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SUPERVISING MANAGED SERVICES

JAMES B. SPETA[†]

ABSTRACT

Many Internet-access providers simultaneously offer Internet access and other services, such as traditional video channels, video on demand, voice calling, and other emerging services, through a single, converged platform. These other services—which can be called “managed services” because the carrier offers them only to its subscribers in a manner designed to ensure some quality of service—in many circumstances will compete with services that are offered by unaffiliated parties as applications or services on the Internet. This situation creates an important interaction effect between the domains of Internet access and managed services, an effect that has largely been missing from the decade-long debate over network neutrality rules for Internet service. This Article examines this interaction effect, focusing on the context of online video services and on the recent NBC-Comcast transaction that finally highlighted these concerns. The Article contends that, when these interaction effects are understood, a nondiscrimination rule applied only to a converged carrier’s Internet service can be rendered ineffective by the carrier’s move to managed services offerings. As a result, a nondiscrimination rule, if it is to be effective, would need to be supplemented by specific behavioral or structural rules that both require the carrier to maintain its Internet service and limit the carrier’s freedom of action in the managed services domain. This reveals the difficulty of drafting effective nondiscrimination rules. It also reveals that noneconomic justifications for nondiscrimination rules cannot stand alone; they must be supplemented by the economic-reasoning tools common to antitrust argument, in order to identify and determine the ultimate effects of the rules.

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INTRODUCTION

Society is finally beginning to see in stark relief the business interactions between multiple modes of content distribution on a single platform—and the regulatory responses to those business interactions. Indeed, this past fall provided a perfect example of these challenges of convergence, the phenomenon that general-purpose digital platforms can carry any form of content, an example that highlights the central difficulty facing the Federal Communications Commission’s (FCC) view of Internet regulation. In October, in the course of particularly contentious, but otherwise typical, carriage negotiations between Fox Television and Cablevision, in which the broadcaster, as sometimes happens in these negotiations, had temporarily pulled its signal off the cable system, Fox also decided to deny Cablevision’s Internet subscribers access to Fox’s video content. Specifically, for a brief period of time, Fox instructed Hulu¹ to block Cablevision subscribers’ access to Fox content hosted on Hulu’s site and, apparently, did the same on its own Fox.com website.² Fox’s position was understandable: any leverage it had over Cablevision came from denying Cablevision’s customers content those customers wanted to watch. And, if Cablevision’s cable customers, most of whom also had broadband service, could simply watch that same content on their Internet service, then Fox’s leverage was severely

1. Hulu is an online video provider that aggregates television programming from numerous different networks and programmers. *See infra* text accompanying notes 111–13.

2. *See* Ben Drawbaugh, *News Corp Pulls Its Hulu Content from Cablevision Customers, Escalating Carriage Dispute*, ENGADGET.COM (Oct. 16, 2010, 4:21 PM), <http://www.engadget.com/2010/10/16/news-corp-removes-hulu-from-cablevision-escalating-carriage-dis>; Brian Stelter & Bill Carter, *In Cable TV Fights, Consumers Wait to See Who Blinks*, N.Y. TIMES, Oct. 17, 2010, at A27.

diminished. Fox's action, however, was met with outrage,³ for it seemed to many that Fox had violated a norm of the Internet—that material made available on the Internet would be made available on equal terms to anyone with an Internet connection.⁴ This is, indeed, a strongly but not universally practiced norm. Although many Internet services and sites do require payments, there are only a few examples of Internet services or content being made available only to some people in a way that an individual could not (even if he wished) offer the site the going rate for access to the content.⁵

This episode reveals the need to consider the manner in which content and carriage services interact and to try to disentangle that interaction as the market moves forward into the next generation of FCC regulation. This episode, in fact, highlights one of the multiple dimensions on which Internet services and more traditional media services interact—interaction that has not generally been acknowledged. While regulators, scholars, and the public have been debating the question of nondiscrimination regulation of Internet services for more than a decade now,⁶ the relationship of Internet services to more traditional services has played only a small and

3. See, e.g., Ryan Nakashima, *Turning Off Free Web TV*, PRESS ATLANTIC CITY, Oct. 26, 2010, at B1 (“Fox abandoned its Internet blockade after about 12 hours following protests from several lawmakers, including Rep. Edward Markey, D-Mass., a senior member on a House subcommittee that oversees technology and the Internet.”); Rob Pegoraro, *In Fox-Cablevision Dispute, Both Sides Lose—And So Do the Viewers*, WASH. POST, Oct. 24, 2010, at G1 (“Fox, meanwhile, burned whatever goodwill it might have had with viewers by briefly preventing Cablevision Internet subscribers—even if they paid another company for TV service—from watching Fox programs at Hulu or its Fox.com site. This clueless, quickly reversed shoot-the-hostage move did little beyond making the powerlessness of Hulu’s management obvious—and showing a profound lack of imagination by whoever in Fox’s Los Angeles headquarters signed off on it.”).

4. I am setting aside private individual or corporate use of services that are made available via Internet connections, such as remote access to corporate networks. These are not Internet services in the sense that I mean: they do not have an arguable public aspect to them, and they are not covered by the norm. On the norm, see generally Philip J. Weiser, *The Future of Internet Regulation*, 43 U.C. DAVIS L. REV. 529, 531 (2009), which discusses the early and continuing norm of openness on the Internet and the challenge to that norm by commercial interests.

5. The principal commercial example that I have in mind is ESPN3.com, in which the content is made available only to those customers whose Internet service provider (ISP) has entered into a subscription relationship with ESPN. See *infra* notes 122–26 and accompanying text.

6. For two of the early examples, see generally Mark A. Lemley & Lawrence Lessig, *Open Access to Cable Modems*, 22 WHITTIER L. REV. 3 (2000); and James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 YALE J. ON REG. 39 (2000).

occasional role in the debate.⁷ One level of the relationship asks whether Internet services themselves are “managed” in the same manner as more traditional media services—that is, whether the carrier decides on the total mix of services being offered, or whether the carrier simply provides bandwidth to the customer and the customer then finds on the Internet the content and services that the customer wants. This issue—obviously oversimplified—had and has consequences for the fundamental characterization question of whether Internet services are common-carrier services like traditional telephone service or something else. And, of course, whether Internet services are considered common-carrier services has consequences for the FCC’s current regulatory authority,⁸ for First Amendment analysis,⁹ and for our intuitions about how Internet services should be provisioned and supervised.

The second level of the relationship between Internet services and more traditionally managed services has appeared much less frequently in the debate, but this second level will increasingly define the challenges for nondiscrimination regulation and, perhaps, for communications policy more broadly. From the very beginning, cable-modem Internet service has been offered by companies that simultaneously offered other services over the very same facilities, namely traditional cable service. DSL providers did not simultaneously offer other services due to its more limited bandwidth, but the telephone companies’ premier broadband services of today simultaneously offer Internet, linear video (video offered through traditional, programmed channels), and other services. The FCC’s recently completed National Broadband Plan report makes clear that in the future such platforms will be the center of broadband service.¹⁰ And yet the regulatory machinery has only very recently begun to address this interaction. It was only in the FCC’s September 2010 call

7. See *infra* Part I.

8. See, e.g., James B. Speta, *The Shaky Foundations of the Regulated Internet*, 8 J. ON TELECOMM. & HIGH TECH. L. 101, 124 (2010) (noting that the FCC’s regulatory power over Internet sources flows from its authority over common carriers).

9. See generally Stuart Minor Benjamin, *Transmitting, Editing, and Communicating: Determining What “the Freedom of Speech” Encompasses*, 60 DUKE L.J. 1673 (2011) (arguing that bare transmission is not speech under First Amendment analysis).

10. See generally FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 42 (2010), available at <http://download.broadband.gov/plan/national-broadband-plan.pdf> (discussing the emergence of high-speed cable and fiber as the platforms of choice to meet emerging consumer demands).

for additional comment in its Open Internet proceeding that the FCC finally recognized the reality that a carrier's decisions on Internet services are only part of a broader decision on how to use its infrastructure more generally.¹¹ That is, a carrier *chooses* how much bandwidth to devote to Internet service and how much to devote to video channels, and this choice can affect consumers' ability to trade off between the two types of service. For example, if the "Internet channel" is wide enough that a household can watch simultaneous high-definition video streams over its Internet service, then there is no technological reason for a consumer to also subscribe to the simultaneously offered multichannel service. By contrast, if the Internet channel does not have enough bandwidth for everyone in the household to satisfy his or her video hunger, then the Internet service cannot be a complete substitute for the multichannel video service. The carrier's choice is even more important when the carrier is also deciding how much bandwidth and quality of service to allocate to video-on-demand services.

This planning decision, at one time, may have had a technological dimension, but today it is essentially a business decision, and it is this business dimension that creates the most difficulty from a regulatory perspective. On traditional video channels, the content creator and the carrier-distributor negotiated to share the surplus that the service created.¹² But with Internet service, the distributor has been limited to bandwidth charges—that is, the carrier cannot negotiate to share in the surplus of any particularly valuable content. And this norm, which network neutrality proponents seek to codify in law, influences design decisions in a number of ways. For the carriers, it creates some incentive to restrict their Internet services so that they can drive customers to the platform on which the carriers' negotiating position is better. It also creates the incentive to seek out forms of exclusivity and to duplicate traditional business models.

Although this precise phenomenon—the carrier that simultaneously offers a traditional video service or other managed services alongside its Internet service—is perhaps new,

11. Further Inquiry into Two Under-Developed Issues in the Open Internet Proceeding, 75 Fed. Reg. 55,297 (proposed Sept. 10, 2010) (to be codified at 47 C.F.R. ch. I).

12. See Jonathan E. Nuechterlein, *Video Games: The Oddly Familiar Terms of Debate About Telco Entry into the Video Services Market*, 5 J. ON TELECOMM. & HIGH TECH. L. 1, 4 (2006) (detailing the early practices of the cable television industry).

communications law and policy has precedents from which to judge an appropriate regulatory paradigm. Congress, through the Communications Act,¹³ and the FCC have considered the value of vertical integration against its risks, as well as the value of nondiscrimination rules more generally. This Article explores those precedents and discusses their possible application to this brave new world of broadband service.

This Article proceeds in three Parts. First, the Article describes the place of the managed-services concern in the current debate over the regulation of broadband carriers. By “managed services,” which the regulators have sometimes called “specialized services,” I mean those services that the carriers offer on a subscription basis, whether on demand or linearly programmed, but outside of their general-purpose Internet connection. Current examples are broadband carriers’ voice-over-Internet-Protocol (VoIP) services and video on demand. Until very recently, regulators and commentators have not acknowledged that nondiscrimination rules might have feedback into the carriers’ incentives over more traditional services or over the innovation path for new services. The Comcast-NBC transaction did finally bring this concern to the fore, and the conditions imposed on the transaction represent one attempt to address it. Second, the Article describes the business consequences that attach to the carriers’ simultaneous offering of such services, against the backdrop of video economics that fundamentally involve windowing and tiering in distribution—practices that allow selective exclusivity in the service of price discrimination. I describe three emerging online video distributors, each of which employs a different kind of exclusivity, to highlight the business models affected by nondiscrimination rules. Third, the Article contends that this context shows that nondiscrimination rules over Internet services can only work if they are backed up by reticulated behavioral limits on other services offered by integrated carriers. As a result, the only intellectual frame through which the issue can profitably be addressed is the frame of antitrust analysis. No freestanding nondiscrimination rule will be effective.

13. Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (codified as amended in scattered sections of 47 U.S.C.).

I. MANAGED SERVICES AND THE NETWORK NEUTRALITY DEBATE

In this Part, I discuss how the network neutrality debate, and in particular the FCC, has only recently come to articulate and address the issue of managed services. More specifically, I discuss how the manner in which nondiscrimination requirements on Internet-access services may have an incentive effect that encourages carriers to offer managed services outside of that regulated domain. By now, the terms of the network neutrality debate are well known: whether and to what extent government ought to supply rules that require the providers of broadband connectivity to carry traffic equally, without discrimination as to source, application, or content.¹⁴ The precedent for network neutrality regulation was the nondiscrimination rule applicable to traditional telephone services, a rule embodied in the Communications Act¹⁵ and derived from the common law of common carriage.¹⁶ The core of common carriage was the requirement to carry all traffic equally, without any difference in service based on the identity of the caller or the content of the communications.¹⁷ The application of the nondiscrimination rule was relatively uncontroversial for dial-up Internet service because that service was provided over traditional telephone service.

