Policy, Federalism, and Regulating Broadband Internet Access

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Abstract

Following recent telecommunications mergers, local (mostly municipal and county) governments and the federal government are fighting over who should determine whether cable television systems must make their facilities available to unaffiliated providers of high-speed ("broadband") Internet service. This intergovernmental dispute is only the latest in a series of such clashes regarding competition and communications policy. A brief review of the policy suggests that substantively, local open-access requirements are not yet warranted. However, the economics of federalism, primarily that the relevant markets are local, indicates that local governments should have the right to choose these policies, perhaps erroneously. Federal preemption could prevent learning from multiple independent local "experiments." The best case for limiting local authority is if it is only the exploitation of opportunistic ability to extract nationwide rents in exchange for approving transfer of the incumbent's cable franchise to an acquiring firm.

Key Words: Federalism, Internet, regulation, vertical integration

JEL Classification Numbers: H1, L5, L1

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I. Introduction and Summary

Across the country, cable television systems have begun to expand their offerings beyond traditional multichannel, point-to-multipoint video, to include using the bandwidth capacity of their coaxial cable and fiber-optic systems for high-speed "broadband" Internet service. Such broadband services offer the promise of delivering digital information to consumers at rates anywhere from 10 to 50 times the speeds available via conventional modems. These higher speeds are most crucial for graphics, high-fidelity sound, and video. Over time, they may allow the Internet to become an important if not preferred medium for customized television services, music and software delivery, and video telephony.

Generally, cable systems have preferred to enter this nascent market by providing broadband service exclusively through affiliated Internet service providers (ISPs), such as Time-Warner's Road Runner and TCI's @Home. In the past year, city or county governments, most notably in Portland, Oregon, have required that TCI cable systems allow unaffiliated ISPs to provide broadband Internet service over the cable operator's facilities. Localities have taken these initiatives as part of their legal role in approving the transfer of TCI-held franchises to AT&T, which had acquired TCI in 1999.

In spring 1999, a federal court upheld the right of Portland to impose those requirements. AT&T challenged the decision. William Kennard, then chairman of the Federal Communications Commission (FCC), also challenged it, yet the FCC in November 1999 imposed similar requirements on local telephone companies, forcing them to allow independent firms to offer broadband digital subscriber line (DSL) high-speed Internet service over their telephone lines. In May 2000, a federal district judge in Richmond, Virginia, overruled similar open-access

* The author is grateful for comments from Robert Jacobs, Julie Kelly, Tim Sullivan, and other participants at the Rutgers-Newark Center for Research in Regulated Industries 13th Annual Western Conference (July 2000) and at the International Communications Forecasting Conference (September 2000). Errors remain those of the author.

requirements that Henrico County sought to impose.[1] Following this trend, in June 2000 the Ninth Circuit Court of Appeals overturned the district court's decision in favor of Portland.[2] More recently, the Federal Trade Commission and the FCC imposed open access requirements on Time Warner's cable systems, as a condition for approving its acquisition of America On-Line (AOL).

The substantive merits of imposing broadband access requirements on cable systems or telephone companies are debatable. Whatever the promise of broadband Internet service may be, it currently constitutes but a very small fraction of residential Internet use. Even if there is a substantial monopoly in this service, denying facilities-providers the right to offer broadband Internet will not offer much consumer benefit as long as those providers face no regulatory constraint on the price unaffiliated ISPs would pay for access.

This paper examines whether local governments should have the authority to impose broadband access requirements, even in the face of these substantive questions. Conventional efficiency-based informational justifications in favor of private markets over central planning suggest that local governments should have that right, or more specifically, that a federal government should not preempt their authority. The justifications generally include the following:

- Officials from one locality (and at the federal level) can learn from the choices of the different localities what policies work best. If allowing cable companies to provide exclusive broadband Internet access leads to quicker deployment and lower prices, greater economic growth should be observable where access regulations were not imposed, all else equal.
- The relevant markets are local, not national. The issue at hand is not agreeing to a standard Internet protocol, but one of the structure of the local ISP market. Local officials presumably are both closer to the affected consumers and more knowledgeable regarding relevant market conditions than is the federal government. To the extent that the policy is based on alleviating problems created by monopolies in relevant markets, the policy choice and the risk of error should be a local

[1] *MediaOne Group, Inc., et al. v. County of Henrico,* U.S. District Court for the Eastern District of Virginia, Civil Action No. 3:00CV33, May 10, 2000.

[2] *AT&T v. City of Portland,* U.S. Court of Appeals for the Ninth Circuit, Case No. 99-35609, June 22, 2000.

prerogative, unless a wrong local choice will substantially reduce the value of Internet access elsewhere in the country.

- Regulatory policy experience, particularly with cable, suggests that the federal government is no more immune from "capture" than are local governments.

To ensure that a locality's access rules are efficiency-based and not merely an opportunistic attempt to capture profits by, for example, holding sway over merger approval, open-access requirements should be imposed independently of whether any merger has occurred. In addition, policies should be directed primarily at opening markets rather than extracting profits.

II. Broadband Internet Services

A. Definition

From the perspective of a user, broadband Internet services generally refer to the speed at which one can communicate over the Internet. The "broadband" appellation arises because the speed of communication, in digital bits per second (bps), is analogous to and in some ways builds upon the carrying capacity of the medium transmitting the bits. Depending on the technology employed to encode bits onto the medium, that carrying capacity depends on the frequency of electromagnetic cycles in the underlying medium and the width of the band of frequencies available to carry the data. All else equal, the "broader" the band, the more data can be delivered per second.

In the Internet context, the term derived from the communications medium has been employed to refer to the speed of transmission of information itself. The standard modem available in desktop or laptop computers today can transmit data through an ordinary dial-up analog telephone connection at 56,000 bps, or 56 kbps. Basic integrated services digital network (ISDN) lines offer 144 kbps, a little more than double the capacity of the analog modems.

Both are considerably slower than the leading broadband offerings. But the capacity of those offerings depends on the symmetry, or lack thereof, between receiving and sending data. In symmetric systems, users can send data as quickly as they can download it; asymmetric connections typically permit much faster downloading than uploading. Except for an occasional photograph (or, perhaps more controversially, an MP3 audio file), the size of the typical user's uploadings are generally small—a text e-mail message, say, or the locational information

embodied in a mouse click on a Web site. On the other hand, downloads often contain graphics, photographs, and streaming audio and video. Broadband technologies generally offer faster downloads if the user is willing to accept asymmetric service with slower uploading speed.

