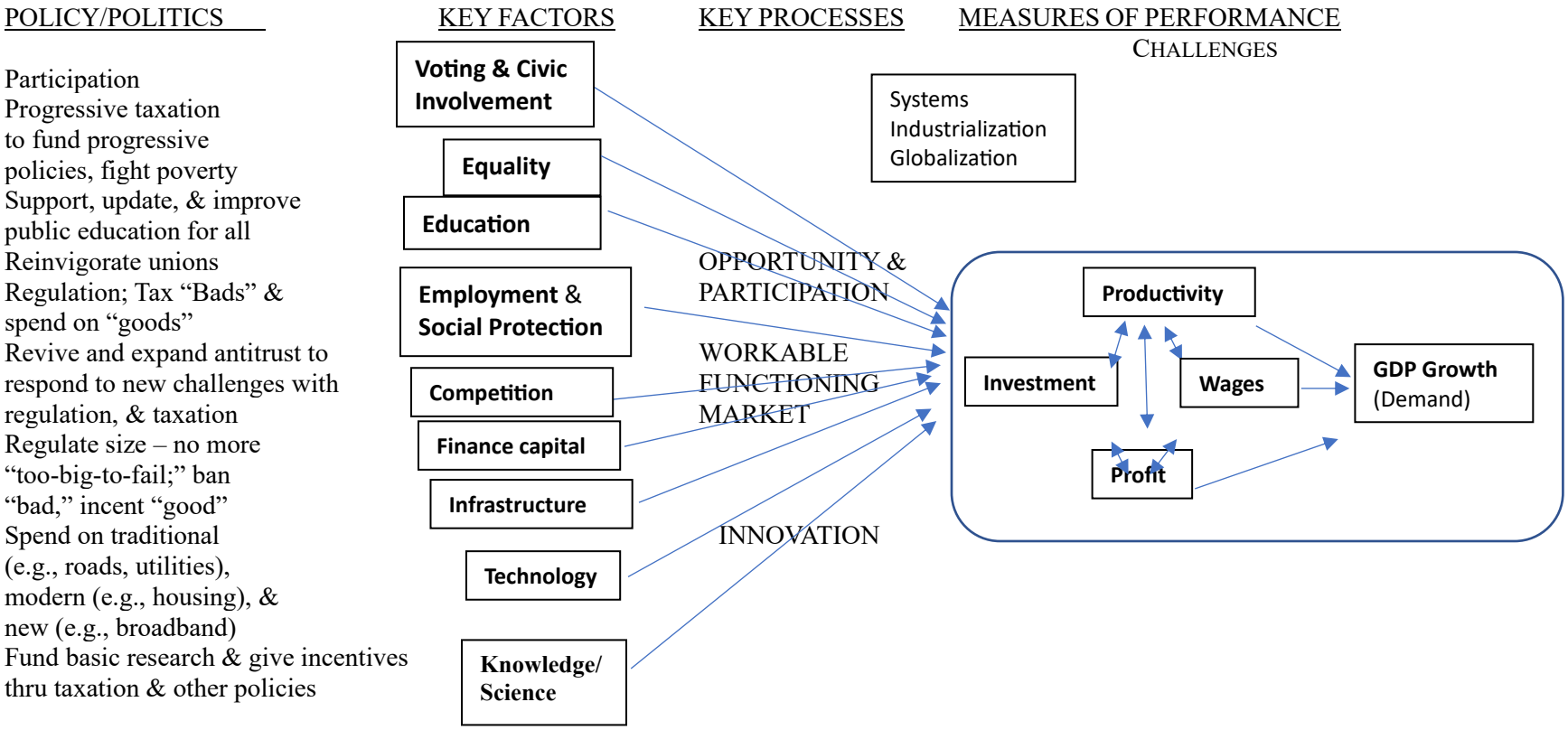
Stiglitz is in much more than just good company among these laureates.[41] The model of a progressive economy he has built from this critique of market fundamentalism is shown in Figure II. 5, highlights the key issues that were raised in this Proceeding. A direct reading of the issues that the FCC has pointed to in the 2023 Open Internet Order shows that the 9 Key Factors and 3 Key Processes are the very issues the FCC has raised. Even the policies, with a few exceptions are not only consistent with, but have been advocated as justification of the FCC order.

[41] I use stars where Stiglitz references his most recent book. Significantly, they are behavioral economists, which attests to the importance of school of thought. Two of the laureates predate the group, Solow and Simon, Stiglitz mentions Solow (his dissertation advisor) who was central to the reconsideration of innovation. Simon was an early practitioner behavioral economics, which became a central force transforming economics (undermining neoclassic economic assumptions) and many of the behavioral economists mention Simon.

FIGURE II. 3: THE STIGLITZ MODEL OF PROGRESSIVE CAPITALISM



Sources: Joseph Stiglitz, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent* (Norton, 2019); *The Economic Role of the State*, Arnold Heertje, (Ed.) (Basil Blackwell,1989)

III. PROPOSED CLASSIFICATION OF BROADBAND INTERMENT ACCESS SERVICE

A. Nature of the Service

The 2023 Open Internet Order begins with a fundamental question – Is Broadband Internet Access Service (BIAS) an essential telecommunications service. The answer is unequivocally yes. The FCC lists five aspects to consider in answering this question – openness, security, privacy, access and the disabled. Our analysis focuses on four of these, excluding security.

Tables III.1 thru III.3 show two fundamental aspects of BIAS service -- the deep penetration of the service into all aspects of daily life and the severity of the digital divide. The upper and upper middle classes (income above $75,000) have embraced BIAS to a remarkable level. The penetration of broadband and Internet are high, around 90%, and they have a clear advantage over those with low incomes (below $35,000). The high penetration and disadvantage for the low-income respondents cover key areas of daily activity, access to BIAS news gathering, health services, employment opportunities, educational opportunities, (especially for households with children),[42] government services, and commerce including financial services and various aspects of product information and acquisition. Since households headed by disabled Americans tend to be lower income, this observation applies to them, in addition to the workplace disadvantage shown in Table III-1. Thus, BIAS has thoroughly penetrated the upper levels of society, making it essential. There is a continuing divide between upper- and lower-income households, which the FCC must address in accordance with its Title I and II obligations.

[42] This was termed the homework gap, one of the five areas addressed by the FCC, included in note 4 above.

TABLE III:1: ACCESS AND USE OF THE INTERNET: CONNECTED V. NOT CONNECTED 2010 PENETRATION AND UPPER INCOME ADVANTAGE

Use	Service	Cnnect'd	Not Cnnect'd.	**Advantage**
Network	Broadband 2021*	93	57	**36**
	Disability	93	72	**21**
	BB 2015 w/Kids	94	65	**29**
	Internet	95	57	**38**
	Frequent Internet	55	31	**24**
	SmtPhone no BB	6	27	21
Devices	Desktop	79	75	**4**
	Laptop	79	38	**41**
	Cellular	95	75	**20**
News	Online	50	25	**25**
	Freq. Online	74	34	**40**
	Political	61	35	**26**
	Govt. Site	79	56	**23**
	email story	59	43	**16**
Health	Test Result	25	11	**14**
	Med. Research	43	30	**13**
	Doctors	54	32	**22**
	Treatment	63	47	**16**
	Issue	51	30	**21**
Comm. Uses	Map	20	12	**8**
	Product	40	19	**21**
	Finance updates	39	17	**22**
	Classified	60	46	**14**
	Pay bills	71	44	**27**
	Banking	71	44	**27**
	Buy Product	81	51	**30**
	Trvl Reservation	83	47	**36**
	Res. Product	88	67	**21**
	Auctions	37	18	**19**
	Rev.Peod.	40	21	**19**
	Rate Prod.	40	29	**11**
	Pay for Content	39	21	**18**

Sources: All comparisons are Below $30k v. $75k, except *Below $30k v. Above $100k., 2010, Pew, Monica Anderson and Andrew Perrin, 2018, Nearly one-in-five teens can't always finish their homework because of the digital divide, October 26,

TABLE III. 2: LOW INCOME DISADVANTAGE 2015

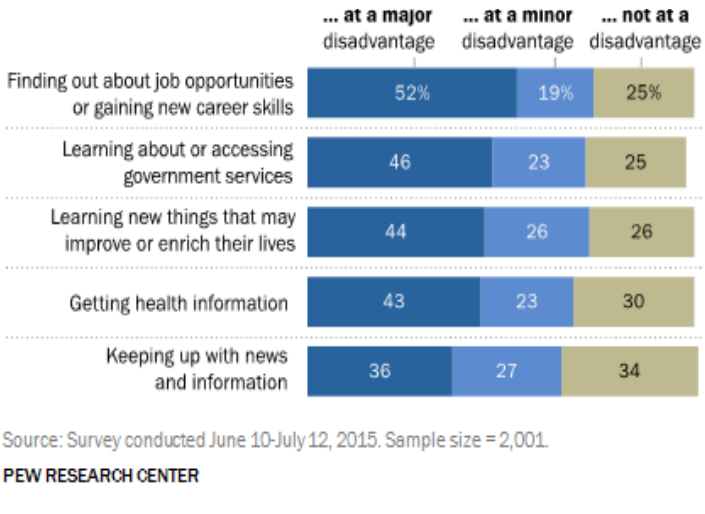


TABLE III. 3: DISABLED DISADVANTAGE

DISABILITY AND THE DIGITAL DIVIDE: INTERNET SUBSCRIPTIONS, INTERNET USE AND EMPLOYMENT

2015	57.7	73	25
2019	62.1	76.7	25
Net Loss 2019-2020	31.8	14.5	17.3

Office of Disability Employment Policy, 2022, June

All of this evidence was from the period in which the FCC was struggling to meet its obligations under the law, concluding correctly that it was time for a classification of BIAS as a telecommunications service. The gap persists and it is nonsense to think that relying on the market will close it. It has persisted since the earliest days of the Internet, as shown below, but efforts to address the failure of universal service by programs to make Internet access more affordable. Since the pandemic and the spread and penetration of broadband policy to accelerate use by low income, disabled and rural households is more, not less, urgently needed.

The fact that the gap has existed for a quarter of a century at the beginning of the Internet is not an excuse to wait. Indeed, the moment a service becomes essential it demands public policy. As we have pointed out, very early in the deployment of telephone service (1886), it was apparent that it needed to be treated as a common carrier (i.e., in a manner that made it, according to later legal usage) a telecommunications service (although, the FCC has proposed to forbear from many of the Title II obligations, many of which were in the 2015 Open Internet Order).

> [The telephone] has become as much a matter of public convenience and of public necessity as were the stagecoach and sailing vessel a hundred years ago, or as the steamboat, the railroad, and the telegraph have become in later years. It has already become an important instrument of commerce. No other known device can supply the extraordinary facilities which it affords. It may therefore be regarded, when relatively considered, as an indispensable instrument of commerce. The relations which it has assumed towards the public make it a common carrier of news – a common carrier in the sense in which the telegraph is a common carrier – and impose upon its certain well-defined obligations of a public character. All the instruments and appliances used by a telephone company in the prosecution of its business are consequently, in legal contemplation, devoted to a public use. [43]

[43]Hockett v. State, 5 N.E. 178 (Ind. 1886), cited in James B. Speta, 2002, "A Common Carrier Approach to Internet Interconnection," *Federal Communication Law Journal,* Volume 54 Issue 2 n. 187.

It is also important to note here that the use of smartphones to achieve some of the functionality of contemporary Internet access is not an acceptable alternative for BIAS at home. The use of smartphones is the sort of second-class service that must be overcome. Smartphones impose two costs as a substitute for BIAS. They have very small screens, making it difficult to use and limiting what can be done, and they impose heavy usage charges on consumers. They are the screens that upper oncome households use for convenience, not to meet the necessities of daily life.

The question becomes, will abandoning regulatory oversight, treating it like a market good and relying on antitrust to provide consumer protection, do the job. The theory under which this abdication of FCC authority was pursued is absurd, refuted by the economics literature and consistently rejected by the courts, until the Flip-Flop order, which withstood legal challenge only because of deference to the agency. If the courts happens to conclude that the agency no longer deserves deference, then the facts and law require a Title II classification because BIAS is unquestionably an essential telecommunications service.

The issue of privacy, which will be discussed below points in the same direction. However, it makes an additional point that is important to the overall analysis. The Federal Trade Commission (FTC), to which the FCC proposes to punt its regulatory responsibility, has done an awful job of protecting privacy. Leaving it to that agency is a crap shoot at best, a death sentence at worst. This issue leads us to a broader point that can be made here. The theory under which the Flip-Flop Order proposed to abandon FCC oversight is weak, has been rejected by the economics literature, and is illegal, since the functions that the FCC is explicitly charged with undertaking will not be accomplished or even seriously attempted under the FCC's proposed scheme.

B. Reclassification and Goals of the FCC Act, Universal Service

Once the validity of the Title 1/II approach to network neutrality is confirmed on historical, legal or agency deference grounds (or as we have argued all three), the FCC can aggressively address the issue of the digital divide. The clear language of Title I, charging the FCC with making available to "all people" of the United States, … or the language of section 202a, …. demand that it does so.

The FCC should move swiftly to implement programs furthering this goal. This section addresses, the main obstacle to meeting this goal – the economics of ensuring connectivity for "all people of the United States." Here we focus on the economics of extending the network and expanding its use, which we have addressed in a series of peer reviewed articles. Those articles are given in the citations for each of the figures introduced below.

However, we have examined these issues in general terms in earlier discussions of universal service and the digital divide.[44] This analysis of universal service has been embedded in a general examination of the political economy of services that are essential to the quality of life in the 21st century.[45] Taken together, these articles represent a quarter of a century of peer-reviewed analysis the vital issue of universal service in digital society.

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[44] "Inequality In Digital Society: Why the Digital Divide Deserves All the Attention It Gets," *Cardozo Arts and Entertainment Law Journal,*2002, first presented at Bridging the Digital Divide: Equality in The Information Age, Cardozo School of Law, November 15, 2000; "Universal Service: A Constantly Expanding Goal," *Consumer Perspectives on Universal Service: Do Americans Lose Under a Connection-based Approach?* (Washington, D.C.: New Millennium Research Council, June 2003); "Open Access to The Broadband Internet: Technical and Economic Discrimination in Closed, Proprietary Networks," *University of Colorado Law Review,* Vol. 69, Fall 2000.

[45] "The Long History and Increasing Importance of Public Service Principles For 21st Century Public Digital Communications Networks," *Journal on Telecommunications and High Technology Law*, 2014; "The Central Role of Wireless in the 21st Century Communications Ecology: Adapting Spectrum and Universal Service Policy to the New Reality," *Telecommunications Policy Research Conference*, September 2011; "Network Neutrality,"

Economic Cost

A business-as-usual framework that the FCC has taken in the past, particularly during the free-market fundamentalism period, is inappropriate. The key is the underlying economics. For five reasons, we believe that the assumptions about cost and value used in the past have underestimated how aggressively the FCC should move to achieve the goal of universal service.

