



# Non-discrimination rules for ISPs and vertical integration: Lessons from cable television

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## ABSTRACT

The experience of cable television indicates that vertically integrated ISPs have plausible incentives to favor their affiliated content and to restrict entry of nascent rival content services, but these incentives are weakened in some respects, and strengthened in others, by differences in the economic architectures of cable and Internet broadband. Non-discrimination regulations designed to control such behavior are potentially more effective than in cable, but rules governing discrimination both in the upstream access and the downstream retail markets (as the FCC's no-unreasonable-discrimination rule appears to do) are likely to be necessary for effectiveness. Beneficial effects of vertical integration on financing and entry of cable programming networks should also apply to Internet video content development, but emergence since the 1970s of a robust programming supply industry with few vertical ties to cable suggests that such benefits will be less significant in the ISP case. Finally, the history of both the cable and ISP industries makes evident that the fundamental policy concern should not be vertical integration but horizontal market shares of ISPs, both at the local and national levels.

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## 1. Introduction

A common claim of network neutrality advocates is that if left unregulated, the Internet will come to resemble cable TV, where only channels selected by the cable operator are available in any given local area.<sup>2</sup> Although such visions may seem extreme if taken literally, they reflect the central question behind the Open Internet rules adopted by the Federal Communications Commission (FCC) in December, 2010 (FCC, 2010b): if broadband internet service providers (ISPs) have bottleneck power at the local level, how might they use it to restrict or control consumers' access to information or other Internet services?

A prominent aspect of this question is how vertical ownership ties between ISPs and content suppliers might affect Internet users' access to information (FCC, 2009b). The potential threat of joint ISP/content ownership on content supply was discussed in the FCC's October, 2009 *NPRM* proposing the Open Internet rules and in the 2010 *Report and Order*; and it clearly motivated extensive FCC and U.S. Dept. of Justice reviews of the Comcast/NBC-Universal merger, which as approved

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<sup>2</sup> See, for example, Mackenzie (2006), Lessig and McChesney (2006), and SciTechBlog (retrieved from CNN: <http://scitech.blogs.cnn.com/2009/10/28/a-world-without-net-neutrality/>).

in January, 2011 combined a major ISP and cable TV operator (Comcast) with substantial television programming assets (NBC-Universal; FCC, 2011; DOJ, 2011). The broad premise of this paper is that the experience of the cable television industry, which has a long history of both vertical and horizontal ownership ties, offers useful parallels to the current network neutrality issues.

As in the cable case, there have been two distinct policy concerns about the effects of ISP integration into content. Getting most attention is that unconstrained ISPs may discriminate against non-vertically affiliated online programming content services, thus reducing competition in programming supply—especially by restricting entry of “independent” program suppliers (FCC, 1990, p. 40). The other concern is that ISPs will limit access by competing ISPs to “must have” programming that they control vertically, thus reducing competition in the ISP market (FCC, 2009b, pp. 70–72).

The focus of this paper is on the former: how vertical integration may affect competition in the Internet content market, and thus the amount and diversity of that content. To this end, it also addresses a related policy question: will FCC regulations attempting to prevent ISP content discrimination be effective in the presence of vertical integration? In searching for answers, attention is directed to professionally produced and copyrighted audio-visual content (although the same principles may apply more generally to other types of online information, such as user-generated content, or to other services such as VoIP or retailing).

At the outset, larger aspects of the network neutrality debate are recognized to be beyond the scope of this paper. These include issues of infrastructure investment, the general effects of access pricing rules on the total supply of content, and the viability of FCC regulation vs. antitrust enforcement. Numerous authors have investigated these and related questions in the academic literature or in submissions to regulatory proceedings.<sup>3</sup> For a recent survey of the economic literature on network neutrality, see Schuett (2010).

The precursor of the current ISP/content ownership issue was the open access controversy in the late 1990s and early 2000s about whether cable systems or telcos should be required to offer competing ISPs access to their platforms. That debate culminated in conditions imposed in 2000 by the Federal Trade Commission (FTC) and the FCC on the AOL-Time Warner merger. Stemming from concerns that it would use its cable branch to protect AOL (at that time the leading ISP) from competition, the merged firm was required to contract on equal terms with one or more unaffiliated ISPs (FCC, 2001a, 2001b). AOL's then dominant instant messaging (IM) service was also required to offer interoperability with certain unaffiliated, competing IM services (FCC, 2001a, 2001b). Many authors, notably Hogendorn (2005), Farrell and Weiser (2003), Rubinfeld and Singer (2001), Faulhaber (2004), Werbach (2002) and Speta (2000) offered economic analysis and policy commentary on the open access debate. Yoo (2002) reviewed the economic literature on vertical integration in cable and broadcasting and applied those lessons to ISPs to argue against government-mandated open access.

While the economic and legal analysis of the ISP and IM vertical ownership question has parallels to the current content ownership issues, those issues have changed with the disappearance of open access as a meaningful business model for broadband ISPs (Rosston, 2009). Apart from minor discussion in recent analysis of network neutrality (e.g., Economides, 2008; Yoo, 2009), ISP integration into content has received little academic attention. Also, plentiful policy commentary on the ISP/content ownership issue has not substantively considered the lessons from economic research on vertical integration in cable television.

In summary, this article argues that vertically integrated ISPs have plausible incentives to favor their affiliated content and to restrict entry of nascent rival content services, but that these incentives are weakened in some respects, and strengthened in others, by differences in the economic architectures of cable systems and Internet broadband. It is also contended that non-discrimination rules governing both the upstream access and downstream retail markets are likely to be necessary for the rules to be effective. In this respect, the FCC's explicit focus in the 2010 *Report & Order* on ISP behavior both in the access market (notably the implied prohibition of pay-for-priority between ISPs and content providers) and in the retail market (notably enhancement of end user control), rather than the 2009 *NPRM's* focus on the access market alone, is a positive step toward increasing effectiveness of the regulations. Certain dynamic benefits of vertical integration on financing and entry of programming networks that were identified by earlier research on the cable industry are likely to apply to the ISP case, but it is speculated that these benefits may be less important than in cable.

After discussing social objectives and a brief background on the policy debate in Section 2, empirical studies of the effects of vertical integration in cable are reviewed in Section 3. This analysis is then applied to ISPs, and the likely effects of non-discrimination restraints considered in Section 4. The potential benefits of ISP vertical integration are considered in Section 5, followed by concluding remarks in Section 6.

## 2. Social objectives and policy background

The broad social goals for Internet content presumed in this article are uncontroversial. As with products and services more generally, economic efficiency, which broadly translates into levels of prices, product variety and product quality that reflect consumer demand, is desirable. Viewed dynamically, efficiency requires an environment of creativity and innovation in the supply of content. In turn, that environment requires conditions of competition and free entry into

<sup>3</sup> See especially Lee and Wu (2009), Hermalin and Katz (2007), Hogendorn (2007), Economides and Hermalin (2010), Economides and Tag (2012), Economides (2008). See also Atkinson (2008) and Greenstein (2007) for historically based policy analysis.

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