B. Technologies

Describing technology in this industry is risky, as tomorrow's headlines may announce new breakthroughs. But as of this writing, the two main technologies for providing broadband service to a wide range of residential and small business users are telephone-based digital subscriber line (DSL) service and broadband cable.[3] Asymmetric DSL services can deliver data through the telephone copper-wire loops at advertised speeds up to 7.1 million bps, or 7.1 mbps, with an uploading rate of 90 kbps.[4] Although the uploading rate is not much faster than that obtainable through ordinary dial-up service, the download rate is more than 100 times faster. Symmetric DSL service is available at rates up to 1.5 mbps, about 25 times dial-up speeds.[5]

The primary alternative to DSL for broadband Internet access involves the other main wire into the home, the coaxial cable used primarily for multichannel and viewer-paid (rather than advertiser-supported) television service. Because cable lines are already designed to provide 100 or more video channels, their potential capacity is high, as much as 10 mbps or more.[6] Advertised rates for cable modem service are slightly slower than DSL, up to 1.5 mbps for asymmetric service and 768 kbps for symmetric connections.[7] At this range, any difference between cable and DSL service may be relatively inconsequential. The FCC finds that 200 kbps suffices "to change web pages as fast as one can flip through the pages of a book and to transmit

3 Large businesses or other very high volume users (governments, universities) may be able to avail themselves of large-scale link transmission technologies, described in S. Keshav, An Engineering Approach to Computer Networking (Reading, MA: Addison-Wesley, 1997): 14–19.

4 In this regard, the FCC has defined "advanced telecommunications capability" by the ability to both receive and send data at a minimum speed of 200 kbps. Federal Communications Commission, "In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans …," CC Docket No. 98-146, Report released February 2, 1999, ¶20.

5 DSL Prime, "Want to win in ADSL?", www.dslprime.com/explained/How_Fast_is_Fast/," 5/12/00.

6 K. Hafner, "Night of the Living DSL," New York Times, May 4, 2000: E1, E8

7 RCN, "How fast are cable modems?", www.rcn.com/cable_modems/faq/cost_and_speed/," 5/12/00.

full-motion video."[8] DSL Prime asserts that "[m]ost of the Internet, and most browsers, can't run much above 600 [kbps]."[9]

Both technologies have limitations, apart from expense. Because it uses telephone copper wire designed primarily for low-fidelity voice transmission, DSL cannot carry high-speed digital information at great distances. Asymmetric broadband service generally requires being within about three miles of a central office, with higher speeds and symmetric service requiring greater proximity. The primary technical limitation of cable services arises from its point-to-multipoint design: a cable system's data transmission capacity is shared among all subscribers who want to use it at more or less the same time. With potentially thousands of households using a system at peak periods, downloading rates will slow.[10] Uploading would also be affected, limiting the ability of consumers to send large files and use high-speed access for their own web servers.[11]

Although wire-based cable and DSL are the primary broadband providers at this juncture, wireless services may become more prominent in the future. Satellites can download data at very high rates, but the lack of uplinking capacity in most homes and businesses requires a separate connection, usually a telephone line, to transmit information (such as Web site clicks) back into the Internet. Wireless technologies are being used for broadband access in local area networks, notably on college campuses.[12] These technologies may become more prominent in the future, particularly as encoding, compression, and cellular technologies enable more efficient use of the spectrum. Cerf and Kahn speculate that wireless data service in the 1 to 2 mbps range is "likely to [be] ubiquitous" and that such services "may one day be the primary way most people get access to the Internet."[13]

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[8] FCC, n. 4 *supra* at ¶20.

[9] DSL Prime, n. 5 *supra*.

[10] Excite@Home limits uploading rates to 128 kbps to control potential cable congestion, particularly from subscribers supplying web servers. Hafner, n. 6 *supra* at E8.

[11] Digital Beat Extra, "Speed Trap: Consumers and High Speed Bandwidth," Benton Foundation, February 17, 2000, www.benton.org/News/Extra/bb021700.html.

[12] J. Boggess and F. Neri, "Mobile Computing: Wireless Access to Multimedia Applications and Its Implications for a Campus Network," AIWORC 2000 Conference, University at Buffalo, Buffalo, NY, 4/28/00.

[13] R. Kahn and V. Cerf, *What Is the Internet (and What Makes It Work)* (Washington: Internet Policy Institute, December 1999): 12, available at www.internetpolicy.org/briefing/12_99.html.

C. Penetration

Broadband Internet service is a familiar option for large businesses, government offices, and universities. However, those institutions typically have dedicated Internet connections and use them with sufficient intensity to justify the expense. So far, broadband penetration in the residential market is small, albeit growing. The FCC's Common Carrier Bureau[14] reported 4.3 million high-speed Internet data lines in service to residences and small businesses by mid-2000. Of these, 2.8 million offered high-speed (200 kbps) service in both directions, reflecting growth of 40% over the level six months before.

The Common Carrier Bureau's data for cable broadband and DSL service reflect similar magnitudes of small size yet rapid growth. Cable broadband subscribership increased 59% to 2.2 million lines by mid-2000, from 1.4 million lines at the end of 1999. DSL is smaller, with about 1 million lines in service by mid-2000—an increase of 157% from only 370,000 lines at the end of 1999.

Regarding future growth, the FCC Cable Services Bureau report estimates that by 2005 more than 11 million households will use cable modems, with a comparable number using DSL service by 2007. [15] Even if these annual growth rates of nearly 50% to 100% continue, broadband technologies will serve only about 20% of U.S. households over the next few years. Part of the reason may be price.[16] For example, in Maryland, Bell Atlantic offers its 600-kbps DSL service for $50 per month and its 1,500-kbps service for $100 per month, along with a $99 payment for the DSL modem.[17] In New York City, Time Warner's Road Runner offers up to 2-mbps downstream and 300-kbps upstream service for $55 per month (discounted to $40 per month if the subscriber also gets more than basic cable service), along with a $99 per computer payment for an Ethernet card and modem installation.[18] Absent a need for quick and routine downloading of large graphic, audio, or video files, most consumers may not be willing to pay this premium to get faster Internet service. On the other hand, what is advanced technology today

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[14] Data in this and the following paragraph come from FCC, "Federal Communications Commission Releases Data on High-Speed Service for Internet Access," Common Carrier Bureau News Release, October 31, 2000.

[15] D. Lathan, *Broadband Today: A Staff Report to William Kennard, Chairman, FCC* (Washington: Federal Communications Commission, October 1999): 26, 27.

[16] Another problem may be service quality. See Hafner, n. 6 *supra*.

[17] www.bell-atl.com/infospeed/more_info/pricing.html, 5/23/00.

[18] www.twcnyc.com/rr/faq.html#gq13, 5/23/00.

becomes the minimally acceptable level tomorrow, so the view that broadband service will dominate the Internet need not be overoptimistic.

III. Local Governments vs. the Feds

A. Local Broadband Cable Controversies

For reasons having to do more with legal and regulatory history than with technology, local governments have focused on broadband cable for high-speed Internet service rather than on DSL. Policy merit aside—we turn to that below—the federal government has largely preempted authority over DSL service. The most recent vehicle for that preemption has been the Telecommunications Act of 1996, following on long-standing assertions of federal authority over the telephone industry by the Federal Communications Commission and the Department of Justice's antitrust cases against AT&T.

A further wrinkle is that local governments—cities and counties—play a greater role in cable policy than they have regarding telephone service. Telephone policy has been the province of state public service commissions, which are charged with regulating rates, terms, and conditions of telephone service and, prior to the Telecommunications Act, granting exclusive franchises.[19] Cable service, on the other hand, has been very much a matter of local government, derived from the need to get local permission for access to public streets and rights-of-way to lay the distribution cable.

