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Implications for Economic Regulation of Cable Television

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IMPLICATIONS FOR ECONOMIC REGULATION OF CABLE TELEVISION

NEIL HAMILTON†

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I. INTRODUCTION

Cable television differs from conventional broadcast television

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in a number of ways, from the method of transmission¹ to the types of programming available.² Cable can also deliver a variety of services such as business data transmission, home security, medical alert, and energy management systems to its subscribers.³ Cable's two-way communications capability clearly distinguishes its services from those of conventional television.

As more advanced cable systems have developed,⁴ many other new technologies have emerged. These technologies provide services quite similar to those offered by cable.⁵ As a result, cable

1. Conventional broadcast television "consists of free over-the-air VHF and UHF television stations, including both advertiser-supported and public stations." J. LEVY & F. SETZER, MEASUREMENT OF CONCENTRATION IN HOME VIDEO MARKETS 41 (December 23, 1982) (Staff Report of Office of Plans & Policy of the Federal Communications Commission) [hereinafter cited as FCC Staff Report 1982]. Conventional television operates on limited frequencies of the broadcast spectrum which are assigned and regulated by the Federal Communications Commission (FCC). See D. GINSBERG, REGULATION OF BROADCASTING 11, 14 (1979).

Cable television "consists of a well-placed television antenna . . . connected to the sets of . . . subscribers" either by coaxial or fiber-optic cable. G. K. WEBB, THE ECONOMICS OF CABLE TELEVISION 2 (1983). Coaxial cable consists of a copper wire encased in plastic and aluminum. *Id.* The cable uses electric currents to transmit signals. *Id.* at 49. Fiber optic cable is made from glass fibers and uses light to transmit signals. Fiber optic cable does not corrode, is not affected by electrical storms and, perhaps most importantly, has much more channel capacity than coaxial cable. *Id.* Despite these advantages, fiber optic cable is not yet widely used because of increased technological complexity and cost. *Id.*; see also D. GINSBERG, *supra*, at 341 (graphic representation of cable system).

2. Conventional television offers programming paid through advertiser or public support. See FCC Staff Report 1982, *supra* note 1, at 41.

Cable television offers enhanced reception of local signals, imported signals, pay cable, and two-way capability. G. K. WEBB, *supra* note 1, at 5-6, 11, 13-14. Pay cable offers box office motion pictures and sports programming, in addition to other special program selections. *Id.*

3. G. K. WEBB, *supra* note 1, at 13-14. Two way capability allows subscribers to communicate with a computer located at the cable distribution center. These services require a keyboard attached to the consumer's television set. *Id.* at 2, 11, 13. For a discussion of regulatory implications arising from cable's two-way capability, see Lloyd, *Cable Television's Emerging Two-Way Services: A Dilemma for Federal and State Regulators*, 36 VAND. L. REV. 1045 (1983).

4. See G. K. Webb, *supra* note 1, at 49. A coaxial cable and a fiber optic cable of the same diameter can carry forty channels and one thousand channels respectively. *Id.*

Cable companies can also shift programming into different subscriber "tiers," in order to charge different rates for specific channels. For example, the Minneapolis cable system has four tiers, the first being free and the remaining tiers priced at \$1.95, \$8.45, and \$10.95 respectively. Rather than raising the price of a tier, the cable company can move popular cable channels such as ESPN (sports programming) or the Black Entertainment Network into higher-priced tiers. See *Minneapolis Cable TV Firm Submits Changes in Pricing*, Minneapolis Star & Trib., Jan. 25, 1984, at 1B, col. 1.

5. These technologies include subscription television (STV), see generally *infra* note 30; multipoint distribution service (MDS), see generally *infra* note 31; satellite master antenna television (SMATV), see generally *infra* note 32; direct broadcast satellites (DBS), see

television finds itself in an increasingly competitive marketplace,⁶ yet subject to governmental regulations⁷ not shared by these competitors.

Traditionally, cable systems have been subject to regulation because of their natural monopoly characteristics.⁸ Natural monopoly conditions exist where the entire demand in a market can be satisfied at lowest cost by one producer.⁹ For example, an electric distribution company or local telephone company finds it progressively cheaper to provide extra units of electricity or telephone service.¹⁰ Cable services enjoy the same economies of scale, that is, the cost of production for the cable company decreases with each

generally infra notes 65-71 and accompanying text; and low power television (LPTV), *see generally infra* notes 60-64 and accompanying text. All of these technologies are capable of delivering broadcast signals to individual subscribers.