But the cable companies, not the telephone companies, were the vanguards of broadband Internet access in the United States.¹⁸ And cable companies were not subject to common-carrier rules. Cable had been conceived in the broadcast model, in which the distributor—the station—chose the content to be provided. Indeed, the FCC's regulatory authority over cable television companies depended initially on the view that cable was simply an extension of broadcasting. The Communications Act forbade the regulation of

14. To be sure, the content of the nondiscrimination rule sought is contested, but that debate need not be taken up here.

15. 47 U.S.C. § 202(a) (2006).

16. See James B. Speta, *A Common Carrier Approach to Internet Interconnection*, 53 FED. COMM. L.J. 221, 258 (2002) (discussing the common law rule of nondiscrimination, as applied to common carriers).

17. See Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1325 (1998) (describing nondiscrimination as the heart of federal common-carrier regulation).

18. Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925, 928–29 (2001).

broadcasters as common carriers,¹⁹ and the Supreme Court extended this restriction to cable regulation.²⁰ Despite the later statutory addition of certain quasi-common-carriage obligations—such as must carry and the obligation to provide public access, educational, and governmental channels—the statute also replicated the prohibition on common-carrier regulation of cable services.²¹ As the Supreme Court put it in *Turner Broadcasting Corp. v. FCC*,²² “Through ‘original programming or by exercising editorial discretion over which stations or programs to include in its repertoire,’ cable programmers and operators ‘see[k] to communicate messages on a wide variety of topics and in a wide variety of formats.’”²³ That is, like broadcasters, cable companies choose their own content, or, more precisely, they choose the content that they offer to their customers.

As a legal matter, of course, this decision did not wholly resolve the issue, for cable companies’ Internet services might or might not be “cable services,” and the Act’s prohibition on common carrier regulation extends only to cable services. If they were telecommunications services, then common carrier rules would be appropriate. In *AT&T Corp. v. City of Portland*,²⁴ AT&T argued that its offering of a cable Internet service provider (ISP) was essentially the same as its choosing a channel.²⁵ Before the FCC took the definitive position that cable-modem services were information services under the Act, courts had rejected the notion that they were cable services, principally because they did not meet the model of operator selection of content.²⁶

That cable companies offered broadband services together with their traditional video programming naturally had an effect on their

19. See 47 U.S.C. § 153(10) (“[A] person engaged in radio broadcasting shall not, insofar as such person is so engaged, be deemed a common carrier.”).

20. See *FCC v. Midwest Video Corp. (Midwest Video II)*, 440 U.S. 689, 709 (1979) (interpreting the Communications Act of 1934 to be inapplicable to cable companies).

21. 47 U.S.C. § 541(c) (“Any cable system shall not be subject to regulation as a common carrier or utility by reason of providing any cable service.”).

22. *Turner Broad. Corp. v. FCC (Turner I)*, 512 U.S. 622 (1994).

23. *Id.* at 636 (quoting *City of Los Angeles v. Preferred Commc’ns, Inc.*, 476 U.S. 488, 494 (1986)).

24. *AT&T Corp. v. City of Portland*, 216 F.3d 871 (9th Cir. 2001).

25. *Id.* at 876.

26. See *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 979 (2005) (noting that the Ninth Circuit had previously rejected the FCC’s interpretation of the Communications Act that cable internet services did not qualify as a telecommunications service).

incentives, although the FCC did not immediately acknowledge this effect. The effect was partly economic and partly technical. As early as 2001, advocates of cable open-access rules argued that cable broadband providers would not permit broadband video services to be deployed, because those services would compete against the cable companies' own video services: "Broadband is a potential competitor to traditional cable video services. Traditional cable providers might well view this competition as a long term threat to their business model"²⁷ What was largely unacknowledged in these arguments was the (at least partial) artificiality of the incentive problem: In traditional cable services, cable companies earned revenues both from subscriber fees and from fees charged to content providers for distribution.²⁸ With Internet services, the bandwidth providers were supposed to earn revenues only from subscriber revenues. If, however, the cable companies were free to impose similar "access charges . . . on ISPs and content providers" then they would be indifferent—and would "maximize their profits" by allowing customers to view whatever customers wanted to view the most, "[e]ven if cable internet users [began] to watch internet video instead of traditional cable programs."²⁹ Thus, the first interaction effect was this: if Internet service did not allow cable operators to develop business models that had traditionally been important to their overall revenues and if those cable companies had a degree of market power, they could indeed have the incentive to restrict the development of Internet video, in one way or another.

Professors Thomas Hazlett and George Bittlingmayer extended the interaction argument along a different vector, noting that cable company actions that enhanced Internet video made DSL services more desirable, making DSL more of a substitute not just for cable-

27. Written Ex Parte of Professor Mark A. Lemley and Professor Lawrence Lessig at 22, Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, to AT&T Corp. Transferee, 15 FCC Rcd. 9816 (2000), *suspended*, 16 FCC Rcd. 5835 (2001) (CS Docket No. 99-251), *available at* <http://cyber.law.harvard.edu/works/lessig/lem-lesd.pdf>.

28. This oversimplifies matters. In some cases, the cable companies have to pay the content providers when the content is extremely popular. In most cases, the parties share the revenues generated through advertising, either explicitly or implicitly by dividing the rights to program commercials. *See infra* notes 122–26 and accompanying text.

29. James B. Speta, *The Vertical Dimension of Cable Open Access*, 71 U. COLO. L. REV. 975, 1005 (2000).

modem service but also for cable television.³⁰ As a result, cable companies had an incentive to limit the bandwidth that they devoted to Internet service: “A more vigorous transition by cable operators could lead to the development of web-based services including video-streaming and other substitutes for networks now packaged by cable system operators, exposing cable assets to intensified demands for common carrier regulation.”³¹ Relatedly, cable companies had the incentive to keep narrow their Internet-access bandwidth, to stunt the growth of online video, and to protect their own video services. This strategy, however, would not violate network neutrality rules because it would starve the Internet pipe rather than discriminating among sources available over the Internet.

When the FCC acted in the open-access debate and rejected calls to unbundle cable-modem services or to subject those services to common-carrier rules, the FCC did not address these incentive arguments at all. For example, in the AT&T-TCI merger, when the FCC first addressed the issue of open access, the Commission focused principally on access requests by unaffiliated ISPs and “conclude[d] that nothing about the proposed merger would deny any customer (including AT&T-TCI customers) the ability to access the Internet content or portal of his or her choice.”³² Although the parties also sought conditions opening the cable services of the combined company and enhancing the program-access rules, each of these issues was presented on a stand-alone basis.³³ As the AT&T cable operation grew through its merger with MediaOne, some parties became concerned that AT&T could negotiate exclusive arrangements to content that would disadvantage other cable or Direct Broadcast Satellite (DBS) companies.³⁴ But the FCC responded by simply noting its existing rules: “If parties believe any existing exclusivity agreements violate the program access rules, the

30. Thomas W. Hazlett & George Bittlingmayer, *The Political Economy of Cable “Open Access,”* 2003 STAN. TECH. L. REV. 4, ¶ 34.

31. *Id.*

32. Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor, To AT&T Corp., Transferee, 14 FCC Rcd. 3160, 3207 (1999) (memorandum opinion and order).

33. *See id.* at 3176–77 (rejecting requests for access to TCI facilities to provide competing multichannel video services); *id.* at 3179–80 (affirming that FCC program-access rules would apply to the merged entity but refusing to go beyond those rules).

34. Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor, To AT&T Corp. Transferee, 15 FCC Rcd. 9816, 9854 (2000) (memorandum opinion and order).

program access complaint process is the appropriate forum in which to resolve any such grievance.”³⁵ This fight was conducted solely on the traditional, cable-television side of the house. As to Internet services, the FCC refused to apply open-access conditions for two reasons: First, it found “that there is significant actual and potential competition from both alternative broadband providers and from unaffiliated ISPs that may gain access to the merged firm’s cable systems.”³⁶ Second, AT&T committed to allow “[d]irect access to all content available on the World Wide Web without any AT&T-imposed charge to the consumer for such content.”³⁷ In part, this reflects a different state of the market, one in which the business models of concern today—the integration of cable and broadband and the provision of high-quality video content solely over the Internet channel—had not yet developed.

As the late 1990s became the early and mid-2000s, this debate over open access—renamed network neutrality³⁸—continued in both the academy³⁹ and the agency, with the FCC eventually issuing a Policy Statement⁴⁰ in which it adopted, at a high level, a commitment to nondiscrimination. The FCC said that “consumers are entitled to access the lawful Internet content of their choice” and that “consumers are entitled to competition among network providers, application and service providers, and content providers.”⁴¹ The FCC’s statement was directed against Internet-carrier policies that might have the effect of blocking or degrading content and not against any similar practices in the traditional or managed services realm.⁴²

35. *Id.*

36. *Id.* at 9866.

37. *Id.* at 9869–70.

38. See generally Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. ON TELECOMM. & HIGH TECH. L. 141 (2003).

39. Compare Richard A. Epstein, Addison C. Harris Lecture, *Intellectual Properties: Old Boundaries and New Frontiers*, 76 IND. L.J. 803, 818–19 (2001) (positing that open access is suboptimal because the customary theories of private property and the commons in physical space are capable of precise carryover to the Internet), with Yochai Benkler, *Siren Songs and Amish Children: Autonomy, Information, and Law*, 76 N.Y.U. L. REV. 23, 111 (2001) (contending that frequency spectrum should be devoted to an open-access commons, rather than commoditizing and auctioning it).

40. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 FCC Rcd. 14,986 (2005) (policy statement).

41. *Id.* at 14,988.

42. See *id.* at 14,987 (directing the policy statement at “[i]nformation service providers”).

The FCC's Internet Policy Statement focused on the Internet carriers' ability to block traffic but did not itself state a theory of the reasons that might motivate carriers to do so. That would finally come, albeit incompletely, in the Comcast matter.⁴³ In that case, the FCC addressed complaints that Comcast had been secretly blocking certain BitTorrent traffic on its Internet service. The FCC found that "[w]hen Comcast judges that there are too many peer-to-peer uploads in a given area, Comcast's equipment terminates some of those connections by sending RST [reset-the-connection] packets."⁴⁴ The FCC's reasoning finally cracked through the separate treatment of traditional services and broadband service. Oddly, however, this discussion came in the section of the decision in which the FCC was defending its jurisdiction and not in the section of the opinion in which it found Comcast's practices unreasonable. Nevertheless, the FCC now clearly had in mind that a cable company's video services could have an effect on its Internet platform actions. It said,

[I]f cable companies such as Comcast are barred from inhibiting consumer access to high-definition on-line video content, then, as discussed above, consumers with cable modem service will have available a source of video programming (much of it free) that could rapidly become an alternative to cable television. The competition provided by this alternative should result in downward pressure on cable television prices, which have increased rapidly in recent years.⁴⁵

This reasoning was problematic for a number of reasons, most particularly because the FCC did not find that Comcast had market power.⁴⁶ It did, however, reveal a more dynamic way of thinking about the network neutrality problem, and it drew on the incentive

43. Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, 23 FCC Rcd. 13,028 (2008) (memorandum opinion and order), *vacated*, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010)

44. *Id.* at 13,051.

45. *Id.* at 13,037.

46. For example, the complaint's reasoning holds principally if Comcast exercises market power, but the FCC did not find that Comcast has market power in any relevant market. See James B. Speta, *A Sensible Next Step on Network Neutrality: The Market Power Question*, 8 REV. NETWORK ECON. 113, 121-23 (2009) (discussing the centrality of the market-power question to this analysis).

arguments being made in the literature, at least those by network neutrality advocates.⁴⁷

Finally, at the same time its Comcast decision was on appeal, the FCC began a rulemaking proceeding—the Open Internet proceeding—to definitively address network neutrality.⁴⁸ Here, the FCC belatedly acknowledged the strong interaction between network neutrality rules and the carriers’ incentives to maintain or deploy managed services, doing so in strong terms despite ultimately taking no action on these stated concerns. The initial notice of proposed rulemaking (NPRM) raised the concern only in a general manner, stating that “there are and will continue to be Internet Protocol-based offerings (including voice and subscription video services, and certain business services provided to enterprise customers), often provided over the same networks.”⁴⁹ Calling these “‘managed’ or ‘specialized’ services,” the Commission said that it was “sensitive to any risk that the growth of managed or specialized services might supplant or otherwise negatively affect the open Internet.”⁵⁰ Its request for comments, however, was very broad and general, revealing no particular action that the FCC thought it might pursue. To cure this gap, in September 2010, the FCC issued a supplementary request for comments to fill in an inadequate record.⁵¹ The agency then acknowledged that, through the unrestricted possibility of managed services, “[o]pen Internet protections may be weakened if broadband providers offer specialized services that are substantially similar to, but do not technically meet the definition of, broadband Internet access service, and if consumer protections do not apply to such services.”⁵² Reflecting the concern of Hazlett and Bittlingmayer,⁵³ the agency also said that providers might “constrict or fail to continue expanding the network capacity allocated to

47. See Written Ex Parte of Professor Mark A. Lemley and Professor Lawrence Lessig, *supra* note 27, at 36 (“[A]llowing the cable companies to . . . [monopolize] a competitive market offers no guarantee of giving the appropriate incentive . . .”).