Much of this local authority has been preempted by federal legislation, especially the Cable Communications Policy Act of 1984 (Pub. L. 98-549, known also as the 1984 Cable Act), which stripped localities of the ability to regulate cable rates, or viewed another way, to hold successful franchisors to the terms of their bids. Federal legislation also limits how much local governments can collect from cable systems via franchise fees. Partly because of this loss of direct authority over rates, localities have attempted to exercise their authority over cable in other

[19] The Telecommunications Act continues to give states considerable authority over the telephone companies that operate within their boundaries. One count listed 22 aspects of telephone industry practices for which the Telecommunications Act reserved authority to the states. T. Brennan, "Making Economic Sense of the Telecommunications Act of 1996," *Industrial and Corporate Change* 5 (1996): 941–61, esp. 953. The only "deregulation" in the Telecommunications Act regarding the states was stripping them of their ability to limit entry to one provider.

ways, most notably by controlling whether a cable franchise can be transferred to a different company following an acquisition of the current owner, as in AT&T's takeover of TCI.

The policy local governments have adopted is "open access"—to require that cable systems provide broadband Internet capacity on a nonexclusive basis to unaffiliated Internet service providers (ISPs) offering high-speed service to their customers. Absent such a policy intervention, a cable operator could, and in many cases would, provide such service exclusively through a vertically integrated broadband ISP. Prominent examples include AT&T's @Home service and Time Warner's (pre-merger) Road Runner.

Following are examples of attempts by local governments to mandate open access.

- Portland, Oregon. The first and most notable open-access mandate occurred in late 1998, when the Mount Hood Cable Regulatory Commission, a local advisory panel in Portland, recommended imposing open access as a condition of the transfer of TCI's cable franchise to AT&T.[20] Portland and Multnomah County officials adopted the recommendation. AT&T contested this ruling, arguing that federal laws did not give local governments the authority to make such a mandate.[21] The local government won a summary judgment at the district court level but was reversed by the Ninth Circuit Court of Appeals.[22] The court found that the broadband Internet service was not a "cable service" as defined by federal law and thus was not subject to local franchise authority. It also determined that broadband Internet capacity was a "telecommunications service" under the 1996 Telecommunications Act. This determination implies that a franchise authority cannot condition a cable franchise on whether it provides broadband Internet access, but it would imply that it comes under the FCC's regulatory jurisdiction.[23]

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[20] B. Gruley, "Outcome of Battle in Oregon Stands to Shape E-Commerce," *Wall Street Journal (Interactive)*, January 15, 1999.

[21] Brief of Appellees, *AT&T et al. v. City of Portland*, Docket No. 99-35609, September 7, 1999.

[22] See n. 2, *supra*.

[23] Although our purpose is to evaluate broadband Internet authority rather than interpret the law, both prongs of the Court of Appeals decision are open to criticism. The basis for deciding that broadband Internet service was not a cable service was basically that it was not a one-way video service, with subscriber interaction only incidental to select programs. To the extent that broadband Internet service is devoted to downloading web pages selected by the user through mouse clicks, it may well fit that definition, particularly if uploading is at slower, nonbroadband speeds.

- Broward County, Florida (Fort Lauderdale, north of Miami):[24] In July 1999, the Broward County Board of Supervisors ordered "that cable systems that offer high-speed access to the Internet (via a cable modem platform or otherwise) shall not discriminate in favor of themselves or their affiliates, but rather shall provide nondiscriminatory access to all requesting unaffiliated Internet Service Providers."[25] Broward County is served not just by AT&T-TCI systems but also by MediaOne and Comcast (which attempted but then failed to merge in 1999).[26] However, MediaOne has been acquired by AT&T[27] and Comcast offers AT&T's @Home as well.[28]
- San Francisco. In July 1999, the Board of Supervisors of the City and County of San Francisco adopted Resolution 718-99 "supporting open non-discriminatory access by consumers to broadband access services and nondiscriminatory access to all content on the Internet." Following this resolution, the city Department of Telecommunications and Information Services filed a report recommending that this resolution be made into a requirement to be implemented by 2003.[29]

Regarding the "telecommunications service" finding, the intent of Congress in the Telecommunications Act was to prohibit conditioning a franchise on whether the cable company discontinues a service, and thereby encourage cable companies to enter the local telephone business. Requiring them to provide offer open access for broadband service neither concerns local telephone service (except to the degree broadband Internet service facilitates Internet-protocol telephony) nor involves discontinuation of any telecommunications service. Open access does condition a franchise on the cable system's not exclusively being the sole broadband Internet service provider, but the Court found that being an ISP is an information service, not a telecommunications service.

[24] Officials in Daytona Beach are also trying to refuse to transfer the Time Warner cable system to America Online if the acquisition of the former by the latter goes through. A.E. Cha, "Holding Out for 'Open Access' to Cable," *Washington Post* (September 27, 2000): E1, E9.

[25] www.broward.org/cgi-bin/AT-anchor.pl?Broadband&/usr/lpp/internet/server_root/pub/cri03000.htm#Broadband1.

[26] Comcast Corporation, "About Us: Key Events," www.comcast.com/defaultframe.asp?section=about_us&SubSection=au-key_events, May 27, 2000.

[27] In deciding not to oppose AT&T's acquisition of MediaOne, the Department of Justice ordered MediaOne to spin off its interest in Time Warner's Road Runner broadband service, www.usdoj.gov/atr/public/press_releases/2000/4829.htm, May 25, 2000.

[28] Comcast advertises that customers can access other providers, possibly at lower prices, through its broadband service, www.comcastonline.com/faq.asp#j8, May 27, 2000. It has reportedly signed agreements with AOL supporting open access. K. Chen, *Wall Street Journal*, March 29, 2000: A15, summarized in the Benton Foundation's "Communications-Related Headlines," March 29, 2000, www.benton.org/News/032900.html.

[29] www.ci.sf.ca.us/telecommunications_commission/openaccess.htm.

- Henrico County, Virginia (north and east of Richmond). In December 1999, the Board of Supervisors mandated open access to AT&T's cable system as part of the transfer to it of the MediaOne franchise. Prior to the merger, MediaOne had been offering Road Runner, which it partly owns. However, unlike the Portland case, Judge Richard Williams of the Eastern District of Virginia supported AT&T's claims that federal law preempted the ability of a local government to order open access.30 Judge Williams found that Henrico County's action was "inconsistent" with federal laws prohibiting local authorities from conditioning franchises on provision of specific telecommunications services, transmission technologies, "common carrier"–like forced access, and the content other ISPs might deliver.

Other states that have received requests to open broadband access to cable systems under their jurisdiction include Arizona, Maryland, Massachusetts, Michigan, Vermont, and Washington.[31] As part of its effort to win public support for its acquisition by America Online, Time Warner and AOL issued a memorandum of understanding offering to provide open access over Time Warner systems if the merger is approved.[32] AOL has long opposed AT&T's efforts to restrict broadband cable service to its @Home service. AT&T also has agreed with MindSpring to eliminate exclusivity regarding @Home broadband service over AT&T's cable lines, although some critics say this agreement does not go far enough.[33]

B. "Vigilant Restraint": The FCC Response

The Federal Communications Commission's response to the decision upholding Portland's open-access requirements was strong. Within two weeks of the Portland decision, FCC Chairman Kennard said,

> [T]he Information Superhighway will not work if there are 30,000 different technical standards or 30,000 different regulatory structures for broadband. The market would be

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[30] See n. 1 *supra*.