6. Many authors and studies have concluded that cable systems exist in an increasingly competitive market. The FCC recently noted the increasing competition in the communications marketplace resulting from cable, MDS, DBS, LPTV, SMATV, and STV. *See* Repeal of the "Regional Concentration of Control" Provisions of the Commission's Multiple Ownership Rules, 49 Fed. Reg. 2478, 2482-83 (1984) (to be codified at 47 C.F.R. pt. 73) (proposed Jan. 20, 1984) [hereinafter cited as Ownership Rules]. The FCC has stated that this increase in competition reduced the need for ownership restrictions in the communications industry. *See FCC proposes to end limiting regional ownership of stations*, *Minneapolis Star & Trib.*, Jan. 14, 1984, at 12C, col. 1.

A study conducted in the Los Angeles area by the consulting firm of Browne, Bortz & Coddington concluded that STV has significant difficulty penetrating areas already served by cable. BROWNE, BARTZ & CODDINGTON, *THE IMPACT OF COMPETITIVE DISTRIBUTION TECHNOLOGIES ON CABLE TELEVISION* 8 (March 1982) (Report prepared for Nat'l Cable Television Ass'n) [hereinafter cited as NCTA REPORT].

Another industry analysis concluded that areas not cabled by 1986 might face competition from DBS systems. *See* DONALDSON, LUFKIN & JENRETTE SEC. CORP., *INDUSTRY VIEWPOINT* 64 (1982) [hereinafter cited as INDUSTRY VIEWPOINT].

7. Cable systems are subject to regulation at the federal, state, and local level. *See* Herbst, Matz & Gibbs, *A Review of Federal, State and Local Regulation of Cable Television in the United States*, 10 WM. MITCHELL L. REV. 377 (1984) [hereinafter cited as Herbst].

8. "Natural monopolies have historically been subject to regulation in order to secure the advantages of size while preventing [the monopolist] from raising prices to levels which exploit its monopoly position." F. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 520 (1973).

9. *See* Hamilton & Hamilton, *Duopoly in the Distribution of Electricity: A Policy Failure*, 28 ANTITRUST BULL. 281, 284 n.10 (1983). *See generally* 2 A. KAHN, *THE ECONOMICS OF REGULATION* 119 (1971).

10. *See* R. SCHMALENSEE, *THE CONTROL OF NATURAL MONOPOLIES* 3-7 (1979).

Natural monopoly refers to a condition in which a firm has increasing returns to scale for finite outputs, so that the firm's average cost of production decreases as its production expands. When such a condition exists, a single company can provide a product or service more efficiently than two competing firms can.

Note, *The Federal Communications Commission And Interactive Cable Technology: The Case for Minimal Regulation*, 97 HARV. L. REV. 565, 568 (1983).

new customer.¹¹

Regulation of cable has been premised on the existence of these natural monopoly conditions and the concomitant monopoly power which sometimes accompanies these conditions.¹² Public concern has focused on cable companies which, if unchecked, could raise prices to monopoly levels and engage in other anticompetitive practices.¹³ Cable systems have, therefore, been subject to regulation at the federal,¹⁴ state,¹⁵ and local¹⁶ levels.

Competitive pressure from substitute technologies can keep the prices charged by a natural monopoly near its costs.¹⁷ This competitive pressure exists and is continuing to build in the communications industry.¹⁸ Thus, the continued economic regulation of cable television appears at best unnecessary and at worst detri-

11. See G. K. WEBB, *supra* note 1, at 63.

12. The Supreme Court has defined monopoly power as "the power to control prices or exclude competition." *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966) (quoting *United States v. E.I. DuPont de Nemours & Co.*, 351 U.S. 377, 391 (1956)). Typically, natural monopoly markets are regulated where only one firm supplies the market and that firm has "dominance" in the relevant market. Although cable systems have the physical characteristics of natural monopolies, few have dominance in their markets. See Note, *supra* note 10, at 568-70.

13. See G. K. WEBB, *supra* note 1, at 179-80. Webb noted, however, that rather than regulating the cable companies' monopoly power, many municipalities have simply used that power to their own advantage in order to obtain municipal revenues. *Id.* Another anticompetitive practice frequently seen in the cable market is the territorial allocation of markets. See, e.g., *Affiliated Cable Corp. v. City of Houston*, 700 F.2d 226 (5th Cir. 1983) (territorial market division of Houston by applicants for cable franchises).

14. See 47 C.F.R. §§ 76.1-617, 78.1-115 (1982); Herbst, *supra* note 7, at 378-96; see also Noam, *Federal and State Roles in Telecommunications: The Effects of Deregulation*, VAND. L. REV. 949 (1983) (new regulatory approach needed at state and federal level).

15. See, e.g., MINN. STAT. §§ 238.01-35 (1982 & Supp. 1983) (Cable Communications Act); 4 MINN. CODE AGENCY R. §§ 4.001-231 (1982) (Rules of the Cable Communications Board); Donaldson, *Minnesota's Approach to the Regulation of Cable Television*, 10 WM. MITCHELL L. REV. 413, 418 n.28 (1984) (survey of state cable television statutes).

