



**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	GN Docket No. 09-191
)	
Preserving the Open Internet)	WC Docket No. 07-52
)	
Broadband Industry Practices)	

COMMENTS OF THE COMPETITIVE ENTERPRISE INSTITUTE

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The Commission has requested comment on two “under-developed issues” in its Open Internet proceeding on specialized services and mobile wireless platforms. The regulations on specialized and wireless services proposed in the Notice would harm consumers and undermine the Commission’s statutory goals. The challenges inherent in regulating these poorly understood aspects of broadband service underscore the serious downside of Open Internet regulation. The Commission should return to the drawing board and focus on developing a truly pro-consumer approach to telecommunications rulemaking—one that fosters the creation of content and infrastructure wealth without favoring certain industries or technologies over others.

Regulating Specialized Services Will Hinder Innovation and Undermine the Open Internet

The Commission’s Notice discusses at great length the challenges of maintaining the “investment-promoting benefits of specialized services while protecting the Internet’s openness.” It is worth noting at the outset that consumers have benefited tremendously from the growth of these specialized services in recent years. Traditional analog television is quickly disappearing as all-digital video networks grow increasingly commonplace.¹ At the same time, many providers now offer digital voice services that are far more advanced than traditional telephone service.² Other specialized services such as home security are becoming increasingly popular.³ Network providers are experimenting with a range of specialized services, which are not set in stone.⁴ The technical characteristics of specialized services vary dramatically, not only among intermodal competitors (cable, DSL, fiber, etc.), but also among firms using the same networking technologies in different geographic areas.

Shackling providers’ ability to experiment and innovate with specialized services will distort the evolution of these specialized services. If, for instance, the Commission were to require that specialized services abide by certain nondiscrimination principles, providers might simply avoid deploying such services altogether. Regulations that treat specialized services differently than traditional broadband services will invariably distort the investment decisions of network providers, causing them to shift resources to maximize their profits subject to the regulatory regime of the day. Under openness rules, therefore, even if all providers continue to offer broadband services that afford the same amount of openness offered by today’s Internet, the open Internet may still suffer from fewer opportunities than might have been possible otherwise.

¹ DSL Reports, “Comcast Joins Others In Ditching Analog,” June 19, 2008.

<http://www.dslreports.com/shownews/Comcast-Joins-Others-In-Ditching-Analog-95410>.

² DSL Reports, “Comcast Now Third Largest Phone Company,” Mar. 11, 2009.

<http://www.dslreports.com/shownews/Comcast-Now-Third-Largest-Phone-Company-101317>.

³ DSL Reports, “Comcast Jumps Into The Home Security Game,” Oct 8, 2010.

<http://www.dslreports.com/shownews/Comcast-Jumps-Into-The-Home-Security-Game-110800>.

⁴ Nate Anderson, “FCC proposes network neutrality rules (and big exemptions),” *ArsTechnica*, Oct. 22, 2009.

<http://arstechnica.com/tech-policy/news/2009/10/fcc-proposes-network-neutrality-rules-and-big-exemptions.ars>.

The Commission seems to take it as a foregone conclusion that content and application providers will forever depend on the open Internet first and foremost. While it is true today that the Internet is the most popular outlet for content and applications, it is far from certain that this will remain the case indefinitely. Indeed, in recent years, an array of content and application ecosystems have emerged that are partially or completely independent from the Internet.⁵ Ten or twenty years in the future, such ecosystems might conceivably become even more crucial to content and application providers than the Open Internet is today. A future Commission might then launch a similar inquiry to explore ways to “preserve and protect” whichever ecosystem happens to be the most popular and vibrant at that time—perhaps even to protect it from the Open Internet itself!

Regulations often result in negative unintended consequences, even when they deliver some benefits.⁶ In some cases, because of these negative consequences, regulations can actually end up undercutting the very objectives they are intended to advance. Even if Open Internet regulations further the Commission’s goal of providing greater certainty to application and content providers, such rules may nevertheless inhibit the growth of the open Internet in serious but unforeseen ways. When regulations are proposed that would harm existing firms, they are typically met with stiff resistance. Yet regulations that foreclose entire avenues of wealth creation that would have otherwise emerged rarely meet much opposition.⁷ In its efforts to advance the public interest, the Commission should act with special care to avoid stifling competitive processes that beget entirely new markets.