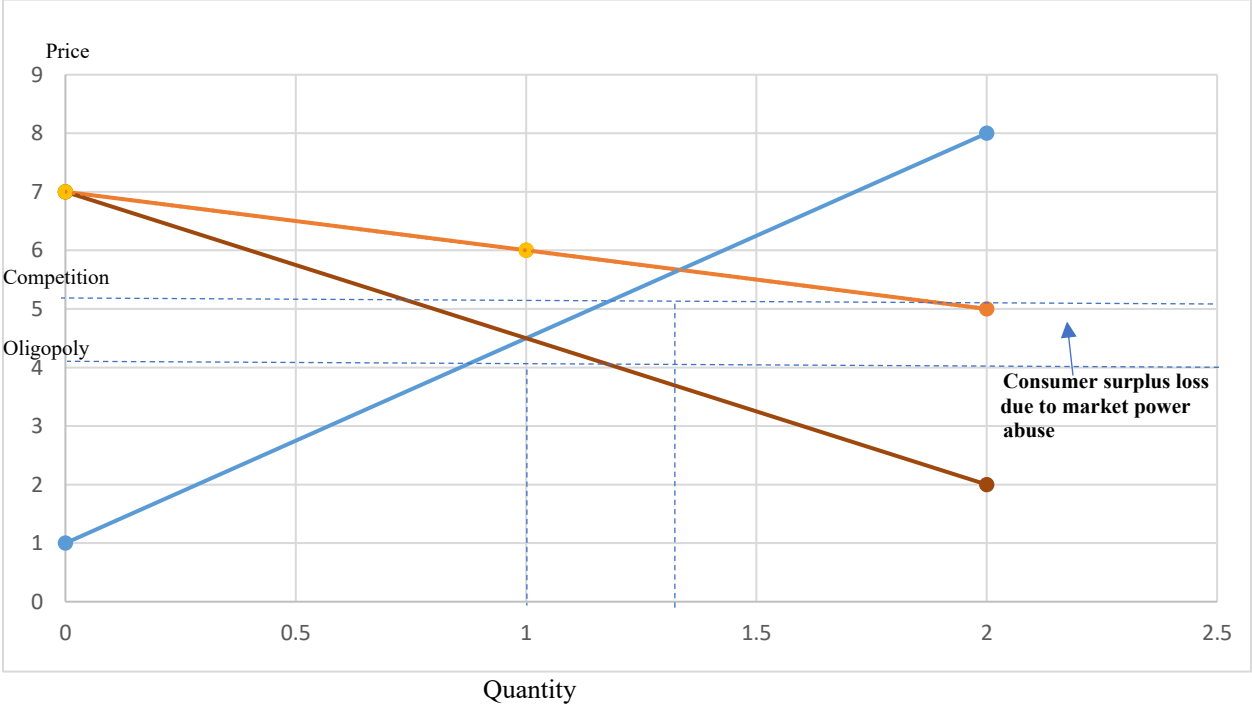
First and foremost, the FCC should not just accept the cost estimates of the incumbents who have failed to make service available. Under the current conditions of delivery of service – at best a very tight oligopoly (two or three providers) or stone-cold monopolies – the FCC cannot assume that service providers price their output in a manner consistent with a competitive market. They are likely to lean toward monopolist pricing, where marginal revenue equals marginal cost (see Figure III. 1), much higher than the competitive price would be.[46]

Toll Roads? The Legal and Political Debate Over Network Neutrality, University of San Francisco Law School, January 26, 2008; "The Failure of Federal Authorities to Protect American Energy Consumers from Market Power and Other Abusive Practices," *Loyola Consumer Law Review,* 19:4 (2007); "The Central Role of Network Neutrality in the Internet Revolution," *Public Interest Advocacy Center*, Ottawa Canada, November 24, 2006; "Information is a Public Good," *Extending the Information Society to All: Enabling Environments, Investment and Innovation, World Summit on the Information Society,* Tunis, November 2005; "Ten Principles for Managing the Transition To Competition In Local Telecommunications Markets, *Triennial Review Technical Workshop National Association of Regulatory Utility Commissioners,* Denver CO, July 27, 2003; "Progressive, Democratic Capitalism in The Digital Age," *21st Century Technology and 20th Century Law: Where Do We Go from Here? The Fund for Constitutional Government, Conference on Media, Democracy and the Constitution,* September 27, 2000; "Antitrust as Consumer Protection in The New Economy: Lessons from The Microsoft Case, Hastings Law Journal, 52: 4, April 2001, first presented at *Conference on Antitrust Law in the 21st Century Hasting Law School,* February 10, 2000.

[46] This is a standard graph in economic textbooks. For applications in various ways to communications see Mark Cooper, 2011,"The Central Role of Wireless in the 21st Century Communications Ecology: Adapting Spectrum and Universal Service Policy to the New Reality," *Telecommunications Policy Research Conference*, September; 2017, "Business Data Services After the 1996 Act: Structure, Conduct, Performance in the Core of the Digital Communications Network The Failure of Potential Competition to Prevent Abuse of Market Power, *Telecommunications Policy Research Conference,* September; and 2016,

Put another way, the problem is not that these services are not profitable, they are not as profitable as the incumbents would like them to be. The FCC must devise mechanisms to ensure that services are delivered at a competitive level.

FIGURE III. 1: EFFECTS OF MARKET POWER ON PRICE AND QUANTITY OF BROADBAND



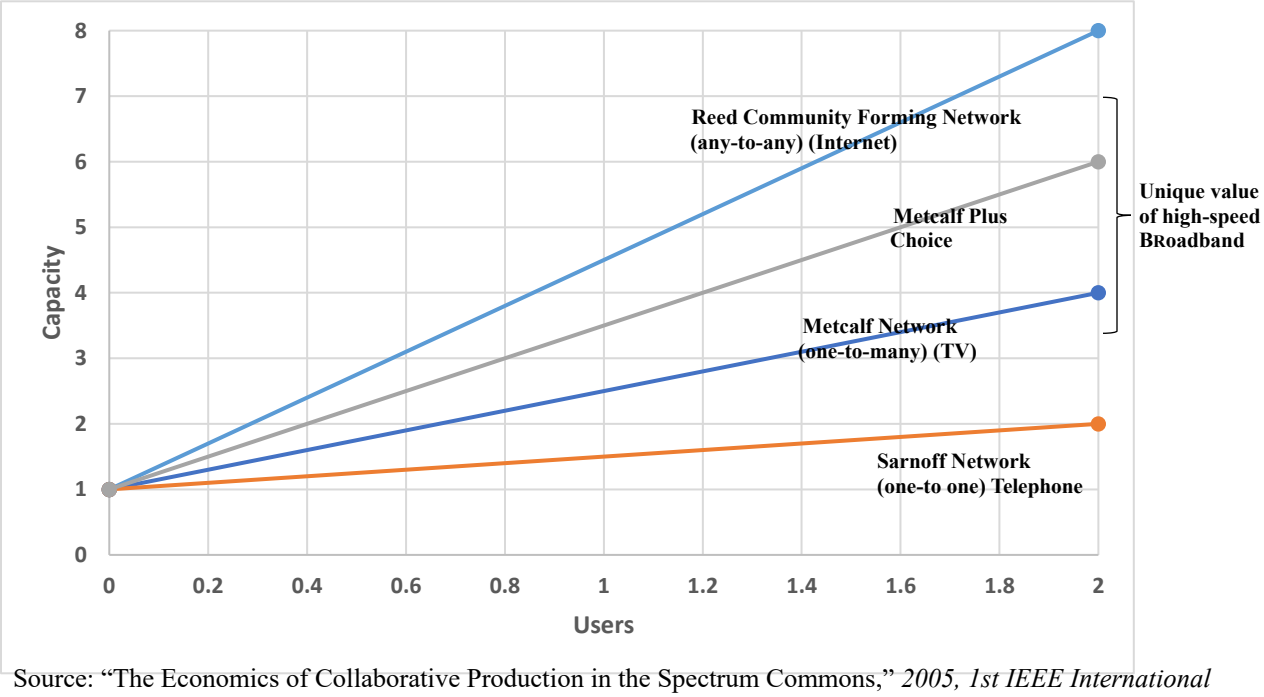
Source Scherer, F.M. and David Ross, *Industrial Market Structure and Economic Performance* (Boston: Houghton Mifflin, 1990), p. 34; William G. Shepherd, *The Economics of Industrial Organization* (Englewood Cliffs, NJ: Prentice Hall, 1985), p. 31; Viscusi, Kip, John M. Vernon, and Joseph E. Harrington Jr., *Economics of Regulation and Antitrust* (Cambridge: MIT Press, 2000), p. 79; John B. Taylor, *Economics* (Boston: Houghton Mifflin, 1998), p. 71. Mark Cooper, 2016, "Overcharged and Underserved: How A Tight Oligopoly on Steroids Undermines Competition and Harms Consumers in Digital Communications Markets," *Telecommunications Policy Research Conference*, December. Presented a technical definition and defense of the concept.

Economic Value is Directly Related to Cost in Network Industries

Second, while the incumbents overestimate the cost of making the network available, they underestimate the take rates and use of services that are likely to be achieved. Since many of the costs are joint and common costs, a higher take rate (in subscriptions and services) results in a lower cost per customer. This higher take rate stems from the value that consumers place on the network. There are three reasons that this value is higher than traditional analysis would suggest.

High speed broadband networks have unique value to subscribers that will be manifest when they are deployed at a competitive market drive price, as shown in Figure III. 2.

FIGURE III. 2: THE NOT SO HIDDEN VALUE OF NETWORKS

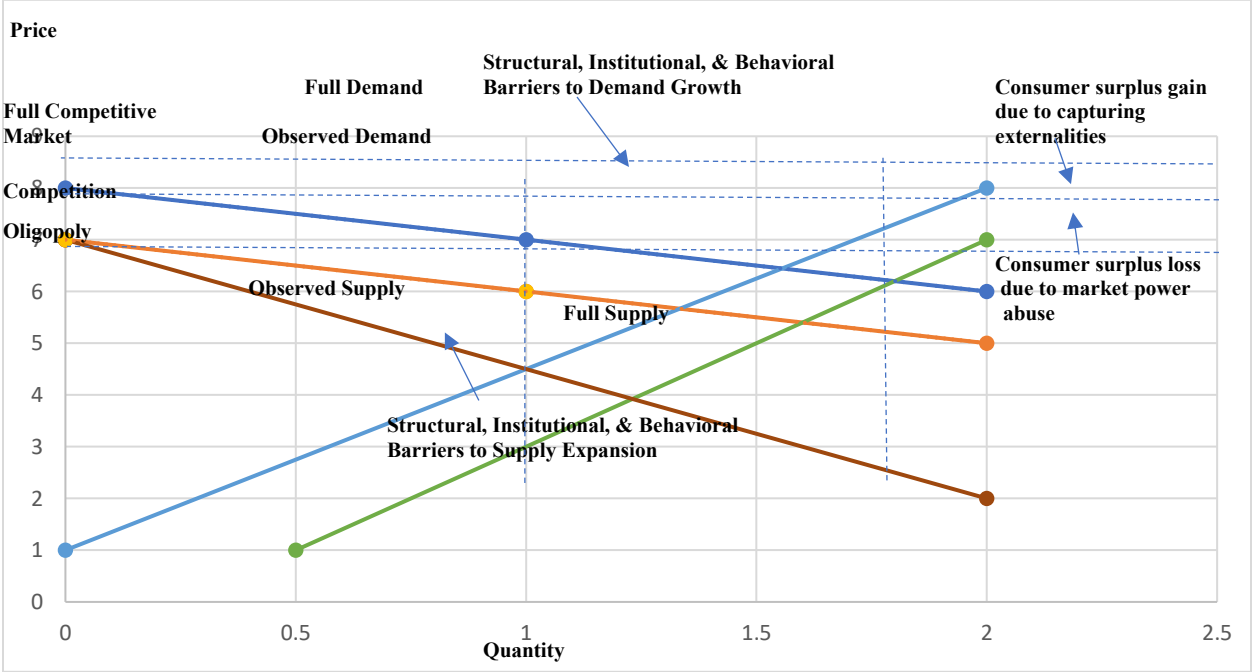


Source: "The Economics of Collaborative Production in the Spectrum Commons," *2005, 1st IEEE International Symposium on New Frontiers in Dynamic Spectrum Access, Dyspan,* (p.395)

Capturing this potential value in the way the network is presented to the public is a form of externality whose value can be realized if the network is made available on inviting terms and conditions, which fall within the scope of the FCC's mandate (see Figure III. 3).

In addition to eliminating the abuse of market power, the FCC's policy can capture some, perhaps all of the external values that the network can deliver. The structural institutional and behavioral obstacles to adoption can be overcome by policy to some extent.

FIGURE III. 3: CAPTURING EXTERNALITIES INCREASES VALUE AND EXPANDS SUPPLY



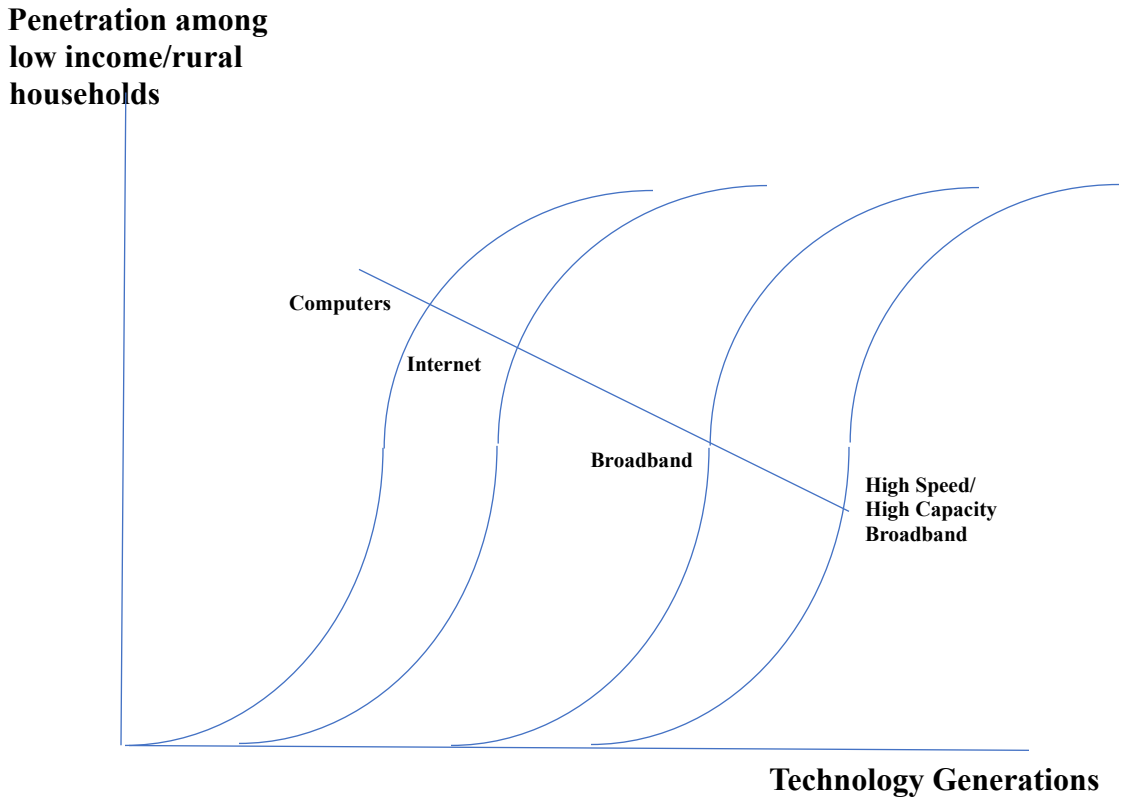
Source: Mark Cooper, "Energy Justice in Theory and Practice: Building a Pragmatic, Progressive Road Map," in Thijs de Graf, Benjamin K. Sovacool, Arunabha Gosh, Florian Kern, and Michael T. Klare (Eds.) *The Palgrave Handbook of the International Political Economy of Energy,* (PALGRAVE, Macmillan, 2016) (pp. 716,718)

The marketplace is not likely to solve the problem and the digital divide increases its power with each new generation of more powerful technology, as I showed in an earlier paper (see Figure III.4). Each new generation of technology drives the advantages of being connected higher but makes it more difficult for lower income and rural households to connect, for economic (price) and availability reasons.