[31] See the Consumer Federation of America "Internet access" site and links, www.consumerfed.org/internetaccess/.

[32] This memorandum of understanding is available at cgi.timewarner.com/cgi-bin/corp/news/index.cgi?template=article&article_id=200021. These conditions were among those mandated by the Federal Trade Commission and the FTC in approving AOL's acquisition of Time Warner.

[33] A.J. Schwartzman, Media Access Project, letter to FCC Chairman William Kennard, December 6, 1999, available at www.nogatekeepers.org/archive/944500938.shtml.

> rocked with uncertainty; investment would be stymied. Consumers would be hurt. That is why I've asked my general counsel for options in light of the recent Portland decision. In fact, that decision was released on June 3rd, and I'm surprised that I haven't yet received a petition for declaratory relief. See, it is in the national interest that we have a national broadband policy.[34]

"Disturbed by the effect that the actions of local franchising authorities could have on this policy and on the deployment of broadband," Kennard also offered his views as to what that policy should be:

> [W]ith competition and deregulation as our touchstones, the FCC has taken a hands-off, deregulatory approach to the broadband market. We approved the AT&T-TCI deal without imposing conditions that they open their network. We did this because there is no sign that as this nascent market matures that the cable operator has an incentive to deny ISPs access to their platform. There is no sign that consumers do not have other avenues to get broadband connections if they don't want to use cable. And finally, it is not clear that the perceived benefits of mandating open access outweigh their apparent economic and technological costs.[35]

Earlier, belief that broadband Internet service would be available from a variety of competing technologies had led the FCC to refrain from adopting any open-access policies prior to imposing such conditions in approving AOLs' purchase of Time Warner.[36] The FCC formally expressed its opposition to local authority over broadband cable in its *amicus* brief before the Ninth Circuit Court of Appeals supporting AT&T's objections to the lower court's finding that Portland's open-access mandate was legal.[37]

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[34] W. Kennard, "The Road Not Taken: Building a Broadband Future for America," remarks before the National Cable Television Association, Chicago, June 15, 1999, available at www.fcc.gov/Speeches/Kennard/spwek921.html.

[35] W. Kennard, remarks before the Federal Communications Bar, Northern California Chapter, San Francisco, July 20, 1999, available at www.fcc.gov/Speeches/Kennard/spwek924.html.

[36] Federal Communications Commission, Report in the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment, Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, Feb. 2, 1999, ¶101.

[37] Federal Communications Commission, "FCC Court Brief Underscores Consumer Benefits from National Internet Policy of Unregulation; Urges Narrow Judicial Resolution," press release, August 16, 1999, available at www.fcc.gov/Bureaus/Miscellaneous/News_Releases/1999/nrmc9060.html.

C. The DSL Situation

A description of the dispute between the FCC and local governments regarding broadband access would not be complete without a look at the seemingly different way that the FCC treats DSL service—the broadband offerings by telephone companies. The FCC has decided that "advanced telecommunications services" offered by "telecommunications companies" are subject to common-carrier requirements for unbundling.[38] In addition, because the FCC has determined that DSL is an interstate service, the regional Bell Operating Companies (RBOCs) continue to be subject to the Telecommunication Act requirement that they meet a checklist of conditions before being permitted to offer DSL on the same basis as do cable companies.[39] As a condition for approving the merger of the RBOCs, SBC, and Ameritech, the FCC will allow them to offer "advanced services," but only through a separate affiliate and only after meeting extensive terms and conditions to promote local telephone competition in their service areas.[40]

IV. Federalism Controversies in Competition Policy

Constitutionally, the boundaries between federal and state power are set in balancing the interpretation of two clauses. Article I, Section 8 sets out the commerce clause, stating that "[t]he Congress shall have Power…[t]o regulate Commerce with foreign Nations, and among the several States…" Depending on the interpretation of "interstate commerce," this clause can grant, and arguably has granted, considerable authority to Congress over a wide range of conduct, even where the connections to interstate commerce may be tenuous.[41] But on the other side is the Tenth Amendment, which reads, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." Strictly construed, this clause restricts the federal role and leaves considerable power to the states.

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[38] J. Oxman, "The FCC and the Unregulation of the Internet," FCC Office of Plans and Policy Working Paper #31, available at www.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf.

[39] Kennard, n. 34 *supra*.

[40] Federal Communications Commission, SBS-Ameritech Merger, FCC 99-279, Summary of Conditions, Oct. 6, 1999, www.fcc.gov/Bureaus/Common_Carrier/News_Releases/1999/nrc9077a.html.

[41] A slightly facetious way to put this is that if someone ever breathed air that crossed a state line, Congress has authority over her actions.

In competition policy settings, conflict between federal and state authority is neither new nor unusual.

A. Antitrust[42]

The leading antitrust case limiting federal authority over state actions is the Supreme Court's decision in *Parker v. Brown*.[43] The case involved the effective cartelizing of the California raisin industry through production limitations instituted by the California Agriculture Prorate Act. In the early 1940s, California farmers held virtually a monopoly over raisins in the United States. Although a lower court found this to be an illegal restraint on competition, the Supreme Court held that the antitrust laws did not apply because the production limitations were imposed by a state rather than by a private party.

Since the institution of the antitrust "state action" doctrine in *Parker*, the courts have increased the burden one must meet to avoid antitrust liability. The burden is showing not that the action had no interstate effects, but that the action was taken by the state rather than by private firms. In *Cantor v. Detroit Edison*,[44] the Supreme Court invalidated a utility's giveaway of lightbulbs as an illegal tie-in, asserting that implicit regulatory approval was insufficient to support a claim that the program was a state action.

A following case involving a dispute between municipal and investor-owned utilities, *City of Lafayette v. Louisiana Power and Light*,[45] established the test that the anticompetitive conduct be the "clear and articulate expression" of the state. Later, in *California Retail Liquor Dealers Assn. v. Midcal Aluminum, Inc.*,[46] a case involving fixing wholesale wine prices, the Supreme Court established the requirement for antitrust immunity that the suspect actions be "actively supervised" by the state, rather than taken at the discretion of the private parties. The "clear articulation" and "active supervision" tests continue to delimit the extent of the state action immunity.

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[42] Much of the following case law is described in more detail in T. Brennan, "Local Government Action and Antitrust Policy: An Economic Analysis," *Fordham Urban Law Journal* 12 (1984): 405–36, esp. 422–29.

[43] 317 U.S. 341 (1943).

[44] 428 U.S. 579 (1976).

[45] 435 U.S. 389 (1978).

[46] 445 U.S. 97 (1980).