48. See Preserving the Open Internet, 74 Fed. Reg. 62,638, 62,638 (proposed Nov. 30, 2009) (to be codified at 47 C.F.R. pt. 8) (“In this Notice of Proposed Rulemaking (NPRM), the Commission considers adopting rules to preserve the open Internet.”).

49. *Id.* at 62,651.

50. *Id.*

51. Further Inquiry into Two Under-Developed Issues in the Open Internet Proceeding, 75 Fed. Reg. 55,297 (proposed Sept. 10, 2010) (to be codified at 47 C.F.R. ch. I).

52. *Id.* at 55,299.

53. See *supra* text accompanying note 31.

broadband Internet access service.”⁵⁴ Finally, the FCC expressed its concern over anticompetitive conduct, “particularly if [providers] are vertically integrated providers of content, applications, or services.”⁵⁵ The Further Notice suggested several possible responses to these concerns, including both regulatory and structural responses.⁵⁶ Despite these specifically noted concerns and despite the additional call for comments, the final Open Internet Order did not impose any restrictions on specialized services.⁵⁷

The last stage in this largely descriptive story is the recent regulatory approval of the Comcast-NBC joint venture, in which both the Department of Justice (DOJ) and the FCC subjected the transaction to conditions designed specifically to address the interaction between network neutrality regulation and the company’s managed services. Although some vertical integration is present between other distribution and content companies, the merger presented such integration on a larger scale. Comcast is the biggest cable company in the United States, and NBC is one of the leading broadcast networks with one of the most extensive libraries of movies (Universal Studios) and other programming.⁵⁸ Under the transaction, Comcast would acquire control of all of NBC Universal’s content through a joint venture, while also contributing content of its own to that venture. Although Comcast would initially share ownership of the joint venture, it would both control it and have an option to acquire the remaining equity from General Electric, NBC Universal’s current owner.⁵⁹

The principal competition arguments present in the NBC-Comcast merger were straightforward vertical-foreclosure stories, in which Comcast might use its newfound control over desirable content to disadvantage competitors, and both the FCC and the DOJ imposed conditions on the merger designed to meet those threats. In the first version of the anticompetition story, Comcast would deny other

54. *Further Inquiry into Two Under-Developed Issues*, 75 Fed. Reg. at 55,299.

55. *Id.*

56. *Id.*

57. Preserving the Open Internet: Broadband Industry Practices, 25 FCC Rcd. 17,905, 52 Comm’n Reg. (P & F) 1, 35–36 (Dec. 21, 2010) (report and order).

58. See Applications of Comcast Corp., General Electric Co., and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses, 52 Comm’n Reg. (P & F) 249, 253–54 (2011) (memorandum opinion and order) (describing the sizes, business interests, and holdings of the three companies).

59. *Id.* at 254–55.

multichannel video-program distributors (MVPDs) access to desirable content, or alternatively charge very high prices, putting them at a disadvantage for subscribers. Comcast has denied access to its regional sports network in Philadelphia, for example, to competing satellite and cable providers, and the merger, it was argued, would create a greater incentive for it to do so more generally.⁶⁰ Critics of the deal also suggested that Comcast would have the same incentive to deny content to online video providers, which would compete with Comcast's traditional services and which would be available over any broadband medium.⁶¹

To respond to these concerns, the DOJ Antitrust Division and the FCC each imposed conditions on the merger. Comcast will be required to provide any content in the joint venture to any MVPD if that content is provided to any other MVPD, including Comcast itself. Additionally, the FCC imposed a baseball-arbitration regime to resolve any disputes over licensing fees.⁶² This regime, based upon similar remedies applied in previous mergers, takes account of the combination of content and distribution assets. As to online video, the conditions were more elaborate, and they were based on a strong

60. *See id.* at 260 (stating that conditions imposed on the transaction are "consistent with our previous finding that Comcast's withholding of the terrestrially delivered Comcast SportsNet Philadelphia RSN from DBS operators caused the percentage of television households subscribing to DBS in Philadelphia to be 40 percent lower than what it otherwise would have been").

61. *See, e.g.*, Mark Cooper, *Structured Viral Communications: The Political Economy and Social Organization of Digital Disintermediation*, 9 J. ON TELECOMM. & HIGH TECH. L. 15, 46, 46 n.107 (2011) (detailing this argument and providing an account of online video providers' anxieties regarding the Comcast-NBC merger); *see also* Comments of Netflix, Inc. at 6, Preserving the Open Internet, 52 Commc'ns Reg. (P & F) 1 (GN Docket No. 09-191, WC Docket No. 07-52), available at <https://prodnet.www.neca.org/publicationsdocs/wwpdf/0114netflix.pdf> (arguing that the Comcast-NBC merger will exacerbate the potential problem of video providers using their gatekeeper control over programming networks and broadband access to stifle competition and discriminate against outside content); Yinka Adegoke, *Web TV Could Come with a Price Tag After Comcast-NBC*, REUTERS, Oct. 4, 2009, available at <http://www.reuters.com/article/idUSTRE5942UI20091005> (expressing concern over the anticompetitive effects that would flow from Comcast's having a vested interest in Hulu's future).

62. *Applications of Comcast Corp., General Electric Co., and NBC Universal, Inc.*, 52 Commc'ns Reg. (P & F) at 270. Baseball arbitration is shorthand for final-offer arbitration, in which the arbitrator is constrained to choose one of the parties' final proposals instead of being free to fashion the solution that the arbitrator may perceive to be best. Baseball arbitration may shift some bargaining power to weaker parties. *See generally* James R. Chelius & James B. Dworkin, *An Economic Analysis of Final-Offer Arbitration as a Conflict Resolution Device*, 24 J. CONFLICT RESOL. 293, 296 (1980).

finding that online video presented an important source of potential competition to cable:

When measured by the number of customers who are cord-shaving or cord-cutting [i.e., downgrading or eliminating their traditional cable service], OVDs [online video distributors] currently have a *de minimis* share of the video programming distribution market. Their current market share, however, greatly understates their potential competitive significance in this market. Whether viewers buy individual or a combination of OVD services, OVDs are likely to continue to develop into better substitutes for MVPD video services.⁶³

The conditions were designed to protect these nascent competitors. First, Comcast is required to provide video to any online provider on the same terms that it provides the video to an MVPD.⁶⁴ This condition, although placing OVDs on the same footing as MVPDs, is unlikely to appeal to the core OVD business model because it essentially requires the OVD to offer the content in the same linear-programming format as do cable and satellite companies. As the DOJ acknowledges, online video generally does not follow a linear format: “One reason for the dramatic growth of online distribution is the increased consumer interest in on-demand viewing, especially among younger viewers who have grown up with the Internet, and are accustomed to viewing video at a time and on a device of their choosing.”⁶⁵

The second condition has more teeth: the joint venture will be required to license to any OVD “broadcast, cable, or film content comparable in scope and quality to the content the OVD receives from one of the [joint venture]’s programming peers.”⁶⁶ This benchmarked solution is designed to ensure that the joint venture behaves in the same manner that a programmer without an interest in distribution would behave. Additionally, Comcast is required to hold only equity—not voting or operational control—in Hulu and must continue to provide Hulu the same type of programming that NBC Universal currently does.⁶⁷

63. Competitive Impact Statement at 18, *United States v. Comcast Corp.*, No. 1:11-cv-00106 (D.D.C. Jan. 18, 2011), available at <http://www.justice.gov/atr/cases/f266100/266158.pdf>.

64. *Id.* at 31–32.

65. *Id.* at 15.

66. *Id.* at 31.

67. *Id.* at 26, 33–34.

The most open-ended of the content restrictions has to do with exclusive licensing practices. The DOJ acknowledged that exclusive licensing arrangements can sometimes be procompetitive.⁶⁸ Content providers often use exclusive distribution arrangements in order to segment the market—to price-discriminate—which many hold is important to assure adequate returns in content industries and which, in any event, is a customary practice.⁶⁹ With the merger, the DOJ was concerned about both the joint venture’s use of its content through exclusive licensing and Comcast’s use of its power in the cable distribution market to require content-providers to offer exclusive deals, either of which could injure Comcast’s distribution competitors. Thus, the Consent Decree limits both the joint venture and Comcast to “reasonable and customary exclusivity provisions,” benchmarked against the exclusivity practices of the most comparable distribution and content providers.⁷⁰

The Consent Decree also imposed conditions on Comcast’s offering of “specialized services,” which fall within the umbrella of managed services.⁷¹ The Decree defined specialized service as every service offered by Comcast, except to the extent those services are regulated as telecommunications or cable services or are themselves Internet Access Services. As to Internet Access Services, the Decree imposes a network neutrality provision.⁷² The agencies forbade Comcast from developing a specialized service consisting of only joint-venture content, to prevent the circumvention of the other content requirements and of the network neutrality rule.⁷³ Similarly,

68. *Id.* at 34–35.

69. *See id.* (“The video programming distribution industry frequently uses exclusive contract terms that can be procompetitive.”).

70. *Id.* at 36.

71. *See* [Proposed] Final Judgment at 7, *United States v. Comcast Corp.*, No. 1:11-cv-00106 (D.D.C. Jan. 18, 2011), *available at* <http://www.justice.gov/atr/cases/t266100/266160.pdf> (defining a specialized service as “any service provided over the same last-mile facilities used to deliver Internet Access Service other than (1) Internet Access Services, (2) services regulated either as telecommunications services under Title II of the Communications Act or as MVPD services under Title VI of the Communications Act, or (3) Defendants’ existing VoIP telephony service”).

72. *See* Competitive Impact Statement, *supra* note 63, at 38 (“Section V.G.1 of the proposed Final Judgment prohibits Comcast from unreasonably discriminating in the transmission of lawful traffic over its Internet access service, with the proviso that reasonable network management practices do not constitute unreasonable discrimination.”).

73. *Id.* at 38–39 (“If Comcast were to offer online video services through Specialized Services, however, it could effectively avoid the prohibitions [on network neutrality and content distribution].”).

they required Comcast to provide other OVDs access to specialized services if Comcast offered an OVD service as a specialized service.⁷⁴

Finally, in order to ensure that Comcast could not limit bandwidth across the board, thus restricting competition while still complying with the network neutrality provision, the agencies required Comcast to “maintain its public Internet access service at a level that typically would allow any user on the network to download content from the public Internet at speeds of at least 12 megabits per second in markets where it has deployed DOCSIS 3.0.”⁷⁵ The Department of Justice said, “These speeds are sufficient to ensure that Comcast’s Internet access services can support the development of OVDs as well as other services that are potentially competitive with Comcast’s own offerings.”⁷⁶

II. THE EDGE OF ONLINE BUSINESS MODELS

The NBC-Comcast merger therefore brought to the forefront competition issues that had long been ignored in the network neutrality debate specifically and in the broader discussion of how traditional regulation should transition to a new generation of Internet regulation. The merger did this both because of the scale and scope of the merger and because it implicated emerging online business models that parties thought the merged company might replicate. These business models demonstrate the content of the competition problems but also, I suggest, demonstrate the fundamental problems of service-specific approaches to competition problems in information policy. In this Part, after a brief detour into some basics of media economics, I take up three case studies of online video distribution: Hulu, the broadcasters’ joint venture; ESPN3.com, the online sports-video service owned by Disney’s ESPN, the 800-pound gorilla of video; and the cable companies’ own TV Everywhere product. These case studies help frame the regulatory response to date, but they are not the end of the story. This section concludes with some speculation concerning the next frame of Internet services, services that might be offered as “specialized services” and thereby re-envision all of the debates to date.

74. *Id.* at 39.