Proposals by the Commission to micromanage providers’ pricing and access practices with regards to specialized services are deeply troubling. In the Notice, the Commission suggests several possible regulatory approaches toward specialized services, including the mandatory unbundling of broadband service from other services, limitations on which kinds of specialized services providers may offer, transparency and disclosure requirements, a ban on exclusive specialized services, and a minimum capacity rule for broadband service.⁸ Each of these proposals risks serious harm to consumers. Even if the growth of specialized services actually threatens the open Internet, the Commission must tread very carefully in formulating rules aimed at preventing providers from circumventing nondiscrimination rules by pushing consumers toward specialized services.

⁵ See e.g. GigaOm, “The Apple App Store Economy,” Jan. 12, 2010, <http://gigaom.com/2010/01/12/the-apple-app-store-economy/>; see also Seeking Alpha, “Comcast’s On-Demand Video Service Worth More Than Blockbuster,” February 24, 2010, <http://seekingalpha.com/article/190359-comcast-s-on-demand-video-service-worth-more-than-blockbuster>; see also Philip Elmer-DeWitt, “Apple iTunes: 10 billion songs later,” *Fortune*, February 24, 2010. <http://tech.fortune.cnn.com/2010/02/24/apple-itunes-10-billion-songs-later/>.

⁶ Johan Norberg, “Regulation and Its Unintended Consequences,” RealClearMarkets.com, September 17, 2009. http://www.cato.org/pub_display.php?pub_id=10559 (“So even if the best and the brightest introduce regulation because they think it is in mankind’s best interest, there are unintended consequences. Indeed, bureaucracies and governmental authorities also have their own agendas and their own interests, and sometimes that trumps social welfare.”)

⁷ <http://cafehayek.com/2010/07/seen-and-unseen-2.html>

⁸ In the Matter of Further Inquiry Into Two Under-developed Issues in the Open Internet Proceedings, GN Docket No. 09-191, *Notice of Inquiry*, (rel. September 1, 2010) (“*Notice of Inquiry*”).

Unbundling of Broadband Service

The Commission's proposal to mandate the unbundling of broadband service from other services would likely result in higher prices for consumers, with minimal corresponding benefits. While most network providers today offer unbundled broadband service, they tend to price unbundled broadband service higher than when it is bundled with specialized services.⁹ This practice of offering bundled discounts may seem anti-consumer at first glance, but economic evidence indicates it tends to benefit consumers overall by pushing prices downward. Even in the case of broadband providers that possess market dominance, there is little reason to believe that bundled discounts will make consumers worse off—after all, monopolists have little incentive to pursue pricing strategies that push consumers toward rival products.¹⁰

Definitional Clarity & Disclosure

Disclosure mandates are very popular with the Commission as a means of correcting alleged market failures, but they come with a serious downside. While the Commission regards the absence of transparency regarding specialized services as problematic, the absence of universal disclosure is hardly unusual in a competitive market characterized by differentiated service offerings. After all, specialized services are a major competitive differentiator among service providers. To the extent that consumers prefer providers that disclose the details of their specialized services, consumers can weigh this factor against other aspects of service in deciding where to take their dollars.

The Commission fails to appreciate the extent to which proprietary product elements are valuable elements of a competitive marketplace. It is commonplace, particularly in high-tech industries, for competing firms to offer services to consumers that “just work” without publicizing intricate details about these services' underlying functionality.¹¹ Protecting some product attributes as trade secrets is often preferred by businesses as a means of acquiring and maintaining economic advantage over competitors.¹² Network providers'

⁹ See e.g. DSL Reports, “US Broadband Price Comparisons,” May 22, 2007.

<http://www.dslreports.com/shownews/83886>.

¹⁰ See Daniel A. Crane and Joshua D. Wright, “Can Bundled Discounting Increase Consumer Prices Without Excluding Rivals? A Comment On “Tying, Bundled Discounts, And The Death Of The Single Monopoly Profit” By Einer Elhauge,” *Competition Policy International*, Vol. 5, No. 2, Autumn 2009, pp. 209-220

http://www.law.gmu.edu/assets/files/publications/working_papers/1029CanBundledDiscountingIncrease.pdf. (“The best available empirical evidence suggests the frequency of instances of bundled discounts and tying arrangements resulting in harm to consumers as compared to those arrangements improving consumer welfare is very low.”)