B. Electricity

A different set of ambiguities pervades state-federal relations regarding public policy toward the electricity industry. Most long-standing is the division of authority between state public utility commissions and federal regulators (once the Federal Power Commission, now the Federal Energy Regulatory Commission, FERC). Nominally, FERC regulates electricity transmission and pricing at the "wholesale" level to entities that serve end users; the states regulate "retail" prices charged directly to those end users. This distinction need not correspond to whether power flows and transactions take place within a particular state's boundary. States can regulate retail rates even if the power comes from out-of-state, and FERC has authority over transmission whether or not the transmission lines are part of an interstate power transaction.

Until FERC in 1996 ordered utilities to give independent power producers open access to the utilities' transmission lines,[47] jurisdictional conflicts did not appear on the regulatory policy radar screen. Among other things, FERC asserted authority over the transmission rates charged directly to end users whenever transmission, local distribution, generation charges are unbundled in retail power sales. But more broadly, many states have begun to open retail electricity markets to competition. Meanwhile, members of Congress and the Clinton administration proposed legislation that would to some extent mandate when and how states would implement retail power competition.

C. Telecommunications

Most pertinent here is the long-standing history of conflict between the federal government and the states regarding telecommunications facilities, primarily the telephone.[48] Perhaps the most important foray of the federal government into local telephony dates to the *Smith v. Illinois Bell* case of 1930.[49] In that case, a fraction of the cost of each line used to connect telephone subscribers to the nearest central office—a local asset if ever there was one—

[47] Federal Energy Regulatory Commission, Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, April 24, 1996, available at www.ferc.fed.us/news1/rules/pages/order888.htm.

[48] One could speculate that much over-the-air broadcasting, being inherently local, might well have been a matter for local authority had the federal government not asserted its authority over rights to use the electromagnetic spectrum for communications.

[49] 282 U.S. 133 (1930).

was assigned to the federal government to regulate, insofar as phone lines were used to carry interstate as well as intrastate calls. Although state governments might have objected to this reduction in their jurisdiction, their concerns were likely mollified by the result: long-distance users effectively subsidized local telephone subscription, allowing state regulators to keep basic telephone rates below cost.

The Communications Act of 1934 and the antitrust case against AT&T established fairly strong federal authority over the telephone industry. Two recent court cases, however, have set some limits on the ability of the federal government, primarily the FCC, to exercise authority over the states in communications areas.[50] In *Louisiana Public Service Commission v. FCC*,[51] the Supreme Court disallowed FCC preemption of Louisiana's depreciation schedule for setting intrastate rates because it conflicted with FCC depreciation schedules over the same equipment.[52] *People of California v. FCC*[53] invalidated the FCC's "Computer III" rules, which would have taken away the right of states to force telephone companies to offer information services (then called "enhanced services") through separate subsidiaries and to set the terms and conditions by which such services could be offered.

The Telecommunications Act of 1996 preserved an extensive role for states in regulating the telephone sector. Congress did take away the right of states to regulate entry into telephone service and to establish zoning policies that would impede direct-broadcast satellite and wireless telephony. However, it left to the states extensive responsibilities for overseeing interconnection agreements between incumbents and entrants, prices, service quality, consumer protection, and numerous other aspects of telecommunications.[54]

Cable television began with firms, locally franchised and regulated, that constructed community television antennae to improve reception in relatively isolated areas. Local involvement continued as technological developments allowed cable systems to deliver

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[50] The following takes descriptions of cases from H. Geller, "Legal Issues in Preemption," in P. Teske (ed.), *American Regulatory Federalism and Telecommunications Infrastructure* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1995): 125–31.

[51] 476 U.S. 355 (1986).

[52] That the same equipment would be subject to simultaneous state and federal regulation is fallout from *Smith v. Illinois Bell*, n. 49 *supra*.

[53] 905 F.2d 1217 (9th Circuit, 1990).

[54] T. Brennan, "Making Sense of the Telecommunications Act of 1996," *Industrial and Corporate Change*, 5 (1996): 941–61. See also n. 57 *infra* and accompanying text.

retransmitted distant broadcast signals and satellite-delivered programming. Since those beginnings, the policy pendulum has swung against the localities. In 1981, the FCC revisited the rules prohibiting television network ownership of cable systems. CBS had petitioned the FCC to allow it to acquire the franchise to serve Lincoln, Nebraska. The FCC denied this petition in the interest of preserving diversity of ownership among video suppliers. Even if CBS's ownership of cable systems presented some competitive risks, the citizens of Lincoln rather than the regulators in Washington might have been the better judges of whether the costs exceeded any benefits CBS ownership might have brought to its video service.

The more important conflict between states and the federal government had to do with setting rates for basic service. Before the 1984 Cable Act, setting basic rates was one of the terms of franchises granted by local governments to cable systems.[55] In passing that act, Congress effectively voided price terms from those contracts. Proponents viewed this as deregulation; opponents viewed it as abrogating agreements set via competition among cable operators to serve a particular locality. After cable rates rose significantly, Congress reregulated cable through the Cable Television Consumer Protection and Competition Act of 1992 (Pub. L. 102-385). That act restored local authority to regulate basic cable rates and allowed the FCC to regulate rates for cable-only programs, but only when cable faced "effective competition" as determined by the FCC. The Telecommunications Act of 1996 eliminated the ability of the FCC to regulate rates for cable programming as of March 1999.[56]

A recent federalism dispute involved the extent to which the federal government can preempt local authority over zoning rules that regulate the construction of antennae for wireless communications. In *Omnipoint Communications vs. Newtown Township et al.*,[57] the Third Circuit Court of Appeals denied Omnipoint's contention that the 1996 Telecommunications Act forced Newtown Township, Pennsylvania, to allow it to place a cellular telephone transmitter on top of an apartment building. The township had refused to do so, citing a zoning ordinance restricting such installations. In finding for the town, the Third Circuit said that the

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[55] Using franchise competition as a substitute for price regulation was originally proposed in H. Demsetz, "Why Regulate Utilities?" *Journal of Law and Economics* 11 (1968): 55–65, and criticized as too simplistic in O. Williamson, "Franchise Bidding for Natural Monopolies—In General and With Respect to CATV," *Bell Journal of Economics* 7 (1976): 73–104.

[56] www.fcc.gov/Bureaus/Miscellaneous/Factsheets/cblrate.html.

[57] *Omnipoint Communications vs. Newtown Township et al.*, Nos. 99-1453, 99-1455, and 99-1458 (3d Cir., July 13, 2000), *cert. denied* November 20, 2000.

Telecommunication Act's restriction on local authority over such installations has force only when such authority impedes the development of the service (in this case cellular telephony) as a whole, not the efforts of a particular company.

V. A Note on the Policy Itself

Before we discuss whether states or the federal government should control policy to set open-access rules for broadband cable service, a brief word about the policy itself may be in order, to preserve the distinction between substantive merits and proper authority. Absent the distinction, one presumably would argue for authority not on the merits of where decisionmaking should lie, but on the basis of which level of government would pick what one has *already* concluded is the right answer. We return below to how that puts the cart before the horse, particularly in an economic paradigm in which revealed preferences rather than *a priori* substantial judgments should be the criteria for the optimality of resource allocations.