75. *Id.*

76. *Id.*

A. *Some Basic Video Economics*

Video creation and distribution is one of the biggest industries in the United States, and it has been for more than half a century; it is also one of the few industries in which the United States continues to have a positive trade balance.⁷⁷ Yet the economics of it are tricky, and at both the production and distribution levels, the economics have resulted in a fair degree of government intervention. Copyright, of course, governs production, and the government has regulated broadcasting through spectrum licensing and cable through franchising, rate regulation, and a variety of other techniques. For present purposes, the economics of the regulation are less important than the industry strategies that have grown up around video, in response to both the difficult economics of video and to the regulation itself.

Here, I briefly describe what should be familiar to any video consumer—and Americans are almost uniformly huge consumers of video.⁷⁸ Video producers and distributors each rely on various practices to segment audiences and engage in effective price-discrimination in order to increase total revenues. Video producers rely on “windowing”—the practice of releasing a video through different distribution channels at different times, with various periods of exclusivity. Distributors similarly rely on windowing, tiering, bundling, and other practices to maximize revenues. Producers and distributors negotiate to share in the revenues created by these business practices; they are cooperative in that the provision of the video experience to the ultimate consumer requires producers and

77. See Martha Bayles, *The Return of Cultural Diplomacy*, NEWSWEEK, Dec. 31, 2008, <http://www.newsweek.com/2008/12/31/the-return-of-cultural-diplomacy.html> (“The Bureau of Economic Analysis reports that between 1986 and 2005, foreign sales of U.S. motion-picture and video products rose from \$1.91 billion to \$10.4 billion (in 2005 dollars)—an increase of 444 percent. As Dan Glickman, president of the Motion Picture Association says, ‘Among all the sectors of the U.S. economy, our industry is the only one that generates a positive balance of trade in every country in which it does business.’ The same is true for the TV and music industries, and the reach is far greater when piracy is figured in.”).

78. See Megan O’Neill, *The Average American Watches 30 Minutes of Online Video vs 5 Hours of TV per Day*, SOCIAL TIMES (Nov. 17, 2010, 9:30 AM), <http://www.socialtimes.com/2010/11/online-video-consumption> (“While 30 minutes of online video a day may pale in comparison to the 5 hours of television that the average American watches on a daily basis . . . it still shows the rapid rate at which online video is growing.”); *TV, Internet and Mobile Usage in U.S. Continues to Rise*, NIELSEN WIRE (Feb. 23, 2009), http://blog.nielsen.com/nielsenwire/online_mobile/tv-internet-and-mobile-usage-in-us-continues-to-rise (“[T]he average American watches 151 hours of TV per month . . .”).

distributors to act jointly, but they are adversarial in that they are negotiating over their respective shares of the surplus produced.⁷⁹ Internet video, especially Internet piracy, has put substantial pressure on windowing practices, shortening windows and changing the importance of different types of distribution channels. The parties' negotiations are also affected by the transition from traditional modes of production and channels of distribution to the era of Internet video.

Producers of television programs and movies "discriminate among audiences by releasing their products at different times (windows) and in different distribution channels."⁸⁰ In windowing, the producer balances a variety of factors in trying to maximize profitability, although the essential issue is "forc[ing] buyers to sort themselves out according to how much they are willing to pay for the film or program close to its original release date."⁸¹ In 1989, a movie might have had a six-year period over which it was released to as many as nine different distribution channels, including domestic theaters (first and second run), overseas theaters, home video (domestic then overseas), first cable run (usually premium), broadcast networks (domestic then overseas), second cable run, and then syndication to local television.⁸² The availability of windowing to increase profitability has a feedback effect on the production market: "The tendency of windowing to increase production budgets favors the producers of programs that are suitable for windowing. Producers of programs for which there is likely to be a continuing demand can, and do, spend more to produce their programs."⁸³

79. See CHARLES B. GOLDFARB, CONG. RESEARCH SERV., RL 34078, RETRANSMISSION CONSENT AND OTHER FEDERAL RULES AFFECTING PROGRAMMER-DISTRIBUTOR NEGOTIATIONS: ISSUES FOR CONGRESS 9 (2007) ("Despite all these complexities, the relationships among content producer, programmer, and distributor are characterized by mutual need—both the content producer and the programmer need distributors that have direct contact with the potential audience; the distributor needs content producers and programmers with good content to attract subscribers. At the same time, there is an inherent tension as each seeks to capture the lion's share of the value that consumers place on the content.").

80. BRUCE M. OWEN & STEVEN S. WILDMAN, VIDEO ECONOMICS 29 (1992).

81. *Id.*

82. *Id.* at 30 tbl.2.2 (citing *A Survey of the Entertainment Industry*, ECONOMIST (SPECIAL REP.), Dec. 23, 1989, at 5).

83. *Id.* at 49.

The modern era has seen a shift in windowing practices,⁸⁴ although the practice has remained fundamental in most video markets. The channels of distribution have shifted, with several new channels becoming important, frequently to the detriment of other channels. Home video distribution—videotape and then DVD—became increasingly important,⁸⁵ but then it began to wane as online distribution became more important. Accelerated release dates for home video reduced the length of first-run theater releases and decreased revenues for releases that occurred after the DVD releases. Video-on-demand products from traditional cable companies provide a channel quite similar to release on tape or DVD. Online distribution of television shows is now quite common, and online distribution both changes the primacy of broadcasters in the distribution chain and changes the market for DVD collections released after the season concludes. Online distribution has not eliminated the DVD channel because of the instability of online models and the lower quality of video. But revenues in the DVD segment are definitely down.⁸⁶

Some of the shift in distribution windows has been driven, of course, by the rise of a distribution channel that is not part of the producers' business model—online piracy.⁸⁷ It is hard to “compete with free,” and studios and others attribute accelerated distribution schedules that greatly reduce the periods of exclusivity, especially to theaters, to the need to provide an alternative to viewing illegally copied movies on the Internet.⁸⁸ Such pirated copies are widely

84. Jason Kilar, *Here Are My Thoughts on Hulu and the Future of TV*, BUS. INSIDER (Feb. 3, 2011, 6:37 AM), <http://www.businessinsider.com/jason-kilar-here-are-my-thoughts-on-hulu-and-the-future-of-tv-2011-2> (positing that recent innovations in windowing will continue).

85. Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. ON TELECOMM. & HIGH TECH. L. 125, 128–29 (2011) (detailing the evolution of the home video platform from an industry-perceived nuisance to a multibillion-dollar, industry-sustaining revenue stream).

86. See, e.g., Tim Arango, *Viacom Profit and Revenue Decline as DVD Sales Drop*, N.Y. TIMES, Feb. 4, 2011, at B4 (noting the significant decline in DVD revenues); Brooks Barnes, *Who Threw the DVD from the Train?*, N.Y. TIMES, Mar. 22, 2009, at BU4 (same).

87. See David A. Cook & Wenli Wang, *Neutralizing the Piracy of Motion Pictures: Reengineering the Industry's Supply Chain*, 26 TECH. SOC'Y 567, 568 (2004) (detailing how millions of dollars of losses resulting from online piracy have motivated content industries to address their online distribution capabilities).

88. See, e.g., Shujen Wang, *Recontextualizing Copyright: Piracy, Hollywood, the State, and Globalization*, 43 CINEMA J. 25, 30 (2003) (“Speed becomes a major goal of, and a challenge to, participants in the global informational structure. Speed is also one of the factors determining the success and prevalence of the piracy networks. Viewed in this context, the windowing strategies practiced by Hollywood help manage time and control speed through space so as to

available very soon after—and sometimes before—theatrical release.⁸⁹ The early release to video is meant to capture the audience that does not go to the theater but, given the easily accessible online copies, will not wait a long time for a cheaper release window.⁹⁰ Although it has not eliminated piracy online, earlier release to DVD and now earlier release to online streaming services create an alternative revenue stream—just as iTunes and similar services did for music sales.

The Comcast-NBC merger, it was thought, also created opportunities for further changes to windowing practices. It was obvious that Comcast would “use Universal’s vast film library to expand its own video-on-demand opportunities.”⁹¹ But commentators on the merger also speculated that Comcast might “break what has been a taboo in the movie business: allowing consumers to watch a film at home while it is still being shown in theaters.”⁹² As in many cases of channel evolution, the prospects for such a change would not only depend on the profits to the producers of the video, but would also be subject to a negotiation with other stakeholders in other channels which, although perhaps less important, would not be irrelevant. For example, enhancing video on demand “may cannibalize DVD sales or offend important retailers like Wal-Mart[, the nation’s biggest seller of DVDs; m]ultiplex owners might also be skittish.”⁹³ Renegotiating rights windows that have already been granted and, more generally, simply assuaging long-standing partners

minimize the threat posed by new technologies. Despite these efforts, however, technologically savvy pirates and their ever-more-efficient and flexible networks have seriously undermined the studios’ control.”); *see also* Cook & Wang, *supra* note 87, at 569 (“[W]e believe that a more effective approach to neutralizing piracy of motion pictures is to reengineer the industry’s supply chain in such a way that it can offer legal, cheaper, more convenient, and more enjoyable entertainment than anything illicit copies can provide.”).

89. *See, e.g.*, Anna E. Engelman & Dale A. Scott, *Arrgh! Hollywood Targets Internet Piracy*, 11 RICH. J.L. & TECH. 3, 59 (2004) (“Today, a movie can be downloaded in hours, for free, and burned onto DVD before it is in theaters.”).

90. As evidence of iTunes’s increasing value to music content industries, consider its 2008 press release indicating that it had surpassed Wal-Mart as the leading music retailer in the United States. Press Release, Apple, iTunes Store Top Music Retailer in the US (Apr. 2, 2008), available at <http://www.apple.com/pr/library/2008/04/03itunes.html>.

91. Lauren A.E. Schuker, *Comcast May Test New ‘Windows’ for Movies on Cable*, WALL ST. J., Dec. 3, 2009, at B9.

92. *Id.*

93. *Id.*

has been one of the hurdles to overcome in the development of new online video distribution models.⁹⁴

Program distributors such as cable television companies also engage in well-known practices to segment audiences. Premium tiers and premium channels attract customers with high willingness to pay for niche programming—and the offerings are nearly unlimited, ranging from premium movie channels, to out-of-market sports channels, to overseas news and entertainment channels. Video-on-demand products attract consumers with higher willingness to pay for particular programming—willingness to pay that can come from the desire to see a show either sooner or later, as video-on-demand movies are sometimes released earlier than through other channels while video-on-demand television viewing allows a viewer to miss the show's regular broadcast.⁹⁵ As channel capacity and addressability have both improved, cable companies can merge premium offerings into combinations of linear programming and video on demand.

The obvious use of tiering for premium offerings, including not just packages of premium channels but also the offering of individual channels, has in part raised the question of why cable companies and other MVPDs do not sell all of their channels on an à la carte basis. The push for à la carte cable services has multiple rationales, including audience members who seek such a requirement in order to limit their exposure to what they view as harmful content.⁹⁶ But as an economic matter, the argument is that consumers are being forced to pay for programming that they do not want when the lowest tier available, other than a broadcast-only tier, comes with dozens of channels, most of which any given consumer does not watch. As former FCC Chairman Kevin Martin contended,

Channel choice is increasingly significant to consumers as the number of channels included in expanded basic, and the corresponding price to consumers, has continued to skyrocket Indeed, cable rates have more than doubled in the last ten years. Cable companies often point to the increased number of channels being offered as an explanation for the increase in prices. This

94. See generally Adam Webb, *Viewing Rights*, NEW MEDIA AGE, Mar. 8, 2007, at 23 (discussing the issues surrounding traditional media companies distributing video online).

95. Producers and distributors are still trying to figure out how (and if) consumers will pay for the value of time-shifting. See *infra* text accompanying notes 96–98.

96. E.g., John Rash, Editorial, *Rash Report: MTV's 'Skins' Bares Public-Policy Divisions*, STAR TRIB. (Minneapolis), Feb. 5, 2011, at 9A (holding out à la carte cable as a way parents could easily control what shows their children watch).

explanation, however, ignores the fact that most of these channels are not actually being watched.⁹⁷

Some economics research has suggested modest savings to consumers would result from offering channels à la carte,⁹⁸ but those would certainly not be pro rata savings.