¹¹ Google, for instance, does not disclose its search algorithm – known as Google's “secret sauce” – which is used to determine page rankings on its search engine. See Steven Levy, “Exclusive: How Google's Algorithm Rules the Web,” *Wired*, February 22, 2010.

http://www.wired.com/magazine/2010/02/ff_google_algorithm/all/1.

¹² Berin Szoka, “First Amendment Protection of Search Algorithms as Editorial Discretion,” *The Technology Liberation Front*, June 4, 2009. <http://techliberation.com/2009/06/04/first-amendment-protection-of-search-algorithms-as-editorial-discretion/>.

bandwidth is generally a scarce resource, and providers are constantly experimenting with a range of approaches toward managing congestion and divvying up bandwidth between specialized services and broadband.

The Commission also fails to account for harmful distortions that might result from “disclosure” or “truth in advertising” rules. Indeed, the information asymmetries that exist in the market for specialized services likely constitute *efficient*, desirable asymmetries indicative of a competitive and innovative marketplace. Before moving ahead with a disclosure rule, the Commission should carefully assess the possible reasons why some providers might prefer not to disclose certain specific attributes of their specialized service offerings. As the Commission has acknowledged previously in the Open Internet proceeding, imposing onerous disclosure mandates risks confusing consumers and saddling service providers with excessive, unwarranted burdens.¹³

The Notice also omits mention of the myriad information sources available to consumers regarding specialized services other than service providers themselves. Today, numerous bloggers, news reporters, advocacy groups, websites, and other stakeholders vigilantly monitor all aspects of network operators’ behavior.¹⁴ While such public scrutiny does not have the force of law, it nevertheless represents a crucial element of *market discipline* that checks potentially anti-consumer behavior by service providers. These disciplinary mechanisms inherent to competitive markets are far more flexible and fast-moving than federal regulatory bodies. The Commission should err against regulating well-functioning markets simply because a handful of “mistakes” have been made over the years by competing firms.¹⁵ As consumer preferences continue to evolve, service providers can and will amend their disclosure policies, as they have with other policies and terms that have proven unpopular among consumers.¹⁶

Non-Exclusivity

The Commission’s proposal to bar broadband providers from entering into exclusive deals involving specialized services would, in effect, extend the proposed Internet nondiscrimination principle to all U.S. networks that offer broadband service. Such a rule would render illegal an array of existing business practices that overwhelmingly benefit consumers.¹⁷ As numerous scholars have noted in their writings on open Internet

¹³ In the Matter of Preserving the Open Internet Broadband Industry Practices, GN Docket No. 09-191, *Notice of Proposed Rulemaking*, (rel. October 22, 2009) ¶ 126.

¹⁴ Karl Bode, “The EFF ‘Test Your ISP’ Project,” DSL Reports, November 28, 2007. <http://www.dslreports.com/shownews/The-EFF-Test-Your-ISP-Project-89789>.

¹⁵ Timothy B. Lee, “The Durable Internet: Preserving Network Neutrality without Regulation,” *Cato Policy Analysis No. 626*, November 12, 2008, p.25. <http://www.cato.org/pubs/pas/pa-626.pdf>.

¹⁶ See e.g. Martin H. Bosworth, “AT&T Changes Terms Of Service After Outcry,” ConsumerAffairs.com, October 11, 2007. http://www.consumeraffairs.com/news04/2007/10/att_tos.html.

¹⁷ See e.g. Spencer Ante, “Verizon Turns to the Umpire,” *BusinessWeek*, March 23, 2006. http://www.businessweek.com/technology/content/mar2006/tc20060323_818464.htm. (“Kevin Werbach, former counsel for new technology policy at the FCC, says the commission has largely let satellite operators have exclusive content relationships in hopes the arrangements will help satellite players enter the cable market.”)

regulation, exclusivity arrangements between service and content providers—including those involving a single firm engaged in vertical integration—tend to make consumers better off, even if they sometimes harm certain competitors or other stakeholders.¹⁸ In the antitrust literature—which has in recent years focused largely on enhancing consumer welfare—a body of evidence indicates that vertical integration and other vertical arrangements, such as exclusivity deals, tend to deliver substantial benefits to consumers.¹⁹