A. The Arguments in Favor of Open Access

The essential premise in favor of mandating open access is that cable systems have market power in the delivery of high-speed Internet service. Vertical integration of cable into a high-speed ISP business, which excludes others from using its facilities, would then imply that cable's market power would be extended into the ISP business. Along with competitive concerns, advocates of open access believe that exclusive broadband ISP provision over cable systems would threaten First Amendment values associated with diversity of speakers and content over the media.[58]

Lemley and Lessig offer three arguments leading to variations on this theme.[59] The first is that the ISP market is characterized by product differentiation: some companies offer only the connection itself, others offer software and support, and yet others supply proprietary content.

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[58] Schwartzman, n. 33 *supra*; Consumer Federation of America et al., "Consumer and Media Advocates Ask FCC to Require Open Access to High Speed Cable-Internet," January 27, 1999, available at www.nogatekeeper.org/archive/19990127-2.shtml.

[59] M. Lemley and L. Lessig, "Written *Ex Parte* of Professor Mark A. Lemley and Professor Lawrence Lessig," before the FCC in the Matter of Application for Consent to the Transfer of Control of Licenses MediaOne Group to AT&T Corp.," CS Docket No. 99-251, 1999, available at www.nogatekeepers.org/reading/lessigpiece.pdf, esp. ¶¶ 44–53.

Exclusivity by cable would limit this differentiation. Second, they argue that independent ISPs and cable outlets may each offer potential competition to each other in their own markets or others in the industry. Third, they contend that integrated cable ISPs will set standards for broadband technology.

B. Does Cable Have a Monopoly over Broadband?

Despite those arguments, mandating cable access seems premature. Whatever the promise of broadband Internet service—something both proponents and opponents of open access cite—it still is a market that now serves only a minuscule amount of the public. As followers of the pharmaceutical industry can attest, selling to a small fraction of the public does not, in and of itself, imply a lack of market power. However, in this case the jury will be out for some time as to whether broadband service providers are sufficiently insulated from competition from plain-old Internet service providers to exercise meaningful power over price.

Meaningful competition need not come only from standard-speed Internet service provision. As noted above, broadband Internet service is now available to some degree through telephone company plant DSL. Wireless options may be on the way. Broadband cable may not have market power even if the relevant market is only broadband service.

We should not leave the subject without a word about the different treatment of DSL service, in which telephone companies are obligated to provide open access.[60] The asymmetry follows primarily from regulation, in two senses. The first is that a regulatory scheme is in place to set the rates a telephone carrier would charge independent DSL service providers, implying that vertical separation can lead to lower DSL prices. Second, telephone service overall is still regulated, and vertical separation may be necessary to prevent the indirect exercise of market power through discrimination or cross-subsidization.[61] Finally, and perhaps more speculatively, the switched design of telephone networks makes independent DSL provision relatively more workable, compared with the point-to-multipoint architecture of cable systems.

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[60] Kennard, n. 34 *supra*.

[61] T. Brennan, "Why Regulated Firms Should Be Kept Out of Unregulated Markets: Understanding the Divestiture in *U.S. v. AT&T*," *Antitrust Bulletin* 32 (1987): 741–93.

C. Vertical Separation Without Regulation is Unlikely to Help

Even if cable becomes the sole supplier of broadband service and if competition from conventional Internet technologies is insufficient, open access to broadband is likely to be beneficial only if the rates that cable systems charge for open access are be regulated. Absent such regulation, cable systems can already force consumers to pay monopoly prices for broadband Internet service by charging an access fee sufficiently great to extract those rents from independent ISPs rather than directly from consumers.[62]

An illustration may be useful. Suppose a local monopoly cable system with no competition from DSL offers cable service for $40 a month and only its own broadband service for an additional $50. The consumer would pay $90 per month. Suppose an independent broadband ISP could offer service for $20 if it could get access to the cable system. The cable company could simply charge the independent ISP $30 per customer for access rights, forcing the price it charges to equal $50 (the $20 service fee plus the $30 access fee). This would leave the total cost to consumers at $90 (the $50 paid to the ISP plus the $40 to get cable itself). Independence leaves consumers no better off unless it is paired with a policy to regulate the "access fee" at a price below the $30 monopoly premium. Since, absent such regulation, cable can already extract those profits with open access, allowing it to control Internet service provision directly may be associated with efficiencies, such as monitoring and control to prevent congestion.[63]

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[62] A numerical example follows, but for a concrete example, Time Warner has offered access to ISPs if they pay 75% of the revenues from subscriber fees and 25% of the revenues from all other sources, such as advertising, to Time Warner. A. Klein, "Time Warner Terms for Cable Criticized," *Washington Post* (October 7, 2000): E1, E8. Time Warner recently announced an agreement to provide broadband access to EarthLink, an ISP with 4.6 million subscribers. Press release, "EarthLink and Time Warner Cable Announce Definitive Agreement," November 20, 2000, available at www.earthlink.com/about/pressroom/timewarner.html.

[63] Speta argues that a broadband service provider will want to keep subscription prices low, so as to build network externalities, and that recovery of cost may require it to be able to earn supracompetitive profits in the content market, thus warranting vertical integration. J. Speta, "Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms," *Yale Journal on Regulation* 17 (2000): 39–91. Speta's argument implicitly presumes that the network externalities generated by one cable system are significant when the relevant network is national or worldwide—a dubious presumption.

D. Arguments Against Open Access

By and large, the Lemley and Lessig arguments presented in *A* above do not appear compelling. If product differentiation is desirable, a cable-owned ISP could offer it by providing different grades of services, just as cable systems do now with video programming. The potential competition arguments are purely speculative; there is no suggestion that independent ISPs will build cables or that cable would add much to the already intense competition in the ISP market generally. Regarding standard setting, one may expect the industry as a whole—content providers, backbones, conventional ISPs, software companies, and the like—to participate. And even in that context, dominant firms often play a role in setting standards, be it Microsoft or Real Player.

Lemley and Lessig's analysis, however, does indirectly suggest one possible concern with cable integration into the ISP business. Currently, we can regard cable as a vertically integrated company—a multichannel video delivery service, and the packaging of multichannel video content. Broadband ISPs could become competitors with cable in the packaging market. Were such a packaging firm to dominate Internet video, acquisition by cable could suppress competition between them in the content market. Perhaps counterintuitively to some, this argument is stronger the less power cable has in the delivery market itself. For if cable is the only way to get multichannel video to consumers, it already controls the tap, regardless of how many potential content suppliers might be jockeying for position upstream.

VI. The Consumer-Locality Analogy[64]

To understand when local governments should have regulatory authority over broadband open access, or anything else, we begin with a look at the economic rationales for vesting decisionmaking authority with individuals rather than central planners, and then see how those arguments apply to the federalism question. Intrinsic philosophical considerations having to do with the inherent worth of liberty may, in and of themselves, justify vesting power with individuals rather than governments. But such arguments will not help us much in deciding how authority should be allocated between higher and lower levels of government.

[64] Some of these points are presented in more detail in Brennan, n. 42 *supra*.

A. Why Trust Individuals over Central Planners? The Economic Case

The economic case for vesting authority with individuals rather than central governments rests on three premises, each of which indicates where we might find exceptions to the rules.