The best explanation for bundling at the basic tier is the same low-marginal-cost problem faced generally in content industries. Here, the cable companies have a very low marginal cost for providing consumers with additional channels, and a relatively higher cost of developing the infrastructure necessary to separate channels and separately bill for them. Customers purchase the package that includes the individual channels they want to view, at a price they are willing to pay,⁹⁹ and, in general, they are indifferent to whether the package also comes with channels they do not want.¹⁰⁰ Bundling is a common practice in many industries in which the consumer is in the best position to select from a menu of related goods.¹⁰¹ In the cable

97. *FCC's Martin Supports 'A La Carte' Cable Plans*, PCMAG.COM (Aug. 22, 2007, 4:51 PM), <http://www.pcmag.com/article2/0,2817,2174261,00.asp> (quoting Martin).

98. *See, e.g.*, CHARLES B. GOLDFARB, CONG. RESEARCH SERV., RL 33338, THE FCC'S "A LA CARTE" REPORTS 2 (2006) (noting that one of two FCC reports on à la carte pricing concluded that "a la carte purchasing is likely to lower the monthly bill" of cable subscribers who already receive digital cable); Gregory S. Crawford & Joseph Cullen, *Bundling, Product Choice, and Efficiency: Should Cable Television Networks Be Offered à la Carte?*, 19 INFO. ECON. & POL'Y 379, 402 (2007) ("[I]n a 'Full À La Carte' world, if all networks continue to be offered, average per-household consumers surplus is estimated to increase [by 65.6%].").

99. *See* Thomas W. Hazlett, *Shedding Tiers for a la Carte? An Economic Analysis of Cable TV Pricing*, 5 J. ON TELECOMM. & HIGH TECH. L. 253, 257 (2006) ("A household subscribes to basic cable if and only if the value they place on the programming they *desire* to watch exceeds the retail price. That is true even though no customer watches every channel, but only their own customized sub-set of programs. Effectively, the consumer subscribes to realize their individual preferences, and the cable company tosses in the additional channels for free.").

100. Those viewers who have objections to the content of the channels they do not want to view (and may fear members of their household inadvertently viewing) may have a negative value for the presence of those channels in their bundle. The policy question is whether those objections are best met through the regulation of cable systems to require à la carte sales or to enable—or mandate—premises-driven blocking technologies. The major cable companies provide premises-based technology and also allow customers to request the blocking of channels. *See id.* at 284–85 ("Individual subscribers can remove unwanted programming from appearing on their home television screens. . . . On a targeted basis, individual households are able to remove programming, gaining utility and incurring only modest costs. . . . Channel blocking is relatively simple when using a television set with a digital set-top box. . . . Advanced analog set-top boxes also have channel blocking capabilities . . .").

101. *See, e.g.*, Joseph P. Guiltinan, *The Price of Bundling of Services: A Normative Framework*, 51 J. MARKETING 74, 74 (1987) ("Broadly defined, *bundling* is the practice of marketing two or more products and/or services in a single 'package' for a special price.

context, some people also assert that it reduces the overall costs of production and distribution because programmers are not required to engage in the advertising necessary to gain initial subscribers.¹⁰²

All of a distributor's practices are finalized in a negotiation with the program owner, a negotiation that divides pricing issues and distribution over a number of dimensions. Distribution companies sometimes pay program owners directly, sending a portion of monthly subscriber revenues directly to the program owner, when the program content is particularly important. The program owner and the distributor can also share the right to place advertising on the programming and thereby share in the advertising revenue generated by the programming. This practice allows dollars to flow in the other direction, from programmer to distributor.¹⁰³ The parties also negotiate over the distribution practices. In one of the more famous examples, Disney used its control over ABC and ESPN programming—two very valuable properties that cable companies cannot really do without—to negotiate to move the Disney Channel to the expanded-basic tier, which then created the outlet for the tween-programming boom.¹⁰⁴ One can dispute the social utility of *Lizzie McGuire*¹⁰⁵ and *Hannah Montana*,¹⁰⁶ but the negotiation demonstrates the powerful position that channel placement has in

Certainly this practice is not new to the field of marketing. For years, firms in a number of industries have used such tactics as the block-booking of a set of movies and the sale of maintenance contracts with computer hardware.”). For other examples of bundling, see *id.*

102. See Hazlett, *supra* note 99, at 282.

103. See GOLDFARB, *supra* note 79, at 18–19 (discussing the multiple dimensions of negotiations between networks and cable distributors); Harry Berkowitz, *For Cable TV, Change Adds Up*, NEWSDAY, Apr. 11, 2007, at A7 (noting the specific example of ESPN raising fees to cable companies, but also noting that “[t]he network says it has provided extra advertising time to cable operators as a way to make up for the extra expense and that it has little choice but to pay what sports leagues demand”).

104. See *Time Warner, Disney Sign Long-Term Retransmission Deal*, COMM. DAILY, May 26, 2000, available at Factiva, Doc. comd000020010804dw5q001ja (“Settling their nasty, very public feud over retransmission consent rights, Time Warner and Disney signed a long-term deal Thurs. that will keep ABC on MSO’s cable systems for another 6 years. In what seemed to be capitulation of Time Warner to Disney’s demands, MSO also agreed to switch Disney Channel from pay to basic tier over [the] next 3 years, extend and expand carriage of 4 ESPN networks and carry 2 fledgling Disney cable networks, Toon Disney and SoapNet.”).

105. *Lizzie McGuire* (Disney Channel television series 2001–04).

106. *Hannah Montana* (Disney Channel television series 2006–11). One cannot question their economic utility, however: the television series *Hannah Montana* received a weekly audience in excess of 2.4 million viewers in a highly desirable economic category. See Peter Sanders, *Disney Revs Up Tween Star Machine*, WALL ST. J., June 17, 2008, at B1.

negotiations between content producers and cable companies, just as it does in other distribution channels.

In sum, video producers and distributors both face the problem of very high fixed costs and very low marginal costs. Hollywood movies and high-value television programming are expensive to produce, but the audience can be expanded at essentially zero cost. Constructing a cable or fiber optic network is very expensive, but, once built, serving additional customers and providing additional content is a very low-cost proposition.¹⁰⁷ In this environment, economic theory dictates that, if possible, the owners and distributors of content will each seek price-discrimination strategies.¹⁰⁸ In video production, this has long resulted in windowing—the use of different distribution channels, each with a degree of exclusivity, to segment audiences based on their willingness to pay.¹⁰⁹ And distributors use tiering and other premium offerings such as video on demand to effect similar strategies.

B. Online Video Business Models

I now turn to describe three different online video providers, each of which has a different manner in which its system is “closed,” to illustrate both the evolving business models and the interaction between these new models and traditional windowing and

107. See, e.g., Daniel Brenner, *Cable Television and the First Amendment: Theory and Praxis*, in CABLE TELEVISION LAW 1990: REVISITING THE CABLE ACT 537, 568 n.128 (PLI Patents, Copyrights, Trademarks & Literary Prop., Course Handbook Ser. No. 386, 1990) (noting that, even in 1990, although start-up construction costs were substantial, fiber optic systems required lower maintenance costs, which in the long run minimized the economic impact of the original investment).

108. See David W. Barnes, *The Incentives/Access Tradeoff*, 9 NW. J. TECH. & INTELL. PROP. 96, 62 (2010) (noting that content creators and providers in all fields of intellectual property are sometimes incentivized and able, through licensing practices, to engage in price discrimination); see also Vartan J. Saravia, *Shades of Gray: The Internet Market of Copyrighted Goods and a Call for the Expansion of the First-Sale Doctrine*, 15 SW. J. INT'L L. 383, 397 (2009) (positing that in the realm of intellectual property there is a strong pull toward price-discrimination strategies because, given the necessary originality of individual works, none of the products are “perfect substitutes for each other, and because either by law or by contract, the copyright owners may prevent or limit the arbitrage opportunities for resellers”).

109. See, e.g., *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1450 (7th Cir. 1996) (“To make price discrimination work, however, the seller must be able to control arbitrage. . . . A producer of movies segments the market by time, releasing first to theaters, then to pay-per-view services, next to the videotape and laserdisc market, and finally to cable and commercial tv.”).

distribution.¹¹⁰ These models also demonstrate how new video, no less than old video, depends on discrimination of different kinds. These tensions, which are inherent in a technological transition, in part create the competition problems that have come to the forefront through the Comcast-NBC merger. The three online video operations are Hulu, which is a joint venture of three leading broadcasters; ESPN3.com, the online arm of the single biggest sports video distributor; and TV Everywhere, an evolving joint venture of the cable companies to provide online video access to their own cable subscribers. Hulu is closed in the sense that much content is made available only by subscription. It is perhaps the least remarkable and least controversial offering, although there has been some controversy. ESPN3.com is closed in that subscription to the service is made via ISP, not directly to the consumer, and ESPN will not sell the service to individual consumers whose ISPs do not subscribe. Finally, TV Everywhere is closed because only customers of the cable companies that sponsor the service are permitted access, and access is tied to a subscription to traditional cable service. TV Everywhere is not available to other customers on a purchased basis.

Hulu is perhaps the best known of these video services. Founded in 2007, Hulu is co-owned by three of the four major broadcast networks (NBCUniversal, News Corporation, and Disney), together with Hulu management and a private equity firm.¹¹¹ Hulu licenses content from Fox, MGM, and many other content providers. Hulu is a leading aggregator of television programming, programming that previously was available directly from programmers' websites or not available at all. At first, Hulu was an entirely advertising-supported site, with all content freely available, including both recently broadcast content and archives of prior television seasons and movies.¹¹² This model did not, however, generate revenues similar to those generated by over-the-air viewing, and the content owners

110. For a more general discussion of the online video market, raised in the different context of copyright policy, see generally Marvin Ammori, *Copyright's Latest Communications Policy: Content-Lock-Out and Compulsory Licensing for Internet Television*, 18 COMMLAW CONSPLECTUS 375 (2010).

111. See *About*, HULU, <http://www.hulu.com/about> (last visited Apr. 5, 2011).

112. See *Thanks, Me Hearties*, ECONOMIST, July 19, 2008, at 74 (noting that, at the time, Hulu offered free, advertising-supported video streaming).

became “[w]orried that free Web versions of their biggest TV shows [were] eating into their traditional business.”¹¹³

The owners’ traditional distribution partners contributed to this pressure. “[T]he networks were becoming increasingly insistent about seeking monthly fees from cable and satellite operators who used their broadcast signals. . . . [I]n tense negotiations, the cable and satellite operators had a big objection: Why would we pay you for content you make available free on the web?”¹¹⁴ In part as a result of those pressures, Hulu has begun a subscription service for most of its content—Hulu Plus. In order to access all but the most recent television shows, as well as some other, less desirable content, customers have to pay \$7.99 a month.¹¹⁵ This has apparently enabled Hulu to license additional content, and it recently announced that Viacom content is returning.¹¹⁶

The manner in which Hulu has closed its service is unremarkable, even on an Internet that generally values openness. Many content owners have tried to establish subscription-based businesses, although not nearly as many of them have actually succeeded. The *Wall Street Journal* is the only domestic newspaper that has proved able to keep most of its content available only by subscription, although the *New York Times* is beginning a second attempt at an online subscription service.¹¹⁷ Internet music sites floundered for some time after the first (illegal) incarnation of Napster,¹¹⁸ and iTunes, the first success story,¹¹⁹ is really more of a

113. Sam Schechner & Jessica E. Vascellaro, *Hulu Reworks Its Script as Digital Change Hits TV*, WALL ST. J., Jan. 27, 2011, at A1.

114. *Id.*

115. See *Hulu Plus*, HULU, <http://www.hulu.com/plus> (last visited Apr. 5, 2011).

116. See Jason Kilar, *Stewart, Colbert, and Hulu's Thoughts About the Future of TV*, HULU BLOG (Feb. 2, 2011), <http://blog.hulu.com/2011/02/02/stewart-colbert-and-hulus-thoughts-about-the-future-of-tv/>.

117. See Arthur Sulzberger, *A Letter to Our Readers*, N.Y. TIMES, Mar. 28, 2011, at A26; Richard Pérez-Peña, *Times to Stop Charging for Parts of Its Website*, N.Y. TIMES, Sept. 18, 2007, at C2.

118. See, e.g., Bob Tedeschi, *Music at Your Fingertips, but a Battle Among Those Selling It to You*, N.Y. TIMES, Dec. 1, 2003, at C21 (detailing the number of online music retailers that had sprung up in the aftermath of Napster, and pointing out that, in 2003, Apple’s director for marketing of applications and services claimed it was “hard to make money selling music downloads,” and that iTunes was only “close to break-even”).