Establishing new rules on specialized services would inject a great deal of uncertainty into the market for voice, video, and other specialized services, thereby discouraging network operators' and content providers' investment in such services. In a regulatory environment in which a single network provider's unpopular, high-profile action could spur the creation of new rules governing specialized services, all broadband providers would likely steer clear of actions that might run afoul of the Commission's guidelines. The mere threat of regulation may prevent entire business models from emerging. While this may seem desirable to some advocates of Open Internet regulations,²⁰ discouraging firms from taking the very risks that spur market evolution makes *all networks* worse off by stifling the “Yin and Yang of Innovation”—the co-evolution of open and proprietary platforms.²¹

Mobile Wireless Platforms

The Commission asks “how, to what extent, and when” openness principles should apply to “mobile wireless platforms.” The answer to this question, in short, is that openness rules *should not apply* to wireless platforms in any way, shape, or form. Openness mandates are even more likely to harm consumers in the mobile wireless market than they are in the wireline broadband market. This is because the mobile wireless market is both more competitive and more vulnerable to regulatory overreach than the wireline broadband market.

The alleged benefits of Internet openness rules in the wireline broadband market—greater innovation, investment, freedom of expression, and consumer choice—completely fly out the window when viewed in the context of the mobile wireless market. While most consumers have two or fewer choices of wireline broadband providers, consumers in the mobile wireless broadband market typically enjoy at least four choices (in some cases, many more). Despite the Commission's decision in its recent Mobile Wireless Competition Report²² against concluding that the CMRS marketplace is “effectively competitive,” all

¹⁸ Barbara Esbin, “Net Neutrality: A Further Take on the Debate,” *Progress & Freedom Foundation Progress on Point*, December 2009. <http://www.pff.org/issues-pubs/pops/2009/pop16.26-net-neutrality-further-take-on-debate.pdf>.

¹⁹ See generally, Frank H. Easterbrook, *The Limits of Antitrust*, 63 *Tex L Rev* 1, 7, 10-11, 27-28 (1984). Also, see e.g. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1022682.

²⁰ See e.g. Jonathan Zittrain, “Net neutrality: the FCC takes back the ball,” *Concurring Opinions*, September 7, 2010. <http://www.concurringopinions.com/archives/2010/09/net-neutrality-the-fcc-takes-back-the-ball.html>.

²¹ Bret Swanson, “Collective vs. Creative: The Yin and Yang of Innovation,” *Entropy Economics*, January 12, 2010. <http://www.bretswanson.com/index.php/2010/01/collective-vs-creative-the-yin-and-yang-of-innovation/>.

²² See FCC Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile

available data indicate that the wireless market in the United States is among the world's most competitive and best performing.²³ Compared to the wireline broadband market, in the wireless sector it can be stated with even greater certainty that the market processes that discipline competing firms, spur innovation, and generally advance consumer welfare will discourage harmful practices while encouraging beneficial ones.

Regulating wireless network devices and mobile applications is especially dangerous due to the fast-moving nature of the mobile marketplace. Intervention by the Commission in this space in the name of maximizing “consumer choice, innovation, and freedom of expression” would almost certainly have precisely the opposite effects. Both handsets and applications continue to evolve rapidly as consumers increasingly demand rich mobile experiences. Just four years ago, the mobile application marketplace was virtually nonexistent. With the advent of the iPhone, numerous developers began writing applications for the iPhone App Store. Then, as the Android mobile platform took off in 2010, many developers began writing apps for the Android Market as well. Today, at least three mobile application distribution platforms each enjoy an installed base exceeding 10 million users, and these figures are in a constant state of flux.²⁴

Consumers today enjoy a staggering array of choices among mobile platforms, applications, and devices. According to the market research firm IDC, five mobile operating systems each enjoy at least 6 percent global market share.²⁵ Remarkably, IDC projects that the market for mobile operating systems will grow even more fragmented over the next four years. Rapid growth in mobile applications is also expected to continue, with revenues expected to grow more than 150 percent in 2010, according to Research2Guidance.²⁶ The wireless sector is a poster child for innovation and wealth creation—and it is no coincidence that this space is largely free from federal regulation.