The first premise is informational: that individuals, with the help of market mediation, have reasonably good knowledge of the benefits and costs of their options. Getting that information in a timely and accurate manner to the government is relatively difficult. Availability of information itself, though, can be problematic. Because the marginal user cost of information is inherently zero, information is a public good, and hence may be underprovided. Systematically asymmetric distribution of information can lead to adverse selection, leading markets to disappear altogether.

The second premise involves incentives. Even if a central planner has accurate information, it need not act in an efficient way. Individual actors, typically, in seeing benefits and costs either directly or as revealed in the market, will presumably choose the most preferred of their options. Again, the results may not be optimal, here because of the classic market failures. If an actor has market power, the marginal benefit to her (e.g., marginal revenue) from an action (e.g., increasing output) will not match the marginal social benefit (e.g., the price, or marginal willingness to pay for more output). If there are externalities, then the prices agents pay may not reflect the marginal social costs, as when pollution creates harms that are not revealed in prices.

A third premise is that the link between individual decisions and cost-benefit relationships is relatively uncorrupted by a faulty link between principals and their agents. Stereotypical consumer decisions have no link: consumers look at a product or service and decide whether its benefits to them exceed the price. In some cases, however, consumers find it beneficial (if not necessary) to rely on independent actors to make decisions ostensibly on their behalf. A divergence between the interests of the principal and her agent—for example, a moral hazard—can lead to inferior outcomes.

B. Implications for Deference to Local Decisionmaking

The economic arguments for deferring to individual decisionmaking rather than central authorities suggest that, absent qualifications, public policy decisions should be vested in local rather than central governments. Local governments will typically be closer to the parties affected by public policy decisions. This should lead to better information regarding costs and benefits and a tighter relationship between the policy decision and the magnitude of net benefits,

based on that information. In a nutshell, the belief in decentralization that underlies neoclassical endorsement of markets over central planning suggests that when public action is called for, the burden of proof should rest with the advocate of vesting authority to act with the larger, central government over states or localities.

But just as market failures may warrant government restriction of individual decisions, so too might similar failures warrant having central governments preempt local government authority. The preceding discussion suggests three factors to consider:

- Inefficiently low information. Weighing the costs and benefits of open access in one locality may involve duplicating costs associated with similar analyses in other localities. The benefits to any one locality of developing its analysis may understate the social benefits of the associated informational "public goods." Hence, left to their own devices, local governments might do a less effective job than a central government that perhaps has better incentives to weigh properly the pros and cons of a particular policy. In effect, information may create a scale economy in governance, in that the average costs of analyzing policies may fall as the size of the jurisdiction increases.
- Transborder inefficiencies. Some of the costs and benefits of a local government's actions may fall outside its jurisdiction. As the *Parker* "raisin cartel" case above shows, a state may be able to exercise monopoly power against those outside its jurisdiction. In addition, it may be able to impose external costs outside its boundaries, for example, by siting polluting power plants just upwind from adjoining states.[65] In thinking about these transborder effects, it is important here as in other policy settings to distinguish efficiency effects from "pecuniary externalities." A local policy choice may make one firm better off and another worse off, just as purchasing decisions do in the market. But only if there is market power or an unpriced cost or

[65] The "Coase theorem" may apply, in that if negotiating costs are low and the federal government has defined the legal rights of localities with reasonable precision, then voluntary agreements may alleviate putative externalities. A recent example of a proposal along these lines is to view such voluntary agreements as a "club good" method of regulation. M. Ainspan, "'Who Should Regulate What?' A Club Good Proposal for Electricity Regulation," presented at the 19th Annual Rutgers-CRRI Conference/Advanced Workshop in Regulation and Competition, Bolton Landing, NY, May 25, 2000.

benefit is there an opportunity to realize a net economic gain through a policy intervention.[66]

- Political failure. A third justification for federal preemption of local authority is if there is some reason to believe that the local decision does not adequately reflect the views of constituents. Defining "adequately" here is not easy, particularly if we want to restrict our attention to process rather than substance.[67] One could justify federal laws against local corruption. Taken more broadly, the political-failure argument would justify requirements, akin to those in the *Midcal* case discussed above, that the local action be "clearly articulated and actively supervised," to instill confidence that the local government is doing what its constituents want. Reluctance to defer to local authorities may well be the result of beliefs that local governments are more prone to nepotism or back-room bargaining than the federal government.

Note that such justifications are separate from the arguments often advanced in the sphere of public finance: that if a local government strays too far from the views of its constituents, citizens will move to another locality.[68] Whether mobility is sufficiently easy and widespread to constrain local governments is a controversial topic, but the discussion here does not depend on it.

C. Noneconomic Policy Goals

The above arguments for and against local control of high-speed Internet access are based on economic efficiency. Specifically, the question is whether prohibiting vertical integration between the putative monopoly provider of the physical broadband "pipe" and the provider of the Internet service itself would mitigate market power without compromising efficiency. Vertical integration itself is not likely to exacerbate any market power already held by the

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[66] It is important here that the inefficiency considered be only those that cross boundary lines. An adequate theory of local authority should leave open the possibility that a group of citizens can democratically select an inefficient outcome for whatever reason they may choose. If not, then deferring to local authorities becomes effectively meaningless if they are "free" to choose only an efficient allocation.

[67] *Id*.

[68] C. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64 (1956): 416–24. Atlhough broadband Internet service may be of considerable interest, I know of no evidence suggesting that people would move their homes just to be in a jurisdiction that did or did not mandate open access. Business relocation is only slightly more plausible, but businesses already have ways of getting high-speed data lines without relying on cable.

"pipe." However, localities ought to be free to test that theoretical proposition, since their constituents will reap the rewards of good decisions and bear the brunt of erroneous ones.

Basing our argument on an analogy between consumers and localities vis-à-vis a central planner assumes that achieving the outcome local citizens desire is the primary policy goal. This need not be the case when goals are noneconomic. A good example would be national policies to preempt local governments from preventing minority groups from getting broadband access. An action that violates legal or moral rights would justify going beyond the market analogy.

A more pertinent issue here could be universal service. To some extent, universal service could be a proxy for an efficiency-based "network externality" argument, in which the value of broadband Internet service to a typical U.S. consumer depends on how many households obtain broadband access in any particular jurisdiction. Another interpretation of the requirement is based on a conception of equity. In traditional contexts, equity considerations would suggest that as a matter of citizenship or personhood, everyone has a right to have a telephone or mail letters, subsidized if necessary to make the service affordable at virtually all income levels. A universal service conception would apply this standard to high-speed Internet access. We discuss below whether such a conception plausibly warrants a federal role over local broadband policy decisions.

VII. Analyzing Local Authority over Cable Access

Having set out the basic criteria for when federal governments should preempt local governments, we check to see how they apply regarding mandating open broadband access to cable facilities.

A. Information and Scale Economies

One justification for federal preemption of local authority is that there are scale economies in nationwide control arising from the cost of gathering information, implementing policy, and enforcing compliance on a locality-by-locality basis. The extensive public debate surrounding open access—check the numerous Web sites in the footnotes—suggests that information on the fundamental considerations is hardly lacking. Information that may be hard to come by—the capacity of the cable system to handle broadband multiple Internet providers, the availability of alternatives, and the local demand for broadband service—seems likely to be local rather than national in nature

Moreover, even if information is something the federal government can provide, localities still could justifiably retain final authority over whether to adopt open access. The FCC can play an active role as an advocate and advisor to local franchise authorities, while leaving with the latter the right to decide whether they agree with its position.