Although the task is formidable, it is not impossible and many nations have taken action to address all of the potential barriers to adoption, as shown in Figure III. 4. The accessibility policies and the technology policies address the structural and institutional barriers on both the supply side and the demand side of the market. The literacy policies address the demand side behavioral barriers. It is difficult to say precisely how far these policies will go to capture the external values that are not reflected in the marketplace, but it seems certain that some will be

internalized and, judging from the four dozen different aspects of the effort in two dozen advanced industrial nations, the effort clearly seems worthwhile.

FIGURE III. 4: INCREASING DIVIDE AND IMPROVING TECHNOLOGY



Source: Mark Cooper, "The Socioeconomics of Digital Exclusion in America," TPRC, 2010, 38th Research Conference on Communications, Information and Internet Policy (p.10 graph) (p.13) (p. 19. Model)

The burden of the failure of universal service falls heavily on lower-income households, as shown in Table III. 4. Low-income households are disproportionately unconnected and those that have services are forced to devote a much larger share of their income to acquire connectivity.

Figure III.5 makes several important points of the current analysis. First, keeping in mind that a family of four at the poverty level had an income of $15,000 in 1995 and just under $30,000 in 2022, we find that low-income households are twice as likely to not have broadband.

Of course, telephone service had been rolling out for about a century by 1995, and 60 years since the Communications Act had enshrined the goal of universal service in law.

TABLE III.4: POLICIES IMPLEMENT IN ADVANCED INDUSTRIAL NATIONS

Accessibility to all technologies for citizens regardless of ability should be a goal that concerns the strategic need for government or other authoritative organisations to stipulate (and monitor adherence to) standards.

Design and usability standards issues

- Mandatory regulations for ICT accessibility for government purchasing (USA)
- Design for all networks and centres (FIN, GR, NL, N)
- Promotion of design for all in appropriate higher education courses and amongst industry (N)
- National resource centres demonstrating participation, accessibility, and assistive devices (N)
- Web design and usability standards also encompass issues about: Accessibility standards and guidance for web developers (A, BG, CZ, DK, EE, FIN, IRL, I, LT, NL, N, PL, RO, UK)
- (naming and shaming) Portals that monitor compliance of government/all web sites with minimum benchmarking standards (NL, PL)
- 'Best on Web' networks, centres or competitions that test and showcase 'off the shelf' products (DK)

Infrastructure issues

- The return path on set top boxes (UK)
- Roll out of dark fibre and other infrastructure (I, NZ)
- WiMax as an alternative to local loop expansion (I, SI, TKY)
- Support for new infrastructure technologies (I)
- Public Access Centres (BG, CZ, FIN, H, I, LV, N, PL, P, RO, UK, and others)
- Incentives and encouragement to adopt and utilise technology (all countries)
- Grants and loans for everyone, excluded, children or specific groups to purchase technology (FIN, I, LV, P, RO)
- Free laptop for every child (this will provide benefits for parents and grandparents)

Technology to enhance independence and ageing.

- Support and/or funding for the development of assistive technologies
- Establishment of interoperability/compatibility standards for assistive living technologies
- National resource centres and demonstration initiatives and centres on ambient assisted living (I, NL, SI)
- Centres of excellence for inclusive technologies for older people (I)
- Entertainment and communications portal for older people (I, NL, PL, P, RO, S)
- Development of online activities for the University of the 3rd Age (AUS, CZ)

Support to provide older and disabled people with basic digital literacy Awareness and confidence building (A, CZ, EE, FIN, GR, LV, LT, NL, PL, RO, CH, UK)

- 'Connected not excluded' initiative to reduce ICT anxieties for older people (D)
- Development and support for voluntary organisations assisting older people to use ICT (POL)
- Support and training (A, BG, CZ, DK, FIN, I, LT, N, P, S, UK)
- Online/DVD digital literacy materials
- ICT mentors (H, UK)
- Annual contest abut ICT for grandparents and grandchildren (H)
- 'Netsafe Now' Once a year event about safety on the Internet (DK)

Technology for inclusion:

Simplify the life of users and improve the efficiency of service delivery to all citizens

- Single portals (AUS, CZ, EE, GR, LV, LT, NL, P, RO, SI, TKY, UK)
- Interoperability goals, XML schema and guidelines (FIN, D, I, N, P, RO, SI, UK
- Style guidelines and WAI compliance (A, BG, CZ, DK, EE, FIN, IRL, I, LT, NL, N, PL, RO, UK)
- Data sharing (EE, F, LT, N, PL, UK)
- Secure data exchange (EE, F, LT, N, NZ, PL, UK)
- Electronic signatures (A, BG, SL)
- Public key infrastructure from trusted sources (EE)

Promotional issues associated with enhancing the use of technology for inclusion:

- A champion and/or mandatory requirements
- Promoting the benefits of technology for excluded groups
- Providing more opportunities for practitioners, IT specialists and excluded groups to meet together to discuss common needs

Literacy and digital competence: Enhancing basic literacy and technological literacy will improve life chances and facilitate lifelong learning

- National skills strategy (I)
- Lifelong learning goals (BG, CZ, EE, FIN, IRL, LT, NL, N, UK)
- ICT strategy for schools and/or school children (A, D, IRL, NL, N, UK)
- ICT support strategy or policy for teachers, third sector and/or carers (P, RO)
- Awareness and confidence building (A, CZ, EE, FIN, GR, LV, LT, NL, PL, RO, CH, UK)

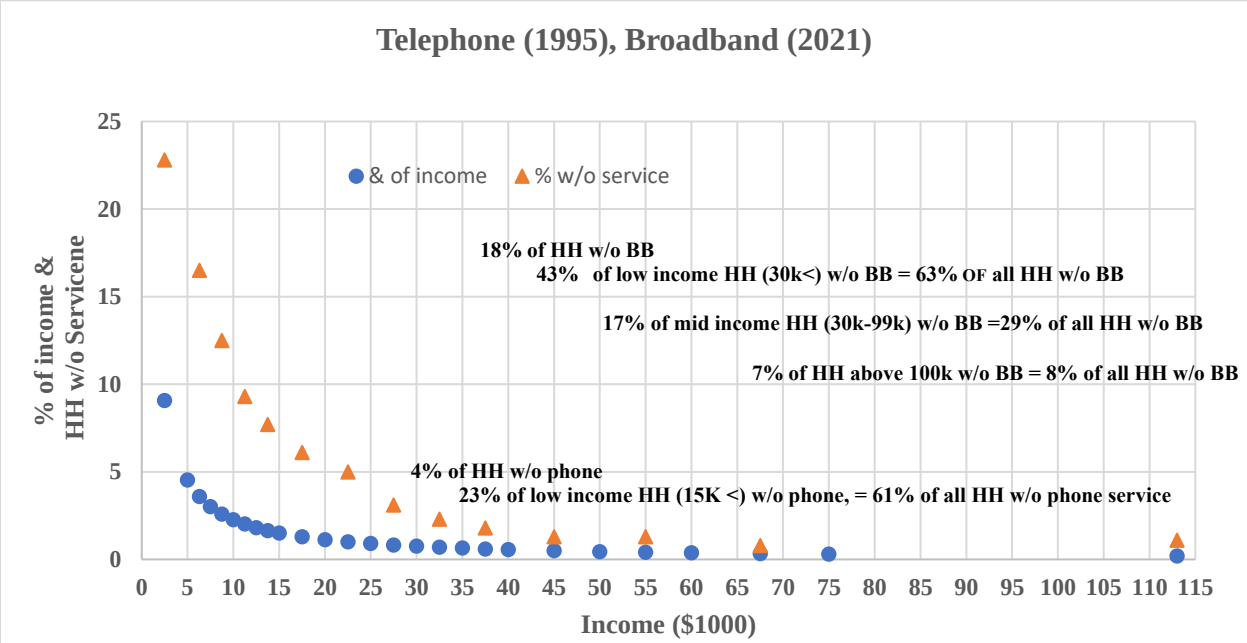
A, Austria
AUS, Australia
BG, Belgium
CH, Switzerland
CZ, Czechoslovakia
D, Germany
DK, Denmark
EE, Estonia
F, France
FIN, Finland,
GR, Germany
H, Hungary
HUN, Hungary
IRL, Ireland
I, Italy
LT, Lithuania
LV, Latvia
N, Norway
NL, Netherlands
NZ, New Zealand
P, Portugal
POL, Poland
RO, Romania
SI, Singapore
SL, Slovakia
TKY, Turkey
UK, United Kingdom

Source: Mark Cooper, "The Socioeconomics of Digital Exclusion in America," TPRC, 2010, 38th Research Conference on Communications, Information and Internet Policy Exhibit IV-12()

Based on. Communities and Local Governments, An Analysis of International Digital Strategies: Why Develop a Digital Inclusion Strategy and What Should be the Focus, October 2008.
Supply side issues were discussed earlier in Mark Cooper, 2000, "Open Access to The Broadband Internet: Technical and Economic Discrimination in Closed, Proprietary Networks," *University of Colorado Law Review,* Vol. 69, Fall 2000, Table 1.

- Support and training for all or excluded groups (CZ, IRL, LV, LT, NL, UK)
- Online/DVD literacy materials (A, CZ, D, I)
- Online/DVD digital literacy materials (A, CZ, D, I)
- ICT mentors (H, UK)
- Annual contest abut ICT for grandparents and grandchildren (HUN)
- 'Netsafe Now' Once a year event about safety on the Internet (DK)

FIGURE III. 5: % OF INCOME AND PENETRATION OF COMMUNICATION SERVICES



Source: Mark Cooper, 1995, *Universal Service: An Historical Perspective and Policies for the 21st. Century*, Benton Foundation and the Consumer Federation of America, August 1996 (% of income, p.12), for Telephone; PEW, Emily A. Vogels, 2021, "Digital divide persists even as Americans with lower incomes make gains in tech adoption," *Pew Research Center,* August, for broadband, Bureau of Labor Statistics, Consumer Expenditure Survey for size of population groups.

Second, on the other hand, explicit policies to subsidize service for low-income households were about a decade old in 1995. The roll out of broadband was about a decade and a half old by 2022. The U.S. is falling behind on broadband based on its own history and the urgency of promoting access, Comparisons to international penetration affirm this conclusion.

Third, saturation occurs in the high 90s for telephone service. A certain percentage of households do not want telephone service. Whether that would be higher or lower for broadband is unclear. What is clear is that the U.S. is nowhere near universal service, in part because of how it is valued by households.

Fourth, lower income households must devote a much larger share of their income to acquiring necessities, like telephone service. The value of a dollar to a low-income household is much higher because of the income constraint under which they live. Lowering the cost of service, either through introducing competition or a direct subsidy, is likely to have a larger impact on these households and their behavior. Thus, the lack of phone services falls rapidly (from 22% to 8%) as rates approach 2% of income. It falls moderately (from 8% to 3%) as expenditure falls to 1% of income. Then it is relatively flat.

Table III.1 and Figure III.5 add the final element to this analysis – not being connected imposes a heavy cost on household, beyond the cost of the service. In 2000, almost no one had broadband, but the lack of Internet service put low-income households at a disadvantage. By 2010, broadband was well on its way to being widely available (see Table III.5).[47] The latest data available is for 2010 and the disadvantage persists. While the situation had improved on some measures of connectivity, it had grown worse on others. More importantly, the disadvantage is clear across all categories of use. While the analysis in Table III.1 and Figure III.5 focuses on differences across income groups, rural households are also well behind on the most important measure, connectivity. Broadband penetration in rural households is 19% below the highest income group (99% at $75+k) and low-income households ($30k < at 46%). Rural households, generally served by monopoly or duopolies, also pay more for broadband (about 4% more).

[47] John Fletcher, 2022, The History of US Broadband, "In 1998 just 0.6% (608K) of US homes had broadband. But since the dot com bust early this century, high speed Internet has gone from novelty to necessity with 2022 penetration including cable, telco, satellite, or fixed wireless topping 87.4% (126.1 million).

TABLE III. 5: ACCESS AND USE OF THE INTERNET: CONNECTED V. NOT CONNECTED

2010					2000				
Use	Service	Cnnect'd	Not Cnnectd.	**Advantage**	**Use**	Cnnect'd	Not Cnnct'd	**Advantage**	
Network	Broadband	87	40	**47**					
	Internet	95	57	**38**	at work	45	14	**31**	
	Frequent Internet	55	31	**24**					
Devices	Desktop	79	75	**4**					
	Laptop	79	38	**41**					
	Cellular	95	75	**20**					
News	Online	50	25	**25**			63	25	**38**
	Freq. Online	74	34	**40**					
	Political	61	35	**26**		Poltcl action	16	10	**6**
	Govt. Site	79	56	**23**			39	22	**17**
	email story	59	43	**16**					
Health	Test Result	25	11	**14**					
	Med. Research	43	30	**13**					
	Doctors	54	32	**22**					
	Treatment	63	47	**16**					
	Issue	51	30	**21**					
Comm. Uses	Map	20	12	**8**					
	Product	40	19	**21**			49	21	**28**
	Finance updates	39	17	**22**					
	Classified	60	46	**14**		search job	28	14	**14**
	Pay bills	71	44	**27**					
	Banking	71	44	**27**					
	Buy Product	81	51	**30**			57	11	**46**
	Trvl Reservation	83	47	**36**					
	Res. Product	88	67	**21**			52	21	**31**
	Auctions	37	18	**19**			13	2	**11**
	Rev.Peod.	40	21	**19**					
	Rate Prod.	40	29	**11**					
	Pay for Content	39	21	**18**			13	3	**10**

Sources: 2010, Pew, 2000, Mark Cooper, "Inequality in Digital Society: Why the Digital Divide Deserves All the Attention It Gets," *Cardozo Arts and Entertainment Law Journal,*2002, first presented at *Bridging the Digital Divide: Equality in The Information Age,* Cardozo Law School November 15, 2000**,**

C. NATIONAL SECURITY AND PUBLIC SAFETY

Having dealt with Openness (B.1 issues 18 and 19), above. We move on to B.2. In our prior analysis we have not looked at the national security and public safety issues in detail, except to the extent that they made good sense in the context of Title II classification. The FCC's ability to implement policies to support national security and public safety was yet another victim of the erroneous and illogical reasoning of the Flip-Flop order.