119. As evidence of iTunes’s considerable success, consider its 2008 press release indicating that it had surpassed Wal-Mart as the leading music retailer in the United States. Press Release, Apple, *supra* note 90.

purchase-based application than a web service.¹²⁰ In the online video space, Netflix's online subscription service has boomed, to the point where some estimate that it represents 20 percent of the downstream traffic on the Internet during peak hours.¹²¹ But no one really objects when content owners attempt to capitalize on the value of their copyrights by requiring payment, whether based on subscription or one-time charges, for their content.

ESPN3.com is perhaps less well known than Hulu, but it has a very devoted following. Sports programming in general is high-value programming¹²² and, although much of the content available on ESPN3.com is niche programming that does not have wide enough appeal to justify its being shown on traditional cable channels, the ESPN management claims that the viewership is intensely interested.¹²³ Its business model is to license subscriptions to ISPs and then to provide access only to the customers of those ISPs.¹²⁴ In other words, it is replicating the cable model:

ESPN's attempt to get ISPs to foot the bill is commonplace in the cable and satellite TV world, in which the likes of Comcast and DirecTV pay a per-subscriber fee to ESPN for its programming. On the Internet, it's a different story. End-users are expected to foot the bill for such premium services, either via a subscription or pay-per-view model.¹²⁵

Those ISPs that have subscribed echo a similar theme: Verizon, in particular, was an early adopter, with a spokesman saying, "It's a

120. See, e.g., Tedeschi, *supra* note 118 (quoting Apple's director for marketing of applications and services as stating that "one reason Apple was in the [online music] business was to drive sales of its iPod music player and to help the company position itself as a cutting-edge brand").

121. Sara Yin, *Netflix Eats Up 20 Percent of U.S. Downstream Bandwidth*, PCMAG.COM (Oct. 21, 2010, 5:45 PM EST), <http://www.pcmag.com/article2/0,2817,2371260,00.asp>.

122. See Diana Moss, *Regional Sports Networks, Competition, and the Consumer*, 21 LOY. CONSUMER L. REV. 56, 56-57 (2008) ("[Regional sports networks] are hugely profitable, with margins estimated at 30 to 40 percent and average fees of \$2 per subscriber, second only to the Entertainment and Sports Programming Network's (ESPN) fees of \$2.50 per subscriber.").

123. See Hiawatha Bray, *ESPN Selling Premium Content to Net Providers*, BOS. GLOBE, June 15, 2006, at D1 (noting that ESPN is "really talking about high-quality premium content that a lot of consumers have a demand for" (quoting Tanya Van Court, vice president and general manager of new media products at ESPN)).

124. Eliot Van Buskirk, *ESPN to ISPs: Pay for Your Customers to Play Video*, WIRED EPICENTER (Feb. 5, 2009, 5:18 PM), <http://www.wired.com/epicenter/2009/02/espn-stands-fir>.

125. Eric Bangeman, *ESPN Charging ISPs to Carry ESPN360*, ARS TECHNICA (Aug. 1, 2006, 1:08 PM), <http://arstechnica.com/old/content/2006/08/7397.ars>.

tremendous value-add—one more thing to help attract customers to our broadband service.”¹²⁶

ESPN’s model has drawn objections from the same groups that advocate for network neutrality. Ben Scott, the policy director for Free Press, has said,

Ultimately, if you carry it to its logical extreme—that’s everyone charging for their content, and depending upon where you are and which ISP you’re using to connect to the internet, your internet experience is different—that’s a really unsettling prospect. . . . I think it undermines the foundational principles that make the internet such an engine of innovation and creativity.¹²⁷

Gigi Sohn, the President of Public Knowledge, called on the FCC to investigate the service on the ground that such “[e]xclusive deals, for example, could block providers of Internet video from offering certain types of content to their customers or prevent programmers from making their content available directly to viewers. This would prevent the emergence of Internet video services that could compete with MVPDs.”¹²⁸

The ESPN arrangement is an example of contractual vertical integration. At first blush, it seems to be driven by ESPN’s power as a content provider, exercising its copyright and licensing protections in order to raise revenues. It does not seem to be a case of discrimination by the ISPs, which is the typical concern of network neutrality. But it is, in fact, an example of traditional windowing taken into the Internet realm, in which channel exclusivity allows market segmentation. In the Internet era, it would be trivially easy for ESPN to offer the content of ESPN3.com to any customer who has a credit card. Why does it not? Because the fees that it generates from ISPs are in part based on the exclusivity generated—as the quotes from Verizon reveal—and that exclusivity has value to the extent that it encourages switching. A subscriber-pays alternative to payment by the ISP would not eliminate the advantage an ISP could claim, but it

126. Van Buskirk, *supra* note 124 (quoting Cliff Lee, Verizon spokesman); *see also* Bangeman, *supra* note 125 (“With Verizon rolling out its FiOS fiber network in selected areas, having premium content like ESPN360 may help convince some customers to switch.”).

127. Van Buskirk, *supra* note 124 (quoting Scott).

128. Gigi B. Sohn, President, Pub. Knowledge, Statement Before the Federal Communications Commission National Broadband Plan Workshop: Best Practices/Big Ideas 2 (Sept. 3, 2009), *available at* <http://www.publicknowledge.org/pdf/gbsohn-ostatement-20090903.pdf>.

might invite the same criticism leveled at cable bundling: why is the ISP building into its price a charge for everyone, even though most do not care to watch out-of-market college football or Bundesliga soccer?

TV Everywhere is the most recent of these three online-video business models, and its form of exclusivity is the most tightly tied to traditional media distributors. With TV Everywhere, subscribers to traditional MVPD services can access over the Internet much of the content that was available on their cable systems. Although Comcast and Time Warner began the service on their own in 2009,¹²⁹ it has expanded to include Verizon.¹³⁰ But, in all instances, non-MVPD subscribers cannot view the programming through the service.¹³¹ On the one hand, the cable companies claim that this is a consumer-friendly development that is designed to respond to consumer demand to see the content, for which they are already paying, through multiple devices and in multiple locations—solutions consumers were beginning to implement on their own through digital video recorders and devices such as the Slingbox.¹³² On the other hand, a coalition of the same public interest groups that push for network neutrality rules has condemned the arrangement as likely to stifle online video services.¹³³

129. Eliot Van Buskirk, *Cable Departs from Hulu Model with "TV Everywhere,"* CNN.COM (June 26, 2009), http://articles.cnn.com/2009-06-26/tech/wired.tv.everywhere_1_hulu-cable-subscribers-television-programmers.

130. Yinka Adegoke, *Time Warner Cable, Verizon to Test TV on the Web,* REUTERS, Aug. 27, 2009, available at <http://www.reuters.com/article/2009/08/27/us-timewarnercable-idUSTRE57Q0WY20090827>.

131. See, e.g., Matthew Lasar, *TV Everywhere: Gift to Consumers or Plot to Kill Online TV?,* ARS TECHNICA (Jan. 6, 2010, 10:01 AM), <http://arstechnica.com/telecom/news/2010/01/tv-everywhere-causing-controversy-everywhere.ars>.

132. See Jessica L. Talar, Note, *My Place or Yours: Copyright, Place-Shifting, & the Slingbox: A Legislative Proposal,* 17 SETON HALL J. SPORTS & ENT. L. 25, 27–29 (2007) (describing the operation of the Slingbox).

133. E.g., Press Release, Pub. Knowledge, Public Knowledge Criticizes 'TV Everywhere' (June 24, 2009), available at <http://www.publicknowledge.org/node/2493> ("Limiting access to programming is straight out of the cable playbook, going back to the days when Congress had to act in 1992 to allow the satellite programming distributors to have access to cable programming. This new version raises substantial anti-competitive issues by restricting the availability of programming to the favored distribution methods."); Josh Silver, *Comcast Launches "TV Everywhere": Say Goodbye to Free Online Television,* HUFFINGTON POST (Jan. 4, 2010, 6:13 PM), http://www.huffingtonpost.com/josh-silver/comcast-launches-tv-every_b_411057.html ("TV Everywhere is designed to protect the current cable TV subscription model and block competition from upstart online video ventures like Vuze, Roku and Hulu.").

TV Everywhere “has been slow to materialize,” both in terms of significant use by cable customers and in terms of the amount of content available through the service.¹³⁴ What is not known is the degree to which content licensed to TV Everywhere is licensed on an exclusive basis, such that content providers would agree to *not* make it available through other streaming or video-on-demand services. If the licenses were nonexclusive, this would lend credence to the cable companies’ descriptions. But if the licenses are exclusive, then the availability of the online content is another incentive to drive consumers to traditional cable subscriptions. For Comcast, the merger conditions provide limits here,¹³⁵ but those, of course, apply only to NBC-Comcast.

To be sure, these three offerings do not exhaust the universe of online video business models, but most of the other implementations are not “closed” in any relevant sense or in any sense different from Hulu’s requiring a subscription. YouTube is a multibillion dollar online video business and, although its content is largely amateur, it has increasingly moved to hosting channels of professional productions, such as music videos and even some authorized clips of broadcast television. Even amateur online video is relevant in the market, however, for it draws eyeballs from professional video. A bevy of other start-ups is attempting to aggregate enough content and distribution to make a play in this market.

C. *Video Is Not the End*

Specialized video offerings are not the last word in managed services that Internet-access providers could offer to their customers, even if they are the most naturally related to providers’ current businesses. Most of the broadband distribution companies, whether they are incumbent cable, cable overbuilders, or new fiber entrants, offer voice services over their platforms.¹³⁶ These services are usually provided on a managed basis, even though they could be provided solely as applications running on the Internet-access portion of the platform, as they are when offered by non-facilities-based VoIP

134. Brian Stelter, *Two Hints at Stepped-Up Media Rivalry in Online Streaming*, N.Y. TIMES, Feb. 2, 2011, at B3.

135. See *supra* notes 58–76 and accompanying text.

136. See, e.g., Saul Hansell, *Questions on the Future of Landlines and the Risks to Phone Companies*, N.Y. TIMES, May 11, 2009, at B6 (noting that cable companies are swallowing up an increasing share of the telecommunications market by offering broadband and voice services).

companies. The reason for this is quality of service: the provider can manage the bandwidth dedicated to voice service, both in the local access network and through backbone capacity, to ensure that the call quality is high and not degraded by other traffic. Two-way voice telephony is subject to jitter and latency concerns to an extent that even streaming video, which can be buffered, is not.¹³⁷ The Comcast-NBC Consent Decree excludes VoIP from its definition of specialized services, probably because the FCC has already clearly defined nondiscrimination obligations for VoIP access. If the FCC has legal authority to regulate any service provided outside of traditional telephony and cable services, it has legal authority to regulate VoIP that interconnects with the traditional telephone network.¹³⁸ VoIP could be extended to offer managed video-conference solutions in the future, a service currently offered by others on Internet platforms.¹³⁹

Beyond pure communications or media services, one can imagine platform providers offering a variety of other managed services to their customers. The platform provider would assert, at least, that these managed services would benefit from a guaranteed quality of service and therefore could not be as easily offered over the Internet-access portion of the platform. The Comcast-NBC materials suggest one such service: medical monitoring and associated health services.¹⁴⁰ Under some discussed implementations, the service would entail not just the housing of medical records in personalized, cloud-based accounts, but also a variety of real-time services, ranging from emergency-call service to the collection of medical data from testing devices or even from body monitors.¹⁴¹

137. *E.g.*, Princy Mehta & Sanjay Udani, *Voice Over IP*, IEEE POTENTIALS, Oct.–Nov. 2001, at 36, 36.

138. This is because such a service would be interconnected with a Title II telecommunications service and therefore “ancillary” to it. *See* Speta, *supra* note 8, at 121 (discussing the FCC’s ancillary jurisdiction).

139. One such example is Skype, which supports group video calling. *See Business*, SKYPE, <http://www.skype.com/intl/en-us/business> (last visited Apr. 5, 2011).

140. *See Applications of Comcast Corp., General Electric Co., and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses*, 52 Commc’ns Reg. (P & F) 249, 299 (2011) (memorandum opinion and order) (noting the “health and cultural” educational information that can be provided as a result of the merger).