In this area and others, different local policies may provide empirical evidence that could help guide other localities in setting their own policies. The empirical experience will not be perfect because selection bias will likely keep the local policy laboratories from carrying out random experiments. One would expect that open access would be adopted just where its expected effects are most likely to be beneficial, and vice versa. Still, the information economy will seem better off if jurisdictions that want to try open-access mandates can choose whether to do so, than if the FCC preempts all such experimentation.

B. Export of Inefficiency

The second question is whether inefficiencies would be exported across jurisdictional lines. The risk of market power seems minimal; neither Portland nor Henrico County nor the other cities or counties considering open-access rules have monopolies over or dominate any market relating to broadband Internet service or cable television that goes beyond their jurisdictions. The cable system itself may have market power, but the inefficiency relating to the exercise of that power would involve too few subscriptions to cable television or broadband service among those passed by the cable system. The market power does not, by definition, go beyond the boundaries of the jurisdiction served by the cable franchise authority.

Externalities offer a more interesting possibility. No negative externalities, like pollution, come to mind. However, broadband Internet service offers two potential positive externalities. The first involves technical compatibility so that people anywhere on the Internet can communicate and the system remains reliable. The second involves a potential network externality, in that the more customers who have broadband access, the more valuable Internet service, broadband or not, becomes to others.

FCC Chairman Kennard singled out technological externalities in his early pronouncements against the Portland decision, stating, “If each and everyone of them decided on their own technical standards for two-way communications on the cable infrastructure, there

would be chaos."[69] That would be true, but the open-access issue is about corporate governance, not technological standards. To my knowledge, no locality is proposing that a cable broadband service adopt protocols other than those used throughout the Internet. If proponents of open access are right about anything, it is that open access is more, not less, likely to prevent any large ISP from trying to break off from the rest of the Internet and go it alone.

C. Universal Service

A second and more compelling externality argument is the efficiency-based rationale for including high-speed Internet service under the rubric of universal service. Broadband access itself increases the value of the Internet to all as a communications tool. If open access were to slow the deployment of broadband, as its opponents contend, then others across the country and around the world may be made worse off if a locality mandates open access.

This argument should not be dismissed out of hand. However, it would be more compelling if its advocates also supported subsidies to encourage the use of broadband technologies. Moreover, the argument remains empirically speculative, particularly when we compare the rate of broadband deployment in, say, Henrico County with the effects on the residents of Henrico County themselves, and then try to extrapolate to the rest of the country. The externality, even if present, may be small relative to the interests of the local residents in letting their local governments make decisions on their behalf.

One may be similarly skeptical regarding more philosophical justifications for universal service, at least as manifested in current policy. The 1996 Telecommunications Act amends the 1934 Federal Communications Act at §254(c)(1) by listing four categories a service should satisfy to be eligible for universal service support:

> (A) are essential to education, public health, or public safety;
>
> (B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
>
> (C) are being deployed in public telecommunications networks by telecommunications carriers; and
>
> (D) are consistent with the public interest, convenience, and necessity.

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[69] Kennard, n. 34 *supra*.

Broadband Internet service meets the last two criteria. The second is more problematic. Broadband service, whether through cable, DSL, or satellite, is used by only a small fraction of households today and is forecast to be used only by about 20% by the middle to the end of this decade. It therefore does not seem to be a service "subscribed to by a substantial majority of residential customers." In addition, although roughly 70% of households subscribe to cable,[70] it does not cover the entire universe of households in the United States. Hence, a universal service policy regarding broadband Internet access over cable would entail cable subsidies, which is not yet under serious consideration. The first criterion, that service be essential to education, public health, and safety, justifies FCC policies to fund Internet access to schools, libraries, and rural hospitals,[71] but broadband Internet service seems not yet to merit consideration as a service to which the "universe" has a right of low-cost access.

D. Relative Corruptibility

The final argument is that local governments are more prone to special-interest influence than the federal government. That the federal government gets it right, and local governments are corrupt or incompetent, is a popular view among federal officials. However, the record does not suggest that the federal government is less immune from special-interest influence. The 1984 Cable Act can be seen as an example of an industry that exploited economies of scale in influencing policy to get Congress to void the price terms of franchise contracts that system operators had accepted in bidding to provide service. Rather than renege on the contracts one at a time, the industry got Congress to renege on them all at once.

VIII. Concluding Caveat: The Holdup Concern

Were it up to me, cable systems would not have to offer open access to unaffiliated broadband Internet service providers. Perhaps fortunately, this matter is not up to me to resolve. In private matters, we let people make their own decisions, presuming they have the best information and incentives, even when some of us think others are mistaken. By the same token, in public matters we should devolve authority to lower levels of government unless we have

70 National Cable Television Association, www.ncta.com/glance.html, searched December 4, 2000.

71 See the FCC's description of such policies on links from its universal service" page, www.fcc.gov/ccb/universal_service/welcome.html.

reason to believe that information is inadequate, externalities are significant, or corruption is systematic. Regarding open access to cable systems, there seems little reason to believe that local governments lack relevant information. The effects of their decisions fall generally and primarily within the locality, insofar as their constituents reap most of the benefits and bear most of the costs of improved broadband service. Finally, the history of cable policy in the United States provides little reason to think that local governments are more susceptible to special-interest influence than the national government.

Before concluding, we should note an important qualification specific to the broadband cable context that might call into question local discretion over open access. The history of this issue is that the localities have acted to impose open access following mergers in which their authority over franchise transfers may be exercised. This also suggests a less benign motive, in which each locality sees an opportunity to threaten to hold up a nationwide, multibillion-dollar merger unless it can extract rents for itself. If every locality can do this, the need to get the consent of hundreds of franchise authorities could block efficient cable industry mergers. This threat could justify stripping local governments of the authority to restrict or impose conditions on transfer of the cable franchise.

It may be a vagary of the law if the only way localities are allowed to act regarding open access is when a transfer (as in a merger) or a reauthorization upon expiration opens the door to changes in the terms of the cable franchise. However, the possibility that local governments may use this authority to hold up a merger, rather than to improve the performance of their local broadband Internet markets, suggests a couple of limitations on what franchising authorities may do. First, to the extent possible, the policy initiative should be independent of a merger. One would have more confidence that a "holdup" is not happening if an open-access mandate would be enacted and enforced regardless of whether a merger took place.

Second, the open-access mandate should be restricted to structure and conduct only, and not bundled with in-kind payments (e.g., more access channels, free institutional networks) that the locality requires to approve the franchise transfer.[72] Distinguishing between the benefits from a behavioral policy and the benefits from an in-kind transfer is not always easy. But to the extent that open access is limited to its effects on the local broadband Internet service market, without

[72] I assume that explicit payoffs, over or under the table, would be ruled out.

substantial fiscal effects on the local government itself, the more confidence one might have that the locality is not engaged in a holdup of the merging parties.