In addition to the general conclusion, the change in circumstances since the Flip-Flop Order makes its illogical impact even more egregious. Given the onset of permanent cyber warfare and the troubling public safety response during the pandemic, these functionalities have become much more important. The FCC never should have punted its responsibility on national

security and public safety and events make the restoration of that responsibility even more urgently needed.

The Commission poses a series of questions seeking comment on "how Title II classification could help," but under the current conditions the question should be phrased differently. Could Title II classification harm the ability of the FCC to meet threats. The questions should be framed in the opposite way. The FCC should have the authority and forbear from using it in the rare cases where the existence of the authority is likely to do harm. The kinds of activities that the commission puts forward as examples make the case. The ability of the FCC of restrain "malicious cyber actors targeting network equipment and infrastructure… identify and address vulnerability of the communications sector. Restoring this Title II authority for network owners (aka ISPs) is important. Extending it to BIAS is equally, if not more important to address to expand its authority to digital communications including the restriction of a "larger class of entities from using equipment and services that pose a threat… prohibit carriers interconnecting with other carriers who have a POP [point of presence] in the U.S.

The use of BIAS for the flow from and to the public and public safety personnel has become even more prevalent. The Commission's reasoning on the role of BIAS in communication with and between members of the public and public safety institutions is also correct. Title II reclassification would improve the ability of the FCC to enhance public safety in the many ways the Commission identifies[48] and improve Network resiliency and reliability.[49]

[48] 2023 Open Internet Order, paras. 33-38.
[49] Id., para. 39,

D. PRIVACY AND DATA

The 2023 Open Internet Order notes that the FCC has responsibility to protect part of critical consumer privacy and data, but an important part. The FCC raises the issue that the Flip-Flop order whistled past the graveyard in abandoning section 222 of the Act, which the 2015 Open Internet Order did not. The 2023 Open Internet Order corrects that error, refusing to forebear from Section 222. This is another case where "two wrongs don't make a right. Where the fact that Big Data Platforms abuse consumer privacy and data does not justify allowing network operators to do so. By regulating the use of Customer Proprietary Network Information (CPNI), the FCC will create the basic protection consumers have always had, but the FCC argues more may be at stake. By preserving the right to protection, the FCC suggests that it might provide a part of the solution to the second wrong.

The FCC reasoned as follows:

> We further believe that, in addition to protecting consumers, reclassifying BIAS as a telecommunications service and declining to forbear from section 222, would protect information concerning entities that interact with ISPs. Section 222 places an obligation on telecommunications carriers to protect the confidentiality of the proprietary information of and relating to other telecommunication carriers (including resellers), equipment manufacturers, and business customers. We seek comment on how reclassification of BIAS will affect telecommunications carriers and equipment manufacturers who interact with ISPs, as well as the customers those entities serve, such as content creators and edge providers.[50]

The FCC poses the effects along these lines in questions. We believe that the speculation on the impact is worth the effort. Putting "resellers, equipment manufacturers and business customers" on notice that the obligation of consumer privacy and data collection of the network owners (aka ISPs) extends to these commercial users of the telecommunications network should be encouraged. For the first time, these network users will face important challenges to their

[50] Id., para. 15.

abuse of privacy and data from powerful entities (a federal agency and large network owners (aka ISPs). Once the network owners (aka ISPs) accept that they cannot profit from the abuse of CPNI, they may recognize that it is in their interest to expose the commercial network users to liability. This would be the first time that network users would face any constraint.

The FCC's analysis of section 222 points to several important observations on the terrain of digital communications. First, privacy and data collection have been orphans in digital communications. The Big Data Platforms have acted as though they are beyond the reach of any agency, which is why many believe new legislation is necessary. Second, the suggestion that the FTC should be left to handle the problem is absurd, given its abysmal record on privacy protection. Third, the market failure in the privacy space is pervasive and persistent, underscoring one of the main weaknesses of Free Market Fundamentalism, its failure to recognize market failure broadly.

Market Failure in Privacy

In an earlier analysis we emphasized the failure of the FTC in an oversight function, especially of privacy. In [Attachment F] we explained why the Federal Trade Commission is the wrong agency to rely on for oversight over the immense market power of big broadband networks. In this paper we have shown that the same conclusion applies to big data platforms. The FTC's failure in privacy is particularly telling in this regard, since the use and abuse of data is central to the market power of the big data platforms. Table III. 6 repeats the market failures in the privacy space and the FTC's failure to address the problem. Despite looking at the issue for over a decade, the FTC has not seen fit to regulate any of these privacy problems.

Behavioral targeting may be particularly harmful to vulnerable populations, including youth and the elderly. Although the survey data showed that few consumers of any age

comprehend the trade-offs involved with behavioral targeting, youth and the elderly are at special risk of not understanding the consequences of being tracked online. The FTC's Self-Regulatory Principles for Online Behavioral Advertising and voluntary industry self-regulatory programs have proven inadequate to ensure that consumers have effective control if they do not want their online behavior to be tracked for purposes beyond fulfilling the transactions they make.[51] The analysis of market failure in the privacy space can be linked directly to the broader critique of the failure of Free Market Fundamentalism to deal with market imperfections and failures.

E. TELECOMMUNICATIONS CLASSIFICATION

Since the 2015 Open Internet Order was upheld by the Court, the FCC could simply restate the argument contained in its order and brief and assert that it is legal. Recent developments, the growing essentiality of broadband, the Covid pandemic, and increased concern about national security and public safety, only reinforce that reasoning. Claims that the network ISP have not abused their market power are doubtful and irrelevant in the face of the increased need for FCC action. Title 0 is inappropriate.

The FCC does exactly that, but it also identifies a series of technical issues that support the definition of BIAS as a telecommunications service. Here we repeat our analysis of the technical nature of the service as we did in Attachment F, on the basis of an extensive analysis of the FCC's Chief Technologist, a rotating position, at the time. [52]

Jordan argued that, while there can be differences of opinions about the facts, the facts themselves are undeniable. Facts and reality are important, but they alone are not dispositive.

[51] Attachment G, p. 53
[52] Attachment F, p. 58 and following.

The next question is whether the law and its interpretation by the courts allow or require actions that are consistent with the facts and reality. Sometimes they do not, or the law allows multiple actions.

TABLE III. 6: MARKET IMPERFECTIONS LEADING TO THE FAILURE OF PRIVACY PROTECTION IN CYBERSPACE

Societal: Situations where important values are not well reflected in market transactions

Externalities: Trust is undermined[1]

Non-economic Values: Concern,[2] Fear of Being Monitored,[3] and Exposed,[4] Reputational Harm,[5] Unwanted Intrusion,[6] Physical Security,[7]

Structural: Conditions that result in inefficient outcomes

Insufficient Competition: Incomprehensible Privacy Policies,[8] Inadequate Choice[9]

Economic Harm: Bad Purchase Decisions,[10] Security Breaches,[11] Identity theft [12]

Endemic: Tendencies of economic relations that undermine key market functions

Perverse Incentives: Incomprehensible Privacy Policies,[13] Slow to React[14]

Asymmetric Information: Speed of Technological Change[15] v. Slowness to React,[16] Difficulty of Detecting Harm,[17] Invisibility of Transactions and 3rd Party Relations[18]

Transaction costs: Frictions that impose costs and constrain exchange

Search and Information Costs: Lack of Simple and Clear Information,[19] Cost of Interrupting Transactions to Find, Evaluate and Act to Protect Privacy,[20] Invisibility of Transactions and 3rd party Relations to Consumers[21]

Bargaining Costs: Lack of Alternatives,[22] Inability to Define[23]

Policing and Enforcement Costs: Difficulty of Detecting Harm,[24] Complexity, Level and Amount of Information Gathered,[25] Rapid Pace of Technological Change,[26] Third Party Relationships[27]

Behavioral: Psychological and other human traits that bound "maximizing" actions

Motivation: Concerns,[28] Fear of Being Monitored[29]

Perception: Reputational Harm [30]

Calculation: Failure to Understand,[31] Failure to Appreciate Risk,[32] Lack of Awareness[33]

Execution: Struggle to Keep Pace,[34] Do Not Read[35]

Sources and Notes: Attachment G, based on the original documents, U.S. Department of Commerce (DOC), *Commercial Data and Innovation in the Internet Economy: A Dynamic Policy Framework,* December 2010; Federal Trade Commission (FTC), *Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers,* December 2010. Page citations follow:

1. DOC, pp. vi, 1, 13, 15.
2. FTC, pp. iii, 28-30, DOC, pp. 3, 16-17.
3. FTC, p. iii.
4. FTC, p. 20.
5. FTC, p. iii.
6. FTC, p. iii.
7. FTC, p. iii.
8. FTC, pp. iii, 26.
9. FTC, p. 19.
10. DOC, p.1.
11. DOC, p. iii.
12. DOC, p. 1,
13. FTC, pp. iii, 26.
14. FTC, p. iii, DOC, p. 1.
15. FTC, p. 36.
16. FTC, p. iii.
17. FTC, p. 33.
18. FTC, pp. I, iii, 26.
19. DOC, p. vii
20. FTC, p. 27
21. FTC, pp. iii, 26.
22. FTC, p. iii.
23. FTC, p. iv, 35,
24. FTC, p. 33.
25. FTC, pp. ii, DOC, p. 18-19.
26. FTC, pp. ii, iii.
27. FTC, pp. ii, DOC, p. 16.
28. FTC, pp. iii, 28-30, DOC, pp. 3, 16-
29. FTC, p. iii.
30. FTC, p. iii.
31. FTC, p. ii, 26, DOC p. 4.
32. FTC, p. ii.
33. FTC, p. ii.
34. FTC, pp. ii, 26.
35. FTC, p. iii.

If, however, the law allows actions consistent with the facts and the agency has consistently taken actions to implement the nexus between reality and law through rules, the precedent becomes compelling. At that point, Jordan argues, the agency cannot invent an alternative reality to support contrary actions. As the next chapter shows, Jordan was right on his description of the technology, the law and actions the FCC had taken over decades to implement the law in a way that comported with the facts and reality. The FCC flip-flop order repealing Title II and replacing it with Title "0" was wrong on the technology and the FCC implementation.

In defense of the Title II classification of broadband, Jordan highlights the strong continuity of the 1996 Act and the regulatory framework that had developed over the quarter century before the amendments to the 1934 Act were adopted. There was a clear fit between the technology of the Internet and the law.[53] The only question is, why did it take the FCC so long to arrive at this compelling line of reasoning that leads to a Title II classification?

Republicans (Powell and Martin) and Democrats (Genachowski and Wheeler) always believed and acted on the belief that the FCC had the authority to regulate high-speed data

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[53] Jordon, 2018, pp. 7-8, Computer II: The policy goals in the proceeding were: (1) to "not directly or indirectly inhibit the offering of [computer processing] services", and (2) to "assur[e] nondiscriminatory access to common carrier telecommunications facilities by all providers of [computer processing] services"…The delineation between basic and enhanced services was designed as a bright-line test; a service would be deemed either a basic or enhanced service, but not both. The boundary between basic and enhanced service is critical. The FCC placed an upper bound on the scope of a basic service, describing it as "limited to the offering of transmission capacity between two or more points suitable for a user's transmission needs and subject only to the technical parameters of fidelity or distortion criteria, or other conditioning." … This framework for classification would later serve as a model for the *Modification of Final Judgement* (discussed in Section 2.C) and for the *Telecommunications Act of 1996* (hereafter *1996 Act*, discussed in Section 2.D). The definition of *telecommunications service* in the *1996 Act*, and the framework set out by *NARUC I* and *NARUC II* will later set the landscape that determines whether broadband Internet access service is a common carrier service, as we will discuss in Section 8.

transmission to prevent discrimination. Between 2000 and 2016 two Republicans (Powell and Martin) and two Democrats (Genachowski and Wheeler) not only claimed this authority but used it for specific enforcement actions or final rules.

Notwithstanding the vigorous efforts of the, network owners (aka ISPs) the tortuous path from the 1996 Act to the 2016 court ruling upholding the Title II classification should not, and cannot, obscure the fact that non-discriminatory access was the policy throughout the history of the Internet. Reviewing the route to the misclassification of high-speed data transmission and its later correction ultimately reinforces the important nexus between technology and law. When technology, economics and law go hand-in-glove, they create a sturdy pillar on which the digital revolution was built.

When the first Open Internet Order was overturned, the FCC was at a turning point. The FCC had to choose between abandoning the principle of nondiscrimination that had been in force for 40 years or building that principle on a firmer basis within the law. Ultimately, the FCC chose the latter, and the court upheld its Title II decision. The Appeals court refused an *en banc* hearing and the decision remained pending Supreme Court review.

F. Internet Architecture, Network Management, and Law: Erroneous Assumption Underlying the Title "0" Order

In the face of a very recent agency decision upheld by the courts that interprets that record as justifying vigorous policy to ensure non-discrimination in network access and consumer protection from abuse of network owners (aka ISPs), the FCC attempted in its Title "0" approach to sidestep that record. The order claims to take us back to the halcyon days of Internet's development and growth when government did not meddle in network management. Since, according to the FCC's revisionist history, government rules had no role in the success of the Internet, the recent decision to impose regulation is worse than useless, since it imposes

unnecessary costs and retards innovation. We have shown that this revision, like most of the flip-flop order, is wrong.

Jordan argues that the practice developed by the FCC and embraced by Congress in the '96 Act gave it legal grounding that linked law, technology and economics in a constellation. Jordan argues that over a thirty-year period, the FCC adopted practices for management of the Internet that had the positive effects I have described in Chapters 2 and 3. These practices had the force of administrative actions upheld by the courts under the 1934 Act and even more legal footing under the 1996 Act.

The earlier analysis in this paper, and Jordan's discussion make it clear that the FCC's flip-flop argument rests on seven claims (see Table III. 7) about broadband Internet access service and the development of the Internet that are incorrect – inconsistent with the actual history, at odds with the market reality, refuted by economic theory and evidence, and contradicted by clear court rulings. Every one of the FCC's points in the flip-flop argument is contradicted by the empirical evidence and the conclusions reached by the Commission**.**

The broad flaws in the FCC's misreading and misinterpretation of the evidence led to specific errors in factual statement, logic and legal reasoning, as briefly outlined in Table 6.1 and discussed at great length throughout this analysis.

- The pre-1996 Act Internet environment thrived because it was not regulated.
- The post-1996 Act prohibited government regulation of any kind going forward.
- Market forces are adequate to discipline the worst behavior in a timely manner. To the extent that network operators dare to engage in seriously abuse practices, the vigorously competitive market will blunt them.
- If consumers are informed about what is going on, their reaction will swiftly force abusers to change their behavior.
- The companies have promised to behave, and we should trust them.
- FTC oversight under the Clayton Act can effectively deal with any seriously anticompetitive or anti-consumer behaviors, as can other antitrust oversight.