To be sure, not all mobile platforms afford complete openness to their users, and not all applications are permitted for use on all mobile devices and networks. Nearly all mobile ecosystems include some proprietary elements. The iPhone is the most well-known example of a “walled garden,” and Apple routinely rejects applications that duplicate “core functionality” or run afoul of its App Store rules.²⁷ Even the Android platform includes a

Wireless, Including Commercial Mobile Services, May 20, 2010, p. 5,

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-81A1.pdf.

²³ Comments of AT&T to the Federal Communications Commission in the Matter of The State of Mobile Wireless Competition, WT Docket No. 10-133, July 30, 2010, pp. 8-27.

http://www.att.com/Common/about_us/public_policy/ATT_Competition_07-30-10.pdf.

²⁴ See e.g. “List of digital distribution platforms for mobile devices,” Wikipedia,

http://en.wikipedia.org/wiki/List_of_digital_distribution_platforms_for_mobile_devices.

²⁵ See IDC, “Worldwide Converged Mobile Device Operating System Market Shares and 2010-2014 Growth,” September 7, 2010. Available at

<http://picasaweb.google.com/lh/photo/qQingE0rTd8yp1SXLrr4FA?feat=embedwebsite>.

²⁶ Alex Wilhelm, “The Mobile Application Market To Nearly Triple In Size This Year,” TheNextWeb.com, Aug. 20, 2010. <http://thenextweb.com/mobile/2010/08/20/the-mobile-application-market-to-nearly-triple-in-size-this-year/>.

²⁷ Jonathan Zittrain, *The Future of the Internet And How to Stop It*. See also Nate Anderson, “Book Review: Jonathan Zittrain's ‘The Future of the Internet And How to Stop It,’” June 18, 2008.

<http://arstechnica.com/old/content/2008/06/book-review-2008-06-2-admin.ars>

“remote kill switch” capability that enables Google to remove installed applications from user devices.

Yet these variations in the level of openness afforded by mobile platform operators ultimately benefit innovation and freedom. Even as tens of millions of users have flocked toward Apple’s iPhone “walled garden,” a growing number of users have purchased devices that run the relatively open Android operating system. When Verizon Wireless launched the Motorola Droid in November 2009, it ran a slew of television advertisements touting the phone’s permissiveness toward “open development.”²⁸ The concurrent success of Android-based devices and the Apple iPhone illustrates that while openness enjoys widespread appeal, it is not the only factor that matters to consumers. Some users care more about product attributes that conflict with openness at times, such as security, uniformity, and perhaps even innovation itself. The consumer benefits of allowing open and closed ecosystems to coexist are nowhere more evident than in the mobile wireless space.²⁹

Imposing openness rules on mobile wireless platforms would harm consumers of wireline broadband services by stifling the emergence of competitive alternatives to cable, DSL, and fiber broadband providers. Openness mandates are especially detrimental to wireless broadband platforms, which are increasingly competing head to head against wireline broadband providers. As the Department of Justice noted in its Ex Parte letter to the FCC in January 2010, “Wireless... appears to offer the most promising prospect for additional competition in areas where user density or other factors are likely to limit the construction of additional broadband wireline infrastructure.”³⁰ Competition – not regulation – is the most effective means of deterring truly undesirable broadband practices. Thus, the Commission should be especially careful to avoid regulations that hinder the emergence of wireless alternatives to wireline broadband services.

Today’s ubiquitous 3G wireless broadband, which offers average downstream throughput in the range of 500kbps to 1.0mbps, is a vastly superior substitute for cable or DSL broadband than traditional dial-up Internet service.³¹ Emerging wireless technologies promise to offer significantly greater throughput than existing 3G networks, posing an even

²⁸ See Verizon Wireless television advertisement, “iDon’t, Droid Does from Verizon,” October 17, 2009.

<http://www.youtube.com/watch?v=FoYr8-uG5C0>.

²⁹ Adam Thierer, “Why Zittrainian Techno-Pessimism is Unwarranted,” Concurring Opinions, September 7, 2010. <http://www.concurringopinions.com/archives/2010/09/why-zittrainian-techno-pessimism-is-unwarranted.html>. (“The presence of “closed” systems or devices on the market doesn’t mean innovation has been foreclosed among more “open” systems or platforms. In other words, a hybrid future is both desirable and possible. We can have the best of both worlds: a world full of some closed systems or even “tethered appliances,” but also plenty of generativity and openness. Think iPhone vs. Android vs. Windows Mobile vs. the many other mobile operating systems.”)