16. See Herbst, *supra* note 7, at 407-11 (typical provisions in local franchise agreements).

17. See S. BREYER, *REGULATION AND ITS REFORM* 186 (1982) (competitive markets' tendency to decentralize economic power).

18. See *supra* note 6. Many of the technologies that will compete with cable in the future are not currently operational but will be within one or two years. See *infra* notes 59-86 and accompanying text. One author has argued that cable will achieve dominance because of its two-way capacity, its multiplicity of channels, its ability to charge fees for viewing and its ability to narrowcast. See Noam, *Towards An Integrated Communications Market: Overcoming The Local Monopoly of Cable Television*, 34 F. COMM. L.J. 209, 233-40 (1982). Other technologies, however, offer many of these features. MDS and DBS offer many channel selections; DBS in combination with a telephone offers two-way capability; DBS has the ability to narrowcast; and virtually all technologies have the ability to monitor and charge for viewing. For a discussion of DBS, see *infra* notes 65-71 and accompanying text.

mental to the rapid and continuing technological developments in this field.¹⁹

This Article explores the implications of the continued economic regulation of cable television. Part II explains the market in which cable operates and the degree to which substitutes check the market power of cable. Part III offers recommendations for changes in the current regulatory framework which will enable cable to continue competing in the rapidly changing communications industry.

II. CONCENTRATION IN THE CABLE MARKET

A. Market Definition

1. Cross-Elasticity

To assess the market power of cable television, the market boundaries for cable must be established.²⁰ Market boundaries can be determined by observing the degree to which consumers switch to substitute products in response to price increases for cable services.²¹ This behavior, as measured by the cross-elasticity of demand, is the preferred method for determining market boundaries.²²

To properly measure cross-elasticity, information on the prices charged by several companies over a long period of time must be available.²³ In the case of video programming, no such data is available for two reasons. First, audiences do not pay to receive conventional television broadcasting,²⁴ which is perhaps the most

19. See *infra* notes 97-118 and accompanying text.

20. See FCC Staff Report 1982, *supra* note 1, at 34; P. AREEDA, *ANTITRUST ANALYSIS: PROBLEMS, TEXT, CASES* ¶ 231 (3d ed. 1981).

21. See P. AREEDA, *supra* note 20, at ¶ 230. "The market power of a firm . . . is limited by the availability of substitutes to which consumers can switch if the firm raises prices above competitive levels or gives inferior service." FCC Staff Report 1982, *supra* note 1, at 34-35. Substitution can occur in two ways: through the consumer moving to an alternative product or through shifts in production capacity of firms in the industry. *Id.* at 35.

22. See 2 P. AREEDA & D. TURNER, *ANTITRUST LAW* ¶ 519a (1978).

23. See FCC Staff Report 1982, *supra* note 1, at 37.

24. *Id.* The FCC did note that consumers pay indirectly for advertiser-supported programming:

Consumers may pay indirectly for the programming they receive through higher prices for advertised products, though whether total advertising expenditures would fall in the absence of television is unclear. In any event, no positive price is associated with receipt of a specific advertiser-supported signal, so that price does not affect viewers' choice to receive the signal or not.

Id. n.7.

evident substitute for cable. Second, many of the technologies competing with cable are new and in-depth substitutability data is unavailable. Thus, the determination of which technologies are actual competitors of cable must rest on reasoned estimation rather than on rigorous scientific proof.

2. Reasonably Interchangeable Products

The United States Supreme Court considers two products to be in the same market if they are "reasonably interchangeable."²⁵ In making this determination, the Supreme Court considers both the product and the geographic dimensions of the market involved.²⁶ Unfortunately, these tools prove problematic in evaluating the cable market.

a. Product Dimension

From the consumer's viewpoint, the product offered by cable is principally video programming, usually for entertainment purposes.²⁷ For conventional television advertisers, the market is viewed quite differently. With subscription services, the product is programming;²⁸ in the case of conventional television, the product for sale is audiences for advertising messages.²⁹ These differing viewpoints make measurement of the substitutability between cable and conventional television difficult. Measuring the substitutability between most of cable's competitors poses the same difficulty.

Subscription video services include cable television, subscription television³⁰ (STV), multipoint distribution service³¹ (MDS), and

25. See *United States v. E. I. DuPont de Nemours*, 351 U.S. 377, 395 (1956).

26. See P. AREEDA & D. TURNER, *supra* note 22, at ¶ 517.

27. See FCC Staff Report 1982, *supra* note 1, at 39.

28. *Id.*

29. *Id.*

30. STV systems, like pay cable, provide special programming to subscribers who pay a fee for the service. STV signals are transmitted over the