- The abuses that advocates claim to be concerned about are infrequent and inconsequential; therefore, there is little to worry about.

TABLE III. 7: FACTUAL, LOGICAL, AND LEGAL FLAW IN THE FCC FLIP-FLOP ORDERS

Issue	FCC Erroneous Claim	General Historical Conditions	Specific, Contemporary Evidence
1) Pre-1996			
Regulation	No regultion	Computer Inquiries & Crarterphone = nondiscriminatory access; open connection for devices	National Broadband Plan Report and virtuous cycle
Virtuous cycles in success of the Internet	Both the cnter and the edge play equal roles	Unique virtuous cycles are to drive innovationand adoption	Market power of the networks, undermines virtuous cycles
2) Post-1996 Regulation	Telecomm Act precludes regulation	Ancilary authority asserted, Title II, S.706 Upheld	Verizon, Roaming orders upheld, with support for
3) Market Structure	Sufficient competition from potnetial entrants and duopoly, not analyzed in detail in network neutrality	Market power in network neutrality, Highly concentrated in BDS proceeding,	Economic literature on contestability, competition and cartels
Oversight			
4) Transparency & Case-by-case	Potent with expansion	Only pat of any oversight regime, Unable to prevent	Misinterpretation of costs and benefis and effectiveness
5) Company behavioral commitments	Trust Companies	Term sheets demanding control over access	Flip-flop on network, neutrality, BDS, competition in mergers
6) Enforcement			
Antitrust in general	Antitrust can deal with all problems	Does not address key conditions to sustain progress and promote competition in a timely manner	
FTC in particular	FTC Section 5, sufficient	Institual structure makes it particlarly Slow and ineffective	FTC disaster in Privacy, failure in Microsoft
7) Suspect Conduct	Rare and Insignifcant by definition	Continuous and important by impact in both network neutraity and BDS	Misrepresents results of Chicago v. Harvard shool debate over welfare and liaiblity standards

Source: Compiled by author

For at least 45 of the first 50 years of FCC policy dealing with the Internet, there was a clear rule that banned undue discrimination in rates, terms and conditions in the handling of data transmission. There is nothing in the intense legal maneuvering around network neutrality that suggests the FCC does not have regulatory authority. No appeals court, nor the Supreme Court has rejected Title II authority over network neutrality.

The Tortuous Route to Misclassification of High-speed data Transmission

The issue turns on whether the law recognizes the two types of services that flow over the network, basic and enhanced. This means that there could be both Title I and Title II services flowing. Opponents of Title II argued that the two were inseparable and there could, or should, be only one classification applied to this inseparable bundle.

As shown in Table III. 8, Jordan argues, first and foremost, that the two are separable. This meant that basic service should be regulated as Title II, which preserves the end-to-end principle.[54] Jordan shows that the legal framework that played a key role in the success of the Internet was wrapped around its key technological characteristic, the layered model, that created the possibility for unfettered entrepreneurial experimentation responsible for the explosion of innovation at the edges.[55]

> The Internet's architecture guarantees that the IP packet transfer service, which provides end-to-end transmission of information of the user's choosing, is separable from the applications (such as webpage hosting, caching of newsgroup articles, and email) riding over it. Protocols at the physical, data link, and network layers are designed separately from Internet applications. The Internet Protocol that transmits packets from one end of the Internet to another end is standardized and is independent of all of the Internet applications that are offered via it. Protocols at the physical, data link, and network layers are implemented in the operating systems of end user devices and are not in any way integrated in those

[54]Jordon, 2018, p. 67, the central tenet of Internet architecture dictates that telecommunications service is separable from information services. Thus, any claim that these applications are "functionally integrated" with and "inextricably intertwined" with the underlying telecommunications, and hence that the underlying telecommunications are inseparable from these applications, is factually wrong. The separability follows from both the modularity of Internet architecture (as discussed in Section 4.C) and the Internet standards for these applications. Separability is also evidenced by the offerings of these applications from entities unaffiliated with the broadband Internet access service provider396. The end-to-end transmission of IP packets and applications such as email, web browsing, or cloud storage are not "functionally integrated (like the components of a car)". By the Internet standards themselves, the end-to-end transmission of IP packets is mandated to be separable from the applications that ride over it.

[55] A communications network is composed of a set of communications links and devices. Each network device (e.g. a router) provides a set of *network services*. The central tenet upon which the Internet is designed is that these network services are organized into *network layers*, and that the lower layer network services are *standardized*.

operating systems with Internet applications. The result is that Internet applications may be offered by entities other than broadband Internet access service providers.[56]

TABLE III. 8: THE LEGAL & REGULATORY PEDIGREE OF TILE II

Design Principles	Computer I, II 1968	MFJ Court 1982	'96 Act Law 1996	Univ. Svc. 1998	1998	Stevens Report 1998	Dial-up Order 2002-05	Cable/ Wireline 2010-2015	Open Internet 2017	Flip-Flop
Status	Defined	Adopted	Adopted	Erroneous		Affirmed	Erroneous	Affirmed	Erroneous	
Technology										
Separability	7 - 8	12	16			30	7, 36, 39, 40, 44-45	45-48	48	51-52 67-68
End-to-End	8-9	14	16			31	31, 40	47	47	54
Network Management	8-10			16		37	6, 37, 43	46, 48	46, 50	56-61
Bundling	50	15		18		38	38, 43, 44	47	48	53, 66
Market										
Competition/	11	14		15, 17		5, 29	5, 15		49	
Forbearance	17					32	32, 39, 40			66
Universal Service		27	27							

Sources: Compiled by author; Citations to Scott Jordan,

Jordan charts this intertwining of law and technology through the fabric of FCC oversight of the digital Communications space (e.g. the Computer Inquiries) noting the regulatory orders) and court cases that upheld them along the way (e.g. NARUC I & II).[57] In addition he cites other court cases (e.g. MFJ breakup of AT&T, Brand X, the D.C. Circuit decision upholding the Open Internet Order and its Title II classification of Broadband Internet Access Service). Ultimately, the 1996 Telecommunications Act is dispositive.

Second, even where basic and enhanced services are closely intertwined, the Commission had properly identified those circumstances as necessary for network management and concluded that the Title II classification should apply to the circumstances in which the bundle was made up of strong complements. The commission properly and consistently concluded that

[56] Jordon, 2018, p. 27.

[57] Jordon, 2018, focuses on Computer II, since it the operative FCC order for most of the issues in the network neutrality debate and the flip-flop order. He notes, however, the legal cases that affect the debate in the 1970s, when the FCC's approach to regulation of data transmission was hashed out in the inevitable legal challenges. He also not the link between Computer I and the MFJ, thereby putting all the key decisions in a single timeline.

Title II should take precedence, given the goals, intent and authorities of the overall act. Here the flexibility of the Act, with its broad goals and generically defined instruments comes into play. To the extent that the FCC had developed and defended approaches that served the purposes of the Act and are upheld, they take on significant weight.

Third, these situations, which had been dealt with, must be distinguished from simple bundling, where the components were not strong complements but separable components of service (to use the phrase from the Microsoft case the products were "bolted" together).[58] Here service providers were creating "discretionary bundles," which were not necessary for the management of the network.[59] Even here, the FCC was careful to protect the obligation of nondiscrimination for basic communications services.[60] Since there was no technological

[58] Cooper, Mark, 2001, "Antitrust as Consumer Protection in The New Economy: Lessons from The Microsoft Case, Hastings Law Journal, 52: 4, April.

[59] Jordon, 2018, pp. 10-11, In the case in which a facilities-based enhanced service provider does not wish to offer the basic service to the public, the FCC found that it was in the public interest to require that the basic service be offered to all other enhanced service providers on the same terms and conditions as it offered the basic service to itself. Thus, even in this case, the basic service is a common carrier service regulated under Title II. Furthermore, the FCC specifically rejected the theory that bundling enhanced capabilities with an underlying common carrier basic service removes the basic service from Title II. The result in either case is that basic service is a common carrier service, and thus must be offered without unreasonable discrimination, per Section 202 of the Communications Act. Basic service providers thus "no requirement that a particular service be offered on a common carrier basis, the Commission and the courts have interpreted whether the public interest requires a common carrier service based on a number of factors related to the service at issue."), and *Virgin Islands Telephone Corp. v. FCC*, 198 F.3d 921 (D.C. Cir. 1999) describing *NARUC I* and *NARUC II* ("a carrier has to be regulated as a common carrier if it will make capacity available to the public indifferently or if the public interest requires common carrier operation.").

[60] Jordon, 2018, p. 10, In the case in which a facilities-based enhanced service provider does not wish to offer the basic service to the public, the FCC found that it was in the public interest to require that the basic service be offered to all other enhanced service providers on the same terms and conditions as it offered the basic service to itself. Thus, even in this case, the basic service is a common carrier service regulated under Title II.

reason to tie the services together (except for the interest of the of the bundler), the public interest could govern that treatment of the basic service.

The law of the land was Title II network neutrality that neither Congress nor the courts had reversed. Indeed, the Tittle II classification was more consistent with the assertion that the FCC has less authority over network neutrality and has had it for fifty years. In place of almost 50 years of FCC policy to proactively ensure network neutrality, the FCC flip-flop abandoned the decades-old position, offering three extremely weak measures that have never been deemed sufficient to ensure nondiscrimination – transparency, promises by communications giants to behave, and the antitrust authority of the FTC, as discussed in Chapter 7.

This reading of the 1996 Act was clear to the only appeals court that ruled on network neutrality decisions. Jordan argues that this legal/regulatory finding was binding because the deregulatory decisions had failed to demonstrate inseparability or misconstrued the network management exception. To escape from this powerful nexus, when the FCC is inclined to abandon the obligation of non-discrimination, it must make arguments about the inseparability of the information from network management functions. The tension between the underlying legal-technical framework and efforts to escape from it are quite evident in the schizophrenic record of the post 1996 treatment of non-discriminatory access.

This is not to suggest that there was not great controversy along the way, but that controversy only arose at points where analysts or participants tried to escape from the well-defined legal-technical framework that had been adopted and proven so successful. Jordan identifies the factual errors underlying each instance where the FCC expressed uncertainty about or acted in violation of the nexus between the technology and the law.

The issue was first litigated before the Ninth Circuit Court of Appeals in 1999, in *Portland v. AT&T*, when Portland attempted to impose conditions of nondiscrimination on cable modem service. The court concluded that the underlying service was a telecommunications service, which should be subject to the nondiscrimination provisions of the Act. As the Appeals court for the Ninth Circuit ruled in *Portland v. AT&T* (as a cable company at the moment) and reaffirmed in its ruling on the Cable Modem Order.

> Among its broad reforms, the Telecommunications Act of 1996 enacted a competitive principle embodied by the dual duties of nondiscrimination and interconnection. See 47 U.S.C. s. 201 (a) …s. 251 (A) (1) … Together, these provisions mandate a network architecture that prioritizes consumer choice, demonstrated by vigorous competition among telecommunications carriers. As applied to the Internet, Portland calls it "open access," while AT&T dysphemizes it as "forced access." Under the Communications Act, this principle of telecommunications common carriage governs cable broadband as it does other means of Internet transmission such as telephone service and DSL, "regardless of the facilities used." The Internet's protocols themselves manifest a related principle called "end-to-end": (not a huge issue, but this seems like a weird time to introduce the concept of end-to-end… you've already been referring to it) control lies at the ends of the network where the users are, leaving a simple network that is neutral with respect to the data it transmits, like any common carrier. On this role of the Internet, the codes of the legislator and the programmer agree.

Later that year, the Federal Trade Commission imposed open access requirements on Time Warner as a condition of approving the AOL-Time Warner merger. The merger condition was anything but nondiscriminatory access; rather it was a feeble attempt to maintain a little competition, in the form of an additional competitor. In 2002, the FCC issued its Cable Modem declaratory ruling, which declared it an information service, in contradiction to the Ninth Circuit decision. Brand X, a small, non-facilities-based Internet Service Provider (ISP), appealed the decision to the Ninth Circuit, which affirmed its earlier conclusion, that high-speed data transmission is a telecommunications component of the service.

The definition of high-speed data transmission service as an information service rested on a theory of "contamination," *i.e.*, that the combination of telecommunications and information services in a "bundle" turns the whole bundle into an information service. This was a reversal of long-standing Commission policy and the regulatory structure that provided the model for the 1996 Act.[61] Previously, the presence of telecommunications in the bundle created a telecommunications service.

While the Supreme Court review of *Brand X v. AT&T* was pending, the FCC engaged in two acts that seemed intended to quiet fears that classifying high-speed data transmission would undermine the principle of nondiscrimination in telecommunications. First, Chairman Michael Powell, a vigorous defender of the information service classification, declared that there were four Internet freedoms that should be preserved. They cover several of the public service principles, including integration (ability to connect devices, access content and use applications) and consumer protection (obtaining service plan information).[62] These were later turned into a policy statement of the Commission[63] and were proposed as part of a new Open Internet rule.

Second, the FCC brought an enforcement action against a small telephone company for blocking VOIP, an Internet application that competed with its voice service. In the consent decree, Title II authority was invoked twice -- § 201 (a) in the introduction and § 208 in the body of the consent decree. In other words, three weeks before the oral argument in the Brand X case

61 Comstock, Earl and John Butler, 2000, Access Denied: The FCC's Failure to Implement Open Access to Cable as Required by the Communications Act, Commlaw Prospectus, reprinted in Mark Cooper, 2004, Open Architecture as Communications Policy: Preserving Internet Freedom in the Broadband Era, (Center for Internet and Society, p. 304.

62 Powell, Mike, 2004, "Preserving Internet Freedom: Guiding Principles for The Industry," delivered at Silicon Flatirons Symposium on "The Digital Broadband Migration: Toward a Regulatory Regime for the Internet Age" University of Colorado School of Law, February 8.

63 As described in 2023 Open Internet Order, para. 4.

and less than four months before the ruling, the FCC was using its Title II authority to prevent undue discrimination in access to the telecommunications network. Two years later, the FCC found that a cable operator had violated the nondiscrimination policy of the Commission. These *ex-post* actions by the FCC may have been intended to elicit *ex-ante* behaviors but the repeated need to intervene made it clear that it had failed to do so. Chevron deference would become the sole support for FCC policy.

A split (6-3) Supreme Court reversed the Ninth Circuit and upheld the FCC's definition of high-speed data transmission as an information service, based on purely procedural grounds. It concluded that the agency should be afforded Chevron deference in an ambiguous situation. The reversal of the Ninth Circuit ruling was an even closer call than the math indicates. In his concurrence Justice Breyer emphasized the closeness of the decision saying, "I join the Court's opinion because I believe that the FCC's decision falls within the scope of its statutorily delegated authority –– though perhaps just barely."[64]

At every key point in the regulatory and judicial process, the FCC asserted that it needed and had the authority to implement policies to promote the Communications Act goals under both Title I and Title II. The assumption repeatedly made by the Commission, that it would be able to exercise substantial "ancillary" authority under Title I to accomplish the goals provided for in Titles II and III, has also now been called into question.