³⁰ Ex Parte Submission of the U.S. Department of Justice to the Federal Communications Commission In the Matter of Economic Issues in Broadband Competition, January 4, 2010.

<http://www.justice.gov/atr/public/comments/253393.htm>

³¹ Mark Sullivan, “A Day in the Life of 3G,” *PC World*, June 28, 2009.

http://www.pcworld.com/article/167391/a_day_in_the_life_of_3g.html

greater competitive threat to existing cable, DSL, and fiber providers.³² Currently, several providers offer WiMax-based mobile broadband service in several major U.S. cities that compares favorably to typical DSL connections in terms of both throughput and price.³³ In late 2010, Verizon Wireless plans to launch its 4G Long-Term Evolution (LTE)-based network in several dozen U.S. metropolitan areas. By 2013, the carrier anticipates that its network will encompass nearly all U.S. households.³⁴ AT&T is also building a nationwide LTE network which is expected to cover 70 to 75 million households by the end of 2011.³⁵ In real-world tests, LTE offers downstream throughput in the range of 5mbps to 12mbps, which is comparable to today's typical residential broadband connections.³⁶ If there is a sure-fire method of stunting the growth of this vibrant sector, it is through imposing Ma Bell-era openness mandates on all mobile wireless providers.

Conclusion

Regulatory intervention by the Commission aimed at furthering the development of successful platforms and technologies has long *obstructed* the creation of communications wealth in the United States.³⁷ There is no reason to believe that Open Internet regulations will break with this pattern. And even if nondiscrimination rules benefit consumers in the near future, what will happen decades hence, when technological change has rendered today's vaunted Open Internet an archaic remnant of an earlier era? In its history, when has the Commission ever been flexible and nimble enough to eliminate a longstanding yet unneeded regulatory regime without first spending many years (if not decades) dabbling in endless inquiries, proceedings, and legal battles?

In its long march forward on Open Internet rulemaking, the Commission has repeatedly overlooked several fundamental questions that must be addressed before any new regulations can be justified. To date, the Commission has failed to demonstrate that future actions undertaken by broadband providers that undermine the "Internet's openness" are likely to harm, rather than benefit, consumers. Moreover, in light of the complex and rapidly evolving engineering challenges that network providers face, there is little reason to believe that the Commission can actually establish regulations and adjudicatory bodies that are better equipped than competing Internet providers to answer the profound technical and economic questions that surround network operation, access, and pricing.³⁸

³² Sascha Segan, "Sprint XOHM (Mobile WiMax), *PC Magazine*, October 1, 2008.

<http://www.pcmag.com/article2/0,2817,2331479,00.asp>

³³ See e.g. Dina Spector, "Top 10 Best WiMax-Covered Cities," *Business Insider*, Sep. 30, 2010.

<http://www.businessinsider.com/cities-with-da-best-wimax-coverage-2010-9>

³⁴ Brad Smith, "Verizon Details LTE Launch Plans," *WirelessWeek*, October 7, 2010.

<http://www.wirelessweek.com/News/2010/10/Technology-Verizon-Details-Launch-Plans-LTE/>

³⁵ Phil Goldstein, "AT&T to launch LTE by mid-2011," *FierceWireless*, September 17, 2010.

<http://www.fiercewireless.com/story/t-launching-lte-mid-2011/2010-09-16>

³⁶ Mike Dano, "The real world: Comparing 3G/4G speeds," *FierceWireless*, May 25, 2010.

<http://www.fiercewireless.com/story/real-world-comparing-3g-4g-speeds/2010-05-25>

³⁷ Clyde Wayne Crews Jr., Comments to the Federal Communications Commission in the Matter of Preserving the Open Internet Broadband Industry Practices, January 14, 2010.

<http://fjallfoss.fcc.gov/ecfs/document/view?id=7020373533>

³⁸ See e.g. Ronald H. Coase, "The Marginal Cost Controversy," in *The Firm, The Market, and the Law*, pp. 75-94.