141. *E.g.*, NEAL NEUBERGER, INTERNET INNOVATION ALLIANCE, ADVANCING HEALTHCARE THROUGH BROADBAND: OPENING UP A WORLD OF POSSIBILITIES 4 (2007), available at http://internetinnovation.org/files/special-reports/Advancing_Healthcare_Through_Broadband_-_Neuberger.pdf; Philip J. Weiser, Dale Hatfield & Brad Bernthal, *The Future of 9-1-1: New Technologies and the Need for Reform*, 6 J. ON TELECOMM. & HIGH TECH. L. 213, 243 (2008).

Alternatively, many of the envisioned implementations of smart-grid technologies, or intense demand-side power management, have a strong communications component.¹⁴² Electric companies are resisting some of these implementations on the ground that they might provide an insecure entryway into the electricity network.¹⁴³ Broadband providers might, therefore, offer energy monitoring and feedback systems on a managed basis to provide an enhanced level of security as well as guaranteed up-time. Such offerings might well be exclusive between the broadband carriers and the power companies.

A third example of managed service offerings based on quality-of-service claims would be telecommuting options. Companies are paying more attention to the security of remote connections. And the bandwidth demands of telecommuters—who not only need access to bandwidth-intensive corporate applications but also are increasingly using video conferencing and online meetings while telecommuting—continue to grow. Combined with a move to cloud-based enterprise services, which themselves often involve a managed network component, the broadband providers could offer a quality-of-service claim for these services.¹⁴⁴

To be sure, all of these services could be offered over a generic Internet connection, and many companies have already begun to develop them for such delivery.¹⁴⁵ Nevertheless, broadband providers might claim to be uniquely positioned to offer some aspects of these

142. *E.g.*, V.K. SOOD, D. FISCHER, J.M. EKLUND & T. BROWN, DEVELOPING A COMMUNICATIONS INFRASTRUCTURE FOR THE SMART GRID 1 (2009), available at http://www.wireie.com/pdfs/Developing_a_Communication_Infrastructure_for_the_Smart_Grid.pdf.

143. *E.g.*, Clark W. Gellings, Marek Samotyj & Bill Howe, *The Future's Smart Delivery System*, IEEE POWER & ENERGY MAG., Sept.–Oct. 2004, at 40, 43 (“Maintaining the security of electric power supplies to these systems will become increasingly important in years to come. An EPRI survey of electric utilities revealed real concerns about grid and communications security.”).

144. *See, e.g.*, Deborah Gage, *VCs: The Time to Make Money in Security Has Finally Arrived*, WALL ST. J., Feb. 14, 2011, <http://blogs.wsj.com/venturecapital/2011/02/14/vcs-the-time-to-make-money-in-security-has-finally-arrived> (detailing the venture capital opportunities that exist in computer security as a result of uncertainties in cloud computing); *see also* Joanne Taaffe, *Changing Face*, TOTAL TELECOM, Feb. 1, 2010, available at 2010 WLNR 2115149 (noting Microsoft’s ever-increasing list of telecommunications offerings, including cloud-based services, which appear to be a direct response to competitive pressures within the industry resulting from the possibilities of cloud platforms).

145. *See, e.g.*, IP ALARMS, <http://www.internet-alarm.net/home.html> (last visited Mar. 12, 2011).

services—especially security and reliability. A recent white paper by CISCO argues that

[s]ervice providers must employ a strategy that enables them to move up the managed services stack, thereby benefiting from higher margins and driving primary demand for lower-level services. . . .

To differentiate delivery, the computing structure must move into the network to provide [service providers] with end-to-end control, resulting in the ability to guarantee service-level agreements and provide extensive and sophisticated levels of monitoring and support.¹⁴⁶

Even in the days of traditional telephony, network providers sought to provide enterprise services that included not only “dumb pipe” services but also a variety of customized communications, network, and service packages.¹⁴⁷ That incentive will certainly be duplicated, and these are only a few of the interesting value-added services that broadband to the home may make possible.

The point is not to criticize these offerings. Indeed, it might in fact be beneficial to provide enhanced security and reliability for some of them, and it might be that those extra aspects of service are more easily provided over a segmented portion of the platform rather than as part of the generic Internet-access stream. But if the Internet portion of the platform is subject to network neutrality rules or similar norms, then the incentive difficulties simply reappear. The broadband provider would not provide enhanced service to its entire Internet-access customer base, and network neutrality would allow the provider—or require it—to refuse to offer enhanced service to those companies willing to pay for it.

III. THE INEVITABILITY OF ANTITRUST META-SUPERVISION

The foregoing two stories reach the point of overlapping: The first Part shows the interaction effect between network neutrality regulation and the traditional services offered by cable and other

146. BRYAN MOBLEY, STUART TAYLOR & ANDREW YOUNG, CISCO INTERNET BUS. SOLUTIONS GRP., NEXT GENERATION MANAGED SERVICES: A WINDOW OF OPPORTUNITY FOR SERVICE PROVIDERS 6-7 (2009), available at http://www.cisco.com/web/about/ac79/docs/pov/VMS_POV_0717FINAL.pdf.

147. See, e.g., U.S. DEP'T OF COMMERCE, U.S. INDUSTRIAL OUTLOOK 28-11 (1992) (noting that “an important issue for AT&T during 1992 will be its ability to continue offering customized service packages”).

multichannel companies. Traditional business models can give rise to incentives to take actions that can negate the effect of any network neutrality regulation. Worse, network neutrality rules can also give rise to incentives to limit innovation on the broadband platform by deploying new services as managed services instead. The second Part shows, against the background of the customary use of windowing and tiering, that these business models are also finding their way into online video-distribution businesses. These narratives converge on two lessons. First, nondiscrimination rules cannot be selectively applied to converged carriers' Internet services without a significant loss of effectiveness of those rules or, alternatively, without significant attention paid to the interaction effect by limiting carriers' options to provide other kinds of services. Second, a noneconomic discussion of network neutrality rules—that is, one that is driven principally by something other than foreclosure concerns—is an impoverished approach. Given the technological and business reality that a carrier can shift content or services from an Internet-delivered implementation to a managed service outside of the Internet platform, the costs and benefits of nondiscrimination can only be evaluated within a construct that takes account of this multidimensional foreclosure. In sum, one may be able to make a wholly noneconomic case for network neutrality rules, but those rules will be ineffective and can only be rescued by an antitrust-like competition analysis.

First, nondiscrimination rules cannot be applied to the Internet portion of a broadband platform alone without a serious loss of general effectiveness. The domain of network neutrality rules, however, is in fact usually limited to the Internet-access portion of a platform. Moreover, limiting such rules to the Internet services domain may well be compelled by the Communications Act as currently stated. If the managed service were a “cable service,” then nondiscrimination treatment would be precluded by the Act's prohibition on regulating cable services as common carriage.¹⁴⁸ If the managed service were not a “cable service,” then the FCC might characterize it as an “information service.”¹⁴⁹ But the FCC would

148. For a discussion of the prohibition on regulating cable services as common carriage, see *supra* notes 16–23 and accompanying text.

149. See 47 U.S.C. § 153(20) (2006) (“The term ‘information service’ means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but

almost certainly not have regulatory authority over that “information service.” In *Comcast Corp. v. FCC*,¹⁵⁰ the D.C. Circuit emphatically stated that the FCC does not have general regulatory authority over information services: it can only regulate if the information service is ancillary to a “statutorily mandated responsibility.”¹⁵¹ And the FCC has no statutorily mandated responsibility that could be stretched to apply nondiscrimination rules to managed services. Thus, the FCC has no regulatory tool that would forbid the carrier from developing business responses to a nondiscrimination rule on its Internet platform by moving content or services to a managed platform or offering.¹⁵²

In fact, it bears noting that the managed service need not be provided on a separate platform. So long as the FCC does not forbid vertical integration, the carrier can combine with a content or services company and offer it on the Internet platform, but offer it in a selective manner similar to ESPN3.com. ESPN3.com does not make its content available to every consumer on the Internet who is willing to pay; it is a cable channel on an Ethernet connection. If the restriction is imposed by the content or application provider, then it does not offend a network neutrality rule on the carrier.

Moreover, these possibilities for evasion are not the only danger of a nondiscrimination rule restricted to the Internet-access service of converged platforms. The rule could be counterproductive to the broader goals of network neutrality. If substantial numbers of services are pulled from the Internet platform into managed services offerings, their visibility outside of the carrier’s closed ecosystem would diminish. The Internet’s role as the general locus of innovation could be diminished, as carriers and other parties focus not on Internet

does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.”). Even this characterization would be doubtful, as the service might well not be offered “via telecommunications,” because telecommunications are “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” *Id.* § 153(43). Depending on the service, there might not be any specification by the user of “points” for the transmission.

150. *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010).

151. *See id.* at 661 (quoting *Am. Library Ass’n v. FCC*, 406 F.3d 689, 692 (2005) (internal quotation marks omitted)).

152. The FCC did, in its December 2010 Open Internet Order, attempt to re-establish its jurisdiction over Internet services. *Preserving the Open Internet*, 25 FCC Rcd. 17,905, 52 Comm’n Reg. (P & F) 1, 36–44 (Dec. 21, 2010) (report and order). Even that order does not offer a more general theory that would cover managed services.

services but on managed services. This would be a shift of the innovation locus which, in my view, could be either good or bad. But the shift does run counter to the general policy articulated by many network neutrality advocates: maximizing the possibility of innovation done independently of the carriers.¹⁵³ The objection that “managed Internet” services offend the open innovation ethic of the Internet has already been made by the network neutrality advocates who object to ESPN3.com.¹⁵⁴

To be sure, one statutory response that would overcome the evasion of a network neutrality rule would be to require cable companies and other converged platform providers to offer *all* services on a common-carrier basis or to forbid any vertical integration. Radical structural separation of content and carriage has been proposed before, in a variety of contexts, to respond to a variety of competition or discrimination problems. The 1956 AT&T Consent Decree forbade the Bell System from being in the content business, a result thought important because AT&T was also the principal means by which television content moved around the country.¹⁵⁵ The 1982 AT&T Consent Decree also initially prohibited the Bell Operating Companies from providing electronic publishing.¹⁵⁶ *United States v. Paramount Pictures, Inc.*¹⁵⁷ required the movie companies to divest their ownership in their principal distribution channel—the first-run movie theaters.¹⁵⁸ And similar calls for requiring cable companies to be common carriers echo from at least the mid-1980s.¹⁵⁹

Communications policy, however, has almost always rejected such radical separation, as evidenced in numerous sections of the Communications Act. Instead, the Act has generally treated vertical integration as acceptable, within limits, or at least as tolerable. As already noted, the Act forbids regulating broadcast licensees and

153. See, e.g., Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917, 1012–20 (2005).

154. See *supra* notes 127–28 and accompanying text.

155. *United States v. W. Elec. Co.*, 1956 Trade Cas. (CCH) ¶ 68,246, at 71,138 (D.N.J.).

156. *United States v. AT&T Co.*, 552 F. Supp. 131, 185 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

157. *United States v. Paramount Pictures, Inc.*, 334 U.S. 131 (1948).

158. *Id.* at 172 (“It is the relationship of the unreasonable restraints of trade to the position of the defendants in the exhibition field (and more particularly in the first-run phase of that business) that is of first importance on the divestiture phase of these cases.”).

159. See, e.g., ITHIEL DE SOLA POOL, *TECHNOLOGIES OF FREEDOM* 172 (1983) (predicting that, once a majority of programming has shifted from broadcast to pay channels, cable “cannot in a free society be other than a carrier”).

cable companies as common carriers.¹⁶⁰ The FCC's *Computer II*¹⁶¹ and *Computer III*¹⁶² rules allowed common carriers to offer information services, although there were at times requirements that such services be offered through separate subsidiaries or that common carriers develop access arrangements that other information services providers could purchase to duplicate the carriers' own offerings.¹⁶³ Broadcast licensing has been successively liberalized to allow the networks to own licenses covering greater portions of the country.¹⁶⁴ And, in cable particularly, vertical integration has long been permitted. Cable companies are allowed to program almost all of their channels, and they are also allowed to own many of the channels that they choose to program.¹⁶⁵

The reason is that communications policy has long recognized the (at least potential) benefits of vertical integration between content and carriage. In broadcasting, vertical integration created substantial efficiencies in the markets for programming, advertising, and distribution. In information services, the carriers were thought to bring a unique capability to provide innovative services.

Cable, in particular, shows a back-and-forth in which the benefits of vertical integration are recognized but balanced with the possibility that vertical integration or similar contractual exclusivity can create foreclosure—in this case the exclusion of distribution competitors by denying them access to valuable content or the exclusion of content competitors by denying them access to valuable distribution channels. The 1992 Cable Act¹⁶⁶ required the FCC to set horizontal and vertical

160. See *supra* note 20 and accompanying text.

161. Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry) (*Computer II*), 77 F.C.C.2d 384 (1980) (final decision).

162. Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry) (*Computer III*), 104 F.C.C.2d 958 (1986) (report and order).

163. For an analysis of the FCC's *Computer II* rule, see Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, 55 FED. COMM. L.J. 167, 181–99 (2003). For a discussion of the *Computer III* rule, see *id.* at 199–203.

164. See generally Adam Candeub, *Media Ownership Regulation, the First Amendment, and Democracy's Future*, 41 U.C. DAVIS L. REV. 1547, 1555–61 (2008) (charting the FCC's history of regulating media ownership).

165. See *Time Warner Entm't Co. v. FCC*, 240 F.3d 1126, 1144 (D.C. Cir. 2001) (reversing the FCC's imposition of "horizontal and vertical limits" on cable companies).

166. Cable Television Consumer Protection and Competition Act of 1992, Pub. L. 102-385, 106 Stat. 1460 (codified as amended in scattered sections of 47 U.S.C.).

ownership limits for cable operators.¹⁶⁷ In setting the vertical limit, the FCC reviewed the benefits of allowing some integration:

First, [cable multiple system operator] MSO investment has produced a wealth of high quality cable programming services. Many of the most popular cable programming services were initiated or sustained with the help of MSO investment. Second, vertical integration between cable operators and video programming services appears to produce efficiencies in the distribution, marketing, and purchase of programming. Third, vertical integration can reduce programming costs, which in turn may reduce subscriber fees and cable rates. Fourth, vertical integration may in certain circumstances foster investment in more innovative and riskier programming services.¹⁶⁸

The Act also limited exclusivity agreements, however, through the program access rules, which required cable companies to provide certain programs to competing multichannel platforms.¹⁶⁹ Here, the concern for foreclosure of competing platforms was paramount. As the FCC explained,

As a general matter, the public interest in exclusivity in the sale of entertainment programming is widely recognized. Indeed, elsewhere in the 1992 Cable Act, in the context of broadcast station-cable system relationship, specific steps have been taken to protect exclusive rights. In the unique situation presented here, however, it is clear that exclusivity is not favored. Congress has clearly placed a higher value on new competitive entry than on the continuation of exclusive distribution practices¹⁷⁰

This same balancing act is present even in the NBC-Comcast Consent Decree, notwithstanding its sometimes clear requirements that the company license on terms prevailing in the market. The DOJ acknowledged that “[t]he video programming distribution industry frequently uses exclusive contract terms that can be

167. 47 U.S.C. § 548(c) (2006).

168. Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992: Horizontal and Vertical Ownership Limits, 8 FCC Rcd. 8565, 8594–95 (1993) (second report and order).

169. 47 U.S.C. § 548.

170. Implementation of Sections 12 and 19 of the Cable Television Consumer Protection and Competition Act of 1992: Development of Competition and Diversity in Video Programming Distribution and Carriage, 8 FCC Rcd. 3359, 3384 (1993) (first report and order).

procompetitive.”¹⁷¹ For example, it can “maximize the revenues [that] it earns” and also “encourage[] the various distributors, such as cable companies, to promote the content during a distribution window by assuring the distributor that the content will not be available through other distribution channels at a lower price.”¹⁷²

As operationalized, the Decree does have some prophylactic rules, but the general principle seems to be one of balance: “The proposed Final Judgment strikes a balance by allowing reasonable and customary exclusivity provisions that enhance competition while prohibiting those provisions that, without any offsetting procompetitive benefits, hinder the development of effective competition from OVDs.”¹⁷³ Comcast is forbidden to enter into contracts that condition its purchase of video programming on the programmer’s not licensing the content to online video providers, but Comcast may secure exclusive agreements for a fourteen-day window (or an agreement for a thirty-day window forbidding free online distribution) or such exclusive agreements as are secured by other MVPDs.¹⁷⁴ This last condition does allow exclusivity to develop in the marketplace, while seeking to cabin any market power that Comcast may have.

In short, if one rules out prohibitions on vertical integration, as the Act generally has, then a nondiscrimination rule addressed to only a portion of a platform is seriously problematic.

This leads back to the nature of nondiscrimination rules. Nondiscrimination has never been a significant part of the video production market and has only played a minor role in the video distribution market. This is because producers and distributors both face an economic problem—the low marginal cost of their product—and the possibility of segmenting customers and producers maximizes revenues for both producers and distributors. The application of a nondiscrimination rule to a new distribution technology—the Internet-access portion of a platform—creates a revenue problem for the distributor, and consequently for the producer as well, which explains why both the cable companies and the copyright holders are nervous about Hulu-type business models and are looking for

171. Competitive Impact Statement, *supra* note 63, at 35.

172. *Id.*

173. *Id.* at 36.

174. *Id.* at 37.

alternatives.¹⁷⁵ The potential loss of revenues when traditional business models are threatened by change creates pressure either to replicate those models in the new distribution space or to restrict the new distribution space's potential to compete with the traditional models. If regulation imposes a nondiscrimination rule for the new distribution space, then the rule must be supplemented in two ways. First, it must be supplemented by a mandate that the carrier not restrict the size or scope of the new space in a way that limits the damage to the traditional space (as a cable company might restrict Internet bandwidth in order to protect traditional video business models). And second, the nondiscrimination rule must be supplemented by rules that forbid the carrier from offering new services in a managed service format, in which it can apply traditional business models.

Both of these conditions are present in Comcast-NBC. On the first point, the DOJ and the FCC have required Comcast to maintain significant Internet-access speeds to ensure that Comcast does not act to restrict the Internet space as a competitor to video.¹⁷⁶ Neither the DOJ nor the FCC, however, seems to have wanted to try to write a condition requiring the online side to grow. And on the second point, the DOJ and the FCC have limited Comcast's ability to offer managed video services—the area of specialized services that most concerned the regulators.¹⁷⁷

This in turn raises the second, more general question: what arguments are adequate to support a nondiscrimination rule, either general or highly specific in its implementation? The answer is that a solely noneconomic case for nondiscrimination rules cannot capture the entire problem. Attempting to describe a nondiscrimination problem and solution without evaluating the regulation's economic effects will leave the problem underdescribed and the regulation

175. See, e.g., Dawn C. Chmielewski & Meg James, *Hulu's Tug of War with TV*, L.A. TIMES, May 11, 2009, at B1 (noting that media executives were "terrified" by Hulu and were considering alternatives such as "authentication," whereby Internet users would be required to show proof of a paid TV subscription as a condition of watching current programs on Hulu); Dawn C. Chmielewski & David Sarno, *More TV Viewers May Be Cutting the Cord This Year*, L.A. TIMES, Jan. 3, 2011, <http://articles.latimes.com/2011/jan/03/business/la-fi-electronics-show-20110104> (describing the "fresh headaches" that Internet video has provided entertainment-industry executives, primarily industry fears that online video content would disrupt traditional cable TV viewing patterns and diminish advertising revenue).

176. See *supra* notes 75–76 and accompanying text.

177. See *supra* notes 71–74 and accompanying text.

ineffective. It is true that network neutrality regulation does have proponents who argue that the rule is necessary to prevent foreclosure strategies.¹⁷⁸ But coming to dominate the debate are a series of noneconomic arguments or what might be called macroeconomic arguments. The noneconomic arguments contend that network neutrality regulation is necessary to provide an adequate space for new free speech activities.¹⁷⁹ The macroeconomic arguments focus on economic spillovers into other areas that are possible if one regulates the Internet platform to essentially create a new public utility, which I think is simply a more general argument that Internet openness promotes innovation in applications and content services.¹⁸⁰ These arguments may be sufficient—although I think generally not—for imposing a network neutrality rule on Internet services. But given the interaction effects already described, which can mute, eliminate, or reverse the effectiveness of the rule, they cannot end the analysis.

This is the sense in which I believe that an antitrust analysis of the space is inevitable, both generally and specifically. Only antitrust provides the analytic tools necessary to determine whether discrimination strategies are likely to be harmful in any individual case, combined with an economic analysis that can identify incentives and opportunities for companies to engage in compensating behaviors

178. In addition to Lemley and Lessig, *supra* note 6, the most prominent example is Barbara van Schewick. See generally BARBARA VAN SCHEWICK, *INTERNET ARCHITECTURE AND INNOVATION* (2010) (arguing that network providers are altering the internal structure of the Internet in a manner that stifles innovation).

179. See, e.g., Jack M. Balkin, Commentary, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 2 (2004) (“By changing the social conditions of speech, digital technologies lead to new social conflicts over the ownership and control of information capital. . . . But the same technologies also produce new methods of control that can limit democratic cultural participation. Therefore, free speech values—interactivity, mass participation, and the ability to modify and transform culture—must be protected through technological design and through administrative and legislative regulation of technology. . . .”); Marvin Ammori, *Network Neutrality and the 21st Century First Amendment*, BALKINIZATION (Dec. 10, 2009, 10:54 AM), <http://balkin.blogspot.com/2009/12/net-neutrality-and-21st-century-first.html> (“Phone and cable companies want . . . to block user requests, charge software companies and websites discriminatory prices to reach users, and even cut exclusive deals A network neutrality rule, quite simply, would forbid the phone and cable [*sic*] from interfering with the Internet in these ways.”).

180. See, e.g., Frischmann, *supra* note 153, at 997–98 (“These cumulative processes also involve nonlinear progression, feedback loops, spillovers, and numerous other complications that frustrate modelers and defy simplification. All of these characteristics contribute to information and transaction cost problems that make relying on property-based, market-driven management of basic research results almost outrageous. . . .” (footnote omitted)).

such as a move to managed services. Video economics thrives when both producers and distributors engage in certain kinds of discrimination. The adoption of nondiscrimination rules without regard to interaction effects outside their stated domain can drive services from the regulated domain to other types of offerings. A nondiscrimination rule, unless it forbids many beneficial or at least benign business strategies, cannot alone address this concern. Antitrust asks the questions necessary to determine whether discrimination is a likely indicator of foreclosure—whether the parties have market power and how the relevant markets operate. Antitrust also attends to possible efficiencies of vertical arrangements, including arrangements that involve discrimination.

By antitrust, I mean antitrust-type reasoning that addresses whether discrimination is likely to evidence foreclosure and that is flexible enough to identify overlapping markets in the manner in which Internet access and managed services necessarily overlap. Such reasoning need not be tied to traditional antitrust institutions, such as the Federal Trade Commission or the DOJ Antitrust Division. Those entities face a doctrinal problem that pure access regulation is probably not an available antitrust liability theory or remedy, at least under the current doctrine.¹⁸¹ Foreclosure actions remain available, but these actions raise an institutional question that is beyond the scope of this paper. If one selects the traditional institutions of antitrust, then one probably loses the ability to act based on predictive judgments about competitive effects. The future of the FCC—to recall this Symposium's title—is to make exactly these sorts of predictive judgments, supported by evidence, in the markets in which it is expert.

CONCLUSION

The Comcast-NBC transaction highlights a reality of multipurpose, converged platforms that has been all too absent from the network neutrality debate in recent years. In particular, it highlights the possibility that such a platform provider would have

181. See *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 411 (2004) (concluding that there was no antitrust action for denial of access required by the Telecommunications Act of 1996); James B. Speta, *Modeling an Antitrust Regulator for Telecoms*, in *ANTITRUST AND REGULATION IN THE EU AND US: LEGAL AND ECONOMIC PERSPECTIVES* 101, 106 (François Lévêque & Howard Shelanski eds., 2009) (concluding that *Trinko* forbids antitrust actions to ensure access).

both the ability and the incentive to evade a nondiscrimination rule addressed to the Internet portion of the platform. Discrimination strategies designed to enhance revenues have long been important in both content and distribution markets, as demonstrated by widespread and widely accepted windowing, tiering, and bundling strategies. If nondiscrimination regulation forbids those sorts of strategies, then carriers will have the incentive to restrict the Internet-access channel or to shift content and services to managed portions of the platform, in which case the effectiveness of nondiscrimination rules would be severely compromised.

This specific example also teaches a broader lesson about the limits of noneconomic reasoning in a largely commercial domain. A noneconomic argument may be adequate to support government intervention, but such an argument alone is insufficient to account for the feedback effects that managed services make available. In order to account for the ecosystem, one needs the tools of competition analysis.