Jordan shows not only that the communications companies challenging the open access order were flawed in their treatment of the architectural principle of the Internet, but he also argues that they were incomplete. A quick look at the Wireline Broadband Order, which replaced the Computer Inquiries and extended FCC oversight over all wireline broadband by

[64] Id., para, 12.

treating cable modem and telephone company broadband symmetrically, underscores the importance of affirmative FCC authority and action to ensure nondiscrimination and promote other goals of the Communications Act. The order cites its ancillary authority 35 times to preserve the FCC's power to prevent discrimination, promote universal service, and protect consumers and the nation. The order opened proceedings to assess whether it could achieve several of these objectives by relying on market forces, rather than its ancillary authority, but never made such a determination. The inquiry into the full implications of abandoning Title II authority never took place.

The 1934 Act recognized that technology would evolve and adopted a pragmatic approach that intended for the principles (social goals) to remain in force as the communications network progressed. Similarly, the 1996 Act explicitly gave the FCC some flexibility and defined telecommunications as an evolving concept that preserved the principles of nondiscriminatory access.[65] This commitment to preserving social goals in the face of rapid technological change was written into the Act at three key points, all of which would play an important part in the next quarter century.

First, definitions were independent of the "technology used."[66] Technological evolution was anticipated,[67]but not expected to alter the basic policy goals. Second, in §254, universal

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[65] Jordon, 2018, pp.44- 45, The FCC recognized that "enhanced services are dependent upon the … offering of basic services." The underlying basic service provides "a 'pure transmission' service which forms the basis upon which all 'enhanced' services are provided."

[66] the *1996 Act* focuses on telecommunications regardless of the facilities used. This approach is consistent with the change in focus from equipment in the FCC's *Computer I* to the focus on functionality in the FCC's *Computer II*. In addition, the *1996 Act* clarifies that "for hire" means "for a fee directly to the public, or to such classes of users as to be effectively available directly to the public", consistent with Title II's application to common carriers.

[67] Jordon, 2018, p. 32, During the late 1990s and the first decade of the 2000s, transmission technologies were developed and deployed that could obtain much higher speeds than data transmission over the PSTN. Digital subscriber line (DSL) is a family of physical (layer 1)

service was defined and as an "evolving" concept that explicitly included advanced telecommunications and information services.

Third, in §706, a finding that progress toward universal service was insufficient allowed the FCC and state regulators to take vigorous action to increase progress toward the goal.

The technological changes that were used in an attempt to escape from the obligations of nondiscrimination and support for universal service were contrary to the Act. They also, as Jordan notes, misconstrued the fundamental nature of the technology. Simply put, the universal service goals of the Act expressed in Title I and Title II are at least as compelling as the nondiscrimination goals in Title II. The D.C. circuit denied an *en banc* hearing and the Supreme Court denied *cert.* Ultimately, the court upheld the Title II classification.

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and data link (layer 2) protocols that telephone companies often use to transmit data between a customer's modem and a network device in the telephone company's central office. Similarly, Data Over Cable Service Interface Specification (DOCSIS) is a family of physical and data link layer protocols that cable companies often use to transmit data between a customer's modem and a network device in the cable company's headend. Either DSL or DOCSIS can be used to replace the need for local telephone service when accessing the Internet. The IP (layer 3) protocol is used over DSL or DOCSIS to offer packet switching from source to destination. The combination of IP with DSL or DOCSIS is used to provide broadband Internet access service.

IV. DEFENDING THE PROPOSED RULE BY CRITICIZING THE FLIP-FLOP ORDER JUSTIFICATION FOR THE 2023 OPEN INTERNET ORDER

The first half of the 2023 Open Internet Order (97 paragraphs, 30 pages), which focuses on the major issue in the 2015 Open Internet and the Flip-Flop Order (the classification of BIAS as an telecommunications service) is roughly equal to the second half (125 paragraphs, 29 pages) which proposes the approach of the rule (including forbearance). When the 80 issues (as we see it) all point to Title II classification, the analysis of the 2015 Open Internet Order is correct and the analysis and conclusions of the Flip-Flop Order are incorrect. The answers to the comments solicited and individual questions posed in proposing the 2023 Open Internet Order have been given in the general discussion above. In the remainder of these comments, we avoid redundancy and focus on areas that have not been covered in our discussion of the first part or areas where the FCC is considering expanding or cutting back on the 2015 Open Internet order.

There are three types of discussion that meet these criteria. Here we repeat Table 1.3 for ease of reference (see Table 4.1).

First the proposed rule is where the 2023 Open Internet Order criticizes the theory used in the Flip-Flop order, especially along the lines given by the *Mozilla* Court, but ignored by the FCC. This explicit rejection bears repeating and there are two other Court rulings that are relevant, Verizon and USTA. The former rejected the 2010 Open Internet Order and remanded issues for further review, but the reasoning supports the ultimate rewrite. The latter upheld the 2015 Open Internet Order, setting the stage for the Flip-Flop. This discussion focuses on the 2023 Open Internet Order in light of those earlier Court rulings. It is worth noting that three fifths of the issues in the 2023 Order are supported by a court ruling. The remainder are issues raised by the FCC in bringing the 2015 Order up to date.

TABLE 4.1: COURT RULINGS AND FCC REASONING IN SUPPORT OF THE PROPOSED 2023 OPEN INTERNET ACTIONS AND RULES

Issues	Issue in Table I. 2	Court Rulings *Mozilla,* USTA Verizon*, Page #	FCC Reasoning 2030 Open Internet Order Para.
Erroneous Economic Framework	**1-8, 12-14, 49-52**		
Unrealistic Economics		***87, 94,95***	**14**
Lax Antitrust		***59***	**139**
Lack of Competition			**128**
***ex-post* complaint v. *ex-ante* rule**		***61***	**119, 137**
Investment		***51,52***	**12,56,109**
Analytic Weakness	**20,38-44, 51-62**		**12**
Cost/Benefit Analysis		***59-63,65-70***	**47,106,109**
Timing of Rules &Business Decisions			
Key Unsupported Functions	**16-17, 20-37, 42-44, 46-48, 49-55**	***18***	**13**
Public Safety		***59-63***	**3,13**
Infrastructure Investment		***65-67***	**13, 47**
Universal Service		***69***	**49,94,109,110**
Internet Economics/Virtuous Cycle	**18-19, 49-52**	**707, 644***	**129,131-132,160**
Self-preferencing incentives		**645-646***	**158-160**
All Other Harmful Practices			**151-157**
Broadband only		***108-109,* 653***	**47,65,186**
Role of Edge Demand-Transparency is		**644***	**129**
Not Enough			**139,160**
Infrastructure Act & Broadband Labels			**169-170**
Content, Misclosure, Means			**171-181**
Legal Authorities: Right to Classify	**10-11, 16-17, 42-43, 63-75,79-80**	***Many per note 232***	**18, 66-67**
Title II		**USTA**	**1, 10**
Preemption		***74***	**13,93**
Patchwork			**145**
Forbearance		**726-733**	**100**
706 Authority		**733-734,635-642***	**194**
Conflict Between Courts		***46 v.* 635-649***	**196-198**
Selective Hypocrisies: 706 v. 257			**195**
254(e) v. 254(c)			**49**
Evolution of Rules	**10-11,17,25-32, 44,58,64,76**		
Flexibility for changed circumstances		**734-739**	**155,166**
ISP requesting waiver			**161**
Public Benefit + No Harm to Openness			**162**
Definitions and Adaptations			**188-189**
Advisory Opinion Procedure		**738-739**	**190-191**

The other two grounds on which we support the order have been discussed above. There are areas where changed circumstances open the way for reconsideration of the 2015 Open Internet Order. There are technical issues that were correctly decided by the Court in upholding the 2015 Open Internet Order but brushed aside by the Flip-Flop order. For the latter we rely on the above discussion of the analysis offered by the Chief Technologist at the time.

THE ERRONEOUS ECONOMIC FRAMEWORK OF THE FLIP-FLOP ORDER

The 2023 Open Internet Order concluded "that the Commission's 2018 finding that existing antitrust and consumer protection laws, in conjunction with some form of a transparency rule, offer enough protection against the potential harms caused by paid prioritization arrangements was erroneous."[68] The 2023 Open Internet Order pointed to the *Mozilla* Court's concerns that the analysis of broadband was "unhinged from reality."

> Finally, even the Commission's technological and marketplace evaluation of BIAS was subject to substantial criticism by a majority of the *Mozilla* panel. In her concurrence, Judge Millett explained that she was "deeply concerned that the result is unhinged from the realities of modern broadband service," but due to Supreme Court precedent treating an information service classification of BIAS as permissible, she concluded that the *Mozilla* court was not free to act on its own "to require the Commission to bring the law into harmony with the realities of the modern broadband marketplace…
> Judge Wilkins likewise expressed agreement with Judge Millett's views. "[69]

While the Court "was not free to act on its own… to bring the law into harmony with realities of the modern broadband marketplace," the FCC certainly is. Here we transition to the FCC's critique of the arguments, evidence and (il)logical of the Flip-flop Order.

While much of the critique of the Flip-Flop Order stems from the lack of real-world competition, contrary to the critical assumption underlying the Flip-Flop, the FCC was so

[68] 2023 Open Internet Order, para. 160.
[69] Id., para, 14.

determined to abandon its authority that it assumed the market would do things that even competition was not likely to deliver.

> We question, however, whether the *RIF Order* was correct to place such confidence in the marketplace as sufficient to advance free expression on the Internet. Do consumers and the public have information about how ISP actions affect free expression on a sufficiently granular and detailed basis to act on that information? Separately, the *RIF Order* acknowledged that "[t]he competitive process and antitrust would not protect free expression in cases where consumers have decided that they are willing to tolerate some blocking or throttling in order to obtain other things of value." We doubt that consumers are likely to act uniformly as a single, undifferentiated group, particularly where issues like free expression are concerned. We thus question how well the *RIF Order*'s analysis accounts for the interests of consumers who place different values on free expression. More generally, we seek updated information and analysis about the anticipated effects of Internet conduct rules on free expression.[70]

Lax Antitrust

While the *Mozilla* Court remanded issues that rested on dubious legal reasoning, it raised a more fundamental point about the overall reasoning of Flip-Flop Order and are reflected in the FCC's rejection of the Flip-Flop Order. First, the *Mozilla* Court and the FCC 2023 Open Internet Order reflected a fundamental concern about the claim that antitrust could achieve the economic results of competition or regulation.

> The D.C. Circuit also found that the *RIF Order*'s analysis concerning the ability of antitrust and consumer protection law to obviate the need for Commission regulatory authority over BIAS was "no model of agency decision making." Ultimately, the *RIF Order*'s "anemic analysis" in that regard "barely survive[d] arbitrary and capricious review."[71]

Lack of Competition

The *Mozilla* court explained that the *RIF Order* "theorized why antitrust and consumer protection law is preferred to *ex ante* regulations but failed to provide any meaningful analysis of whether these laws would, in practice, prevent blocking and throttling."[72] The *RIF Order* also

[70] Id., para 118.
[71] Id., para. 12.
[72] Mozilla, p. 59.

seems to concede that blocking, throttling, and discrimination may be permitted under its chosen oversight and enforcement framework,[444] and that paid prioritization may be found to be permissible in many instances. We explored this problem most fully in Attachment B Attachment F, and Attachment G, introducing the problem of a tight oligopoly on steroids in both network access and Big Data Platforms. Once the competition assumption fails, the logic and every aspect of the fabric of the Flip-Flop Order collapses.

> The *RIF Order* offered several reasons for rejecting the prior rationales, including ISPs' economic incentives and supposed material competitive restraints.[414] We believe these conclusions presumed that there were other ISPs to which consumers can switch if they were suffering open Internet harms, and that the switching costs would not deter such switching. In addition, we tentatively agree with the *Mozilla* court, which found that, "[t]aken together, the Commission fail[ed] to provide a fully satisfying analysis of the competitive constraints faced by broadband providers."[73]
>
> The Commission also claimed that "from the perspective of many edge providers, end users do not single home, but subscribe to more than one platform (e.g., one fixed and one mobile) capable of granting the end user effective access to the edge provider's content (i.e., they multi-home)," and "to the extent multihoming occurs in the use of an application, there is no terminating monopoly." However, consumers may lack access to both fixed and mobile connections,[417] and even when they do have access to both, the Commission did not show that these connections allow consumers to access all edge provider services unhindered, and therefore are truly competitive alternatives. Indeed, the Commission has since concluded that "fixed broadband and mobile wireless broadband are not substitutes in all case.[74]

While the lack of competition is generally harmful to consumers, it is especially damaging to internet economics because, without effective oversight it destroys the key attribute of the virtuous cycle, innovation without permission. Moreover, the *ex-post* approach was particularly harmful to key population groups.

> We note that the *Mozilla* court expressed specific skepticism about the Commission's contention in the *RIF Order* that post-activity enforcement is a suitable method to address harmful conduct in the public safety context, emphasizing that "even if

[73] Id., p. 57; 2023 Open Internet Order, para. 123.
[74] 2023 Open Internet Order, para.123.

> discriminatory practices might later be addressed on a post-hoc basis by entities like the Federal Trade Commission, the harm to the public cannot be undone."[75]

The central problem in the Flip-Flop order was the failure to recognize the incentives of network owners (aka ISPs), and their incentive to ignore the externalities of Internet economics – the virtuous cycle of innovation at the edge without permission.

> We tentatively conclude that the RIF Order's explanation of how two-sided markets work does not address a central problem open Internet rules are intended to address. When an ISP's actions harm content creators and edge providers, the impact is distributed across all ISPs, not just the ISP undertaking the action. Yet, each ISP only accounts for the impact on its own operations. Consequently, a profit-making decision from the perspective of the individual ISP creates repercussions across all ISPs that harm the industry and the economy at large. When an ISP makes the profit-maximizing decisions the RIF Order describes, it only accounts for the impacts of its decision on its own company. It does not account for the impact of those actions on ISPs that lie outside its geographic market. These constitute the bulk of ISPs. Thus, an ISP, for example, that does not face fully effective competition, might expect to see higher profits if it sets prices for edge providers that recover in expectation a little more than its long-term costs. However, consistent with the reasoning of the RIF Order, it will not set prices for edge providers that are so high that the impact on the quality of edge provider service would cause the ISP to lose more because it would be forced to lower prices to its own consumers. We believe that the difficulty with the RIF Order analysis is that in setting its profit-maximizing prices, the ISP lowers service quality for all ISPs, but that harm does not feature in the ISP's profit-maximizing calculation. While the impact on content quality of a single ISP setting prices somewhat above the competitive level will be small and spread out over all ISPs, all similarly situated ISPs face similar incentives. Thus, since ISPs have no means of coordinating their behavior, and doing so could be illegal, each will behave in this way with material negative cumulative effects. The result is a breaking of the virtuous cycle described in the 2010 Open Internet Order: not only will ISPs collectively be worse off, but so will the broader economy.[76]
>
> In its Verizon opinion, the D.C. Circuit noted the powerful incentives ISPs have to accept fees from edge providers in return for excluding their competitors or for granting prioritized access to end users.503 Some ISPs continue to advertise that they do not engage in paid or affiliated prioritization practices. Even with similar promises from ISPs in 2015, the Commission concluded that the potential harm to the open Internet was too significant to rely on mere promises from ISPs because "the future openness of the Internet should not turn on the decision of a particular company."[77]

[75] Id., p. 61.
[76] Id., para. 130
[77] Id., para. 259; Verizon, p. 645-646*.

The 2023 Open Internet Order felt that the Flip-Flop Order misunderstood, or misrepresented the state of competition and the availability of consumer access in the market.

> The Commission also claimed that "from the perspective of many edge providers, end users do not single home, but subscribe to more than one platform (e.g., one fixed and one mobile) capable of granting the end user effective access to the edge provider's content (i.e., they multi-home)," and "to the extent multihoming occurs in the use of an application, there is no terminating monopoly." However, consumers may lack access to both fixed and mobile connections,[417] and even when they do have access to both, the Commission did not show that these connections allow consumers to access all edge provider services unhindered, and therefore are truly competitive alternatives. Indeed, the Commission has since concluded that "fixed broadband and mobile wireless broadband are not substitutes in all cases," finding that each type of service "enables different situational uses."[78]

The Commission underscored this point, noting that "Going forward, is there reason to believe that ISPs will engage in conduct that harms the open Internet, particularly if the Commission chooses not to adopt open Internet rules?[79]

Investment

The *Mozilla* Court noted the doubt and small effect that could attributed to the investment impact of the 2015 Open Internet Order "the Commission was cleareyed in assigning quite modest probative value to studies attempting to draw links between the [*2015 Open Internet Order*] and broadband investment.[80]" The Flip-Flop FCC chose to run with the modest probative value and deregulate BIAS. The 2023 Open Internet Order argued that the decision on investment was wrong.[81]

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[78] 2023 Open Internet Order, para. 123.
[79] Id.
[80] *Mozilla,* p.51.
[81] 2023 Open Internet Order, para. 56. We tentatively conclude that the Commission's conclusions in the RIF Order that ISP investment is closely tied to the classification of BIAS were unsubstantiated. Instead, we agree with the RIF Order's statement that "owners of network infrastructure make long-term, irreversible investments," which we believe makes it unlikely that changes in investment shortly following the adoption of each Order were actually related to the effects of each Order… We note that the Commission received conflicting viewpoints regarding the actual effect of Title II classification on investment.

Ultimately, the thrust of the threat was to the core process of innovation and investment that had driven the Internet for decades.

> We believe the *RIF Order*'s reliance on antitrust protections undermines the virtuous cycle by failing to protect the small edge services that comprise an important part of the Internet. While antitrust protections would apply where, for example, an ISP favored its own edge provider, or sought to harm a competing edge provider, antitrust protections do not forbid the unjust or unreasonable exercise of market powers. But it is exactly those practices that could unravel the virtuous cycle. As part of its justification for reliance on antitrust law, the *RIF Order* expresses particular concern about the effect of regulations on small ISPs. But we believe that there are far more edge services that are small—typically many times smaller than the smallest ISPs—which the *RIF Order* does not acknowledge or evaluate.[82]
>
> We believe that an important byproduct of an open Internet is the edge innovation and consumer demand that promotes ISP investment,[83] … In the *2015 Open Internet Order*, the Commission recognized that "innovations at the edges of the network enhance The validity of the virtuous cycle was upheld by both the *Verizon* court and the *USTA* court.[84] The *RIF Order*, however, discounted the *2015 Open Internet Order*'s reliance on the virtuous cycle, contending there was a two-sided market in which ISPs acted as platforms and benefited from facilitating interactions between both sides of the market—edge providers and end users—and profits from inducing both sides of the market to use its platform.[85]
>
> We tentatively conclude that the *RIF Order*'s explanation of how two-sided markets

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Instead of concluding, as the 2015 Open Internet Order did, that conflicting viewpoints concerning the effect of classification on investment prevented the Commission from being certain which viewpoint was more accurate,196 the Commission chose to rely on certain studies purporting to show that Title II classification in the 2015 Open Internet Order hurt investment to reach its conclusion about the effect of Title II classification on investment, even as the Commission seemed to recognize the weaknesses of those studies. Additionally, similar to the 2015 Open Internet Order record,199 the RIF Order's record showed opposing views on the likely long-term effects of the Commission's regulatory decisions on investment.200 We believe, as the Commission did in 2015, that "no party [could] quantify with any reasonable degree of accuracy how either a Title I or a Title II approach may affect future investment."201 As such, we tentatively conclude that changes in ISP investment following the adoption of each Order were more likely the result of other factors unrelated to the classification of BIAS, such as broader economic conditions at the time, technology changes such as the transition from 3G to 4G LTE networks, and ISPs' general business development decisions.

[82] 2023 Open Internet Order, para. 143.

[83] Id., para. 129

[84] Verizon 644, * USTA, 707.

[85] 2023 Open Internet Order, para.130.

> work does not address a central problem open Internet rules are intended to address. When an ISP's actions harm content creators and edge providers, the impact is distributed across all ISPs, not just the ISP undertaking the action. Yet, each ISP only accounts for the impact on its own operations. Consequently, a profit-making decision from the perspective of the individual ISP creates repercussions across all ISPs that harms industry and the economy at large. When an ISP makes the profit-maximizing decisions the *RIF Order* describes, it only accounts for the impacts of its decision on its own company. It does not account for the impact of those actions on ISPs that lie outside its geographic market.[432] These constitute the bulk of ISPs. Thus, an ISP, for example, that does not face fully effective competition, might expect to see higher profits if it sets prices for edge providers that recover in expectation a little more than its long-term costs. However, consistent with the reasoning of the *RIF Order*, it will not set prices for edge providers that are so high that the impact on the quality of edge provider service would cause the ISP to lose more because it would be forced to lower prices to its own consumers. We believe that the difficulty with the *RIF Order* analysis is that in setting its profit-maximizing prices, the ISP lowers service quality for all ISPs, but that harm does not feature in the ISP's profit-maximizing calculation. While the impact on content quality of a single ISP setting prices somewhat above the competitive level will be small and spread out over all ISPs,[433] all similarly situated ISPs face similar incentives. Thus, since ISPs have no means of coordinating their behavior, and doing so could be illegal, each will behave in this way with material negative cumulative effects. The result is a breaking of the virtuous cycle described in the *2010 Open Internet Order*: not only will ISPs collectively be worse off, but so will the broader economy.[86]
>
> We tentatively conclude that the Commission's 2018 finding that existing antitrust and consumer protection laws, in conjunction with some form of a transparency rule, offer enough protection against the potential harms caused by paid prioritization arrangements was erroneous.[87]
>
> We believe it is necessary to secure the open Internet to preserve the virtuous cycle wherein market signals on both sides of ISPs' platforms encourage consumer demand, content creation, and innovation, with each respectively increasing the other, providing ISPs incentives to invest in their networks.[88]

Analytic Weakness: Lack of Cost Benefit Analysis

The Flip-Flop Order made a choice that the 2023 FCC felt was inconsistent with the evidence. There was more to the complaint than agency discretion, however. The Flip-Flop

[86] Id., para, 130.
[87] 2023 Open Internet Order, para. 160.
[88] Id., para. 131.

FCC had made its choice without balancing the costs and benefits of its decision, which it was required to do. To the extent that there may have been modest benefits from defining BIAS as an information service, the FCC should have balanced these against the costs of that definition. Apparently, it never did, and the failings involved the most important duties of the FCC.

The failure to do the proper cost benefit analysis affected the "externalities" in public safety and universal service. These issues will be elaborated below,

> In addition, the D.C. Circuit in *Mozilla* emphasized the need to consider the potential benefits of Title II classification of BIAS for the Commission's authority to protect public safety. Although public safety considerations were an important element of the Commission's overall decision in the *2015 Open Internet Order*, preserving the Commission's public safety authority above and beyond that granted in sections 201 and 202 of the Act was not as explicit a focus in much of the commission's tailoring of forbearance there.[89]

> The D.C. Circuit's *Mozilla* decision also highlighted the potential benefits of Title II classification of BIAS for the Commission's authority to encourage deployment through regulation of pole attachments and to provide universal service support for low-income households.[90]

> The Commission concluded that while there were potentially adverse effects to this class of providers resulting from the loss of pole attachment rights, the benefits of returning BIAS to an information service classification outweighed any drawbacks. We tentatively conclude that the Commission erred in its 2020 analysis.[91]

The economic impact was evident, too, to the effect that failing to undertake detailed analysis overlooked network investment and innovation.

> Research in innovation economics suggests that edge innovation is heterogeneous. Some types of edge innovation will thrive under general purpose open networks. Such innovations could have significant positive spillover effects that benefit the broader Internet ecosystem. However, other types of edge innovation, especially during the early phases of the innovation process, may be facilitated by quality of service differentiation of the network. This suggests that a forward-looking open Internet policy will be most supportive of innovation if it protects the openness of the access platforms for innovations with high spillover effects while at the same time allowing non-

[89] Id., para., 106; *Mozilla,* pp. 59-63.
[90] Id., para, 109, Mozilla*,* pp. 65-70.
[91] Id., para. 47.

discriminatory forms of network differentiation to support edge innovations that are facilitated by such support.[92]

The commission needed authority to fulfill all of the goals as expressed by the Act.

First, this authority will allow the Commission to protect consumers, including by issuing straightforward, clear rules to prevent Internet service providers from engaging in practices harmful to consumers, competition, and public safety, and by establishing a uniform, national regulatory approach rather than disparate requirements that vary state-by-state. Second, reclassification will strengthen the Commission's ability to secure communications networks and critical infrastructure against national security threats. Third, the reclassification will enable the Commission to protect public safety during natural disasters and other emergencies. Our proposals to safeguard and secure the open Internet build on several other actions the Commission has taken since the onset of the COVID-19 pandemic to ensure that the public has access to broadband.[1] We believe that the actions we propose today are critical to protecting the nation's security and the public's safety and to ensuring that consumers and competition can flourish in the modern Internet economy.[93]

Key Unsupported Obligations of the FCC to Promote the Public Interest

The 2023 Open Internet Order raises doubt about the Flip-Flop Order in two ways. In the early part of the document the FCC relies on the *Mozilla* Court's clear expression of concern and remand, which the Pai-chaired FCC virtually ignored. The key issues are repeated in the later part of the document. The second way the FCC confronts the Flip-Flop Order is to cast doubt on or reject the fundamental economic and analytic reasoning of the Order. Here we begin with the FCC's reflection on the *Mozilla* Court. The FCC describes the *Mozilla* court as follows:

The *Mozilla* court had substantial concerns about the *RIF Order*'s failure to adequately evaluate the potential negative implications of moving away from a Title II regulatory framework for BIAS on the Commission's ability to: (1) adequately protect public safety; (2) promote infrastructure deployment through pole attachment regulation; and (3) ensure continued legal authority to provide Lifeline Support for BIAS through the universal service fund.[94]

[92] Id., para. 144.
[93] Id., para. 3.
[94] 2023 Open Internet Order, para.13.

The three key FCC functions of Title I are here, adequate facilities, universal service, public safety and (by implication) national security. The only function not included had been subject to forbearance (reasonable charges). Each of these concerns was grounded in a different weakness in the order. Preemption was a particular concern for state programs that sought to advance universal service.[95]

> In 2020, following the *Mozilla* court's direction that the Commission "grapple with the lapse in legal safeguards" for broadband-only providers that resulted from the *RIF Order*, the Commission concluded that while there were potentially adverse effects to this class of providers resulting from the loss of pole attachment rights, the benefits of returning BIAS to an information service classification outweighed any drawbacks. We tentatively conclude that the Commission erred in its 2020 analysis and believe that *-reclassifying BIAS as a telecommunications service will help support the Commission's goals to facilitate broadband deployment, and we seek comment on this tentative conclusion.[96]
>
> The D.C. Circuit's *Mozilla* decision also highlighted the potential benefits of Title II classification of BIAS for the Commission's authority to encourage deployment through regulation of pole attachments and to provide universal service support for low-income households.[385] In consideration of those interests, the Commission previously excluded sections 224 and 254 of the Act from the scope of its forbearance in the *2015 Open Internet Order*.[97]

We believe that the *RIF Remand Order* was too quick to dismiss concerns regarding public safety, pole attachments, and low-income universal service support as speculative or unproven.[98]

The short period in which the Flip-Flop Order was in place (after the *Mozilla* Court ruling) makes it extremely difficult to argue that it had a profound effect on the behavior of network owners (aka ISPs). Moreover, states with over one-quarter of the U.S. population enacted legislation that filled at least part of the gap that the Flip-Flop order created. In fact,

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[95] Id., para. 94.
[96] Id., para. 47.
[97] Id., para, 109; *Mozilla,* pp. 65-70.
[98] Id., para. 110.

there were long-term processes in place, like contracts and investment cycles) that made it unlikely one would see an immediate effect. Moreover, to the extent that the network owners (aka ISPs) committed to good behavior, meant there was not only little immediate change, but also very small costs of compliance with an Order that replicated the 2015 Open Internet Order.[99]

The 2023 Open Internet Order also argues that the strong demand for Internet services caused by the pandemic drove growth more than the behavior of the network owners (aka ISPs). The special circumstance also lowered the elasticity of demand, making consumers more vulnerable to the abuse of market power and the most vulnerable are those who need the Internet most.

> We further believe our proposed conduct rules would have particular benefits for the safety of individuals with disabilities. Above, we highlighted that these individuals increasingly rely on Internet-based communications,[407] and that "[t]hese applications often require significant bandwidth, making their use particularly sensitive to data caps and network management practices." We believe the use of broadband to facilitate Internet-based communications by persons with disabilities for public safety purposes, such as to contact emergency service providers, has a higher likelihood of being degraded by prioritization of latency-sensitive applications on the same facilities than less data-intensive uses, such as email, software updates, or cached video. We accordingly believe that our proposed rules would prevent such degradation and seek comment on this proposed analysis.[100]

> The *RIF Order* offered several reasons for rejecting the prior rationales, including ISPs' economic incentives and supposed material competitive restraints.[101] We believe these conclusions presumed that there were other ISPs to which consumers can switch if they were suffering open Internet harms, and that the switching costs would not deter such switching. In addition, we tentatively agree with the *Mozilla* court, which found that, "[t]aken together, the Commission fail[ed] to provide a fully satisfying analysis of the competitive constraints faced by broadband providers."[102]

[99] Id., para. 128.
[100] 2023 Open Internet Order, para. 120.
[101] Id., para. 123,
[102] *Mozilla,* p. 57.

VIRTUOUS CYCLES

The 2023 Open Internet Order embraced the core logic of the 2015 Open Internet Order on Virtuous Cycles.

> Following the *Verizon* decision, the Commission adopted the *2015 Open Internet Order*, adopting carefully-tailored rules to prevent specific practices harmful to Internet openness—blocking, throttling, and paid prioritization—as well as a strong standard of conduct designed to prevent deployment of new practices that would harm Internet openness, and enhancements to the transparency rule. [103] The Commission concluded that the Internet's openness promotes innovation, investment, competition, free expression, and other national broadband goals, and found that the record supported the proposition that the Internet's openness enables the virtuous cycle of innovation.[23] The Commission also found that broadband providers have both the incentives and ability to harm the open Internet.[104]

ROLE OF THE EDGE, TRANSPARENCY IN NOT ENOUGH

The key role of consumer freedom in creating the demand that stimulates innovation and investment, only where it is free is the cornerstone of the dynamic Internet economy.

> Because of its importance, we further believe it is paramount that consumers be able to use their BIAS connections without degradation due to blocking, throttling, paid prioritization, or other harmful conduct. The rules we propose today are designed to ensure these protections. Below, we seek comment on particular issues that inspire the need for these rules, including protecting public safety, reliance on the Commission's communications sector expertise to address harmful conduct, ISPs' incentives and abilities to harm Internet openness, the effects of harmful conduct on consumer demand and edge innovation, and how the *RIF Order*'s oversight framework addresses harmful conduct.[105]

The failure to consider benefits of Title II classification was also raised by the *Mozilla* Court, as noted earlier.

> The Commission's transparency rule requires ISPs to publicly disclose the network practices, performance characteristics, and commercial terms of the BIAS they offer, including disclosure of any blocking, throttling, and affiliated or paid prioritization practices. We recognize that transparency is a valuable tool to protect the open Internet, but that it is only one element of a comprehensive framework that prevents consumers

[103] Id., para.9, USTA.
[104] Id., para.9, USTA.
[105] Id., para. 116.

> from experiencing harms that inhibit their access to an open Internet. While the transparency requirements currently in place provide consumers and edge providers the ability to make informed decisions, we believe their effectiveness is limited because they do not restrict ISPs from engaging in activities that have long enjoyed bipartisan opposition—blocking, throttling, and discrimination—let alone other conduct that has the potential to cause harm, such as paid prioritization. We tentatively conclude that these are the types of conduct that require *ex ante* intervention to ensure they do not happen in the first instance, and therefore tentatively conclude that the comprehensive set of conduct rules that we propose today are needed to protect consumers from this conduct. [106]

Transparency is not enough to ensure that consumers will be able to fulfill their key role in the virtuous cycle.

> We recognize that transparency is a valuable tool to protect the open Internet, but that it is only one element of a comprehensive framework that prevents consumers from experiencing harms that inhibit their access to an open Internet. While the transparency requirements currently in place provide consumers and edge providers the ability to make informed decisions, we believe their effectiveness is limited because they do not restrict ISPs from engaging in activities that have long enjoyed bipartisan opposition—blocking, throttling, and discrimination—let alone other conduct that has the potential to cause harm, such as paid prioritization.[441] We tentatively conclude that these are the types of conduct that require *ex ante* intervention to ensure they do not happen in the first instance, and therefore tentatively conclude that the comprehensive set of conduct rules that we propose today are needed to protect consumers from this conduct.[107]
>
> The Flip-flop Order "requires only that companies disclose their blocking, throttling, and paid or affiliated prioritization in their transparency disclosures; it does not prohibit companies from engaging in these practices."[108]

The *ex-ante* approach was seen as central to the ability to achieve non-discrimination and prevent the network owner (aka ISPs) from interfering with freedom to innovate at the edges without permission.

> Following the *Verizon* decision, the Commission adopted the *2015 Open Internet Order*, adopting carefully-tailored rules to prevent specific practices harmful to Internet openness—blocking, throttling, and paid prioritization—as well as a strong standard of

[106] 2023 Open Internet Order, para. 136.
[107] Id., para. 136.
[102] Id., Note 441.

> conduct designed to prevent deployment of new practices that would harm Internet openness, and enhancements to the transparency rule. [109]

LEGAL AUTHORITY

706 Authority

The Flip-Flop Order's obsession with abandoning authority led it to denigrate the clear language in the statute and insist there was no legal basis for the FCC to regulatory oversight. The 2023 FCC asks for comment on the alternative that the 2018 FCC had claimed were not applicable. The central concern is the claim that section 706 was merely hortatory and could not be used as a legal basis for asserting jurisdiction, the universal service obligation in Title I and II.

> In particular, although the *RIF Order* departed from the Commission's prior interpretation of section 706 and instead concluded that the provision was merely hortatory,[619] we propose to return to the commission's prior view and interpret sections 706(a) and (b) of the 1996 Act as grants of regulatory authority. We propose to do so in light of the considerations that persuaded the Commission to adopt such interpretations in the past, and that persuaded courts to affirm those interpretations.[110]

> Following the *Verizon* decision, the Commission adopted the *2015 Open Internet Order*, adopting carefully-tailored rules to prevent specific practices harmful to Internet openness—blocking, throttling, and paid prioritization—as well as a strong standard of conduct designed to prevent deployment of new practices that would harm Internet openness, and enhancements to the transparency rule. The commission concluded that the Internet's openness promotes innovation, investment, competition, free expression, and other national broadband goals, and found that the record supported the proposition that the Internet's openness enables the virtuous cycle of innovation.[23] The Commission also found that broadband providers have both the incentives and ability to harm the open Internet.[111]

The Flip-Flop FCC was hypocritical in taking this position, since (hortatory) authority un section 257 for its transparency rule even though it denied such authority to the commission under section 706. Why was one merely "hortatory" and no basis for claiming authority, while the other one was.

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[109] Id., para.9, USTA.
[110] 2023 Open Internet Order, para. 194, Verizon, pp. 635-642.
[111] Id., 9 citing Verizon and USTA.

> The *RIF Order* itself recognized that, in relying on section 257 of the Act as authority for the transparency rule, it was interpreting that provision as a grant of authority notwithstanding its lack of any identified universe of entities from which information could be obtained, explaining that "other aspects of section 257 persuade us that our interpretation of that provision as a grant of authority."[112]

Other sections of the Act cited for authority include 201, 202, 206, 209, 216, 217, in addition to 257. These were rejected by the Flip-Flop FCC. Several provisions that were mentioned by the Flip-Flop FCC (e.g., 251, 256, and 275) were not explicitly rejected but also not used.[113]

> In *Mozilla*, the court found that the Commission failed to explain how its universal service authority over telecommunications carriers in section 254(e) of the Act could extend to ISPs without BIAS classified as a telecommunications service for purposes of the Lifeline program, and it remanded the issue back to the Commission. Although the Commission conceded in the *RIF Remand Order* that under a Title I regime, BIAS could not be a section 254(c) supported service because section 254(c) defines universal service as an "evolving level of telecommunications services," it nevertheless asserted a theory under section 254(e) to enable Lifeline support for BIAS offered by eligible telecommunications carriers (ETCs), similar to the theory under which the Commission has funded broadband-capable networks through the High-Cost Program. [114]

The Flip-Flop Order took the anomalous position that Title III of the Act could be used to reach mobile providers, but it was abandoning Title II. "The *RIF Order* conceded the viability of Title III authority in this regard, but declined to exercise that authority because it would be limited to rules for mobile ISPs, rather than providing authority for rules governing all ISPs.[115]

Preemption (94-97)

The Flip-Flop order preempted all state regulation of Bias, which the Court Reviewing the order found troubling – "the D.C. Circuit in *Mozilla* concluded the *RIF* (Flip-Flop) *Order "fail[ed]* ground its sweeping Preemptive Directive … in a lawful source of statutory

[112] Id., para, 198.
[113] Section 202
[114] 2023 Open Internet Order, para. 49, *Mozilla*, pp. 68-70.
[115] Id., para. 203

authority."[116] The FCC opines in the 2023 Open Internet Order that it reclassification of BIAS should remedy the legal flaw, but asks what other legal basis exists for the preemption, although the commission makes clear that its preemption would be based on specific powers. The questions then reflect consideration of specific areas, floors, as opposed to ceilings, and historical bases for preemption.

Forbearance of Many Provisions of Title II Oversight (98-114)

Classification of BIAS as a Title II telecommunications service in the 2015 Open Internet Order had an important impact on oversight of that service. The second most important impact of the proposed classification was the decision to forbear from applying many of the Title II sections to BIAS service. In general, the 2023 Open Internet Order, followed the forbearance of the 2105 Order. The commission adopted the forbearance from rate regulation, but continued Title II in a number of areas, listed below, noting, in particular, numbers 4, 5 and 6 deal with universal service.

1. The open Internet rules and section 706 of the 1996 Act;
2. "[S]ections 201, 202, and 208, along with key enforcement authority under the Act, both as a basis of authority for adopting open Internet rules as well as for the additional protections those provisions directly provide"
3. Section 222 of the Act, "which establishes core customer privacy protections"
4. Section 224 of the Act and the Commission's implementing rules, "which grant certain benefits that will foster network deployment by providing telecommunications carriers with regulated access to poles, ducts, conduits, and rights-of-way"
5. Sections 225, 255, and 251(a)(2) of the Act and the Commission's implementing rules, "which collectively advance access for persons with disabilities; except that the Commission forbears from the requirement that providers of broadband Internet access service contribute to the Telecommunications Relay Service (TRS) Fund at this time"
6. Section 254 of the Act and "the interrelated requirements of section 214(e), and the Commission's implementing regulations to strengthen the Commission's ability to support broadband, supporting the Commission's ongoing efforts to support broadband deployment and adoption,";
7. Requirements governing the wireless licensing process in section 309(b) and (d)(1) of the Act and sections 1.931, 1.933, 1.939, 22.1110, and 27.10 of the Commission's rules.[117]

[116] Id., para. 94.
[117] Id., para. 103.

It then asked what it should do in specific circumstances, like small ISPs. Our answer is simple, if the service is not competitive (at least 4 relatively equal options), the potential for abuse of market power exists and should be a concern in the behavior of ISPs.

> The *Mozilla* court had substantial concerns about the *RIF Order*'s failure to adequately evaluate the potential negative implications of moving away from a Title II regulatory framework for BIAS on the Commission's ability to: (1) adequately protect public safety; (2) promote infrastructure deployment through pole attachment regulation; and (3) ensure continued legal authority to provide Lifeline Support for BIAS through the universal service fund.[118]
>
> We believe that the *RIF Remand Order* was too quick to dismiss concerns regarding public safety, pole attachments, and low-income universal service support as speculative or unproven, and we seek comment on that view.[119]

EVOLUTION OF RULES

Broadband Only

The *Verizon* court's conclusion that, in addition to the retail service provided to consumers, "broadband providers furnish a service to edge providers, thus undoubtedly functioning as edge providers' 'carriers.'" [120]

The questions about how the FCC could adapt the rules as the Internet evolved were repeated several times, underscoring the flexibility that the commission had.

> general waiver of the Commission's rules is only appropriate if special circumstances warrant a deviation from the general rule and such a deviation will service the public interest.[511] In 2015, the Commission found that it was appropriate to adopt specific rules concerning the factors that it will use to examine a waiver request of the paid prioritization ban.[512] We tentatively conclude that it remains appropriate to accompany a rule prohibiting paid prioritization arrangements with specific guidance on how the Commission would evaluate subsequent waiver requests.[121]
>
> We also seek comment on whether forbearance should be differently tailored in the specific context of the Internet traffic exchange portion of BIAS… We propose to

[118] 2023 Open Internet Order, para.13. *Mozilla,* p. 18.
[119] Id., para.110.
[120] 2023 Open Internet Order, para. 8, Verizon, p. 653.
[121] Id., para. 161

continue that uniform approach here, but also seek comment on whether and to what extent the Internet traffic exchange component of BIAS should be subject to different tailoring of forbearance.[122]

We seek comment on whether the Commission's longstanding oversight of the communications industry gives it unique technical, economic, and public interest aptitude in evaluating ISP conduct. To what extent does the Commission's enforcement apparatus provide it with sufficient authority and capabilities to address harmful conduct by ISPs, including by securing administrative relief? What efficiencies would be achieved as a result of the Commission having authority over BIAS along with other communications services (e.g., voice and cable) that providers offer to customers as part of bundled offerings?[123]

[122] Id., para. 112.
[123] 2023 Open Internet Order, para. 133.

ATTACHMENTS
Consumer Federation of America Papers:

General Economic Concepts

Overcharged and Under Served: How a Tight Oligopoly on Steroids Undermines Competition and Harm Consumers in Digital Communications Markets, December 2016 (Attachment A) available at:
https://consumerfed.org/wp-content/uploads/2016/12/Overcharged-and-Underserved.pdf

Pragmatic, Progressive Capitalism Roadmap to a Remarkably Successful, Uniquely American Political Economy for Brandeis to Stiglitz & Beyond the 2020 Election, August 2022 (Attachment B) available at
https://consumerfed.org/wp-content/uploads/2020/08/Pragmatic-Progressive-Capitalism-Report-8-13-20.pdf

Business Data Services: Another Failure of Free Market Fundamentalism to Promote Competition or Prevent Abuse of Market Power, September 2020 (Attachment C) available at:
https://consumerfed.org/wp-content/uploads/2020/09/Business-Data-Services-Market-Failure.pdf

Open Internet

The Public Interest in Open Communications Networks, July 2004 (Attachment D) available at:
https://consumerfed.org/elements/www.consumerfed.org/file/Public_Interest_in_Open_Communications_Networks_White_Paper.pdf

The Role of Open Internet Policy in Creating and Preserving the "Virtuous Cycle" of the Internet Innovation System, July 25, 2014, (Attachment E) available at:
https://consumerfed.org/press_release/the-role-of-open-Internet-policy-in-creating-and-preserving-the-virtuous-cycle-of-the-Internet-innovation-system/

Pragmatic, Progressive Capitalism at its Best: Network Neutrality, How an Entrepreneurial State Used Public Policy to Foster Experimental Entrepreneurialism and Create the Internet, August 2020 (Attachment F) available at:
https://consumerfed.org/reports/pragmatic-progressive-capitalism-at-its-best-network-neutrality/

Big Data Platforms: A New Chokepoint in the Digital Communications Sector: Meeting New Challenges with Successful Progressive Principles, September 2020 (Attachment G) available at:
https://consumerfed.org/wp-content/uploads/2020/09/Big-Data-Platforms-Regulatory-Reform-Report.pdf

Universal Service

Does the Digital Divide Still Exist? Bush Administration Shrugs, But Evidence Says "Yes" May 30, 2002, (Attachment H) available at:
https://consumerfed.org/pdfs/DigitalDivideReport20020530.pdf

Expanding the Digital Divide and Falling Behind on Broadband, Why a Telecommunications Policy of Neglect in not Benign, October 2002, (Attachment I) available at:
https://consumerfed.org/pdfs/digitaldivide.pdf

The Challenge of Digital Exclusion in America A Review of the Social Science Literature and its Implications for the U.S. National Broadband Plan, January 2010 (Attachment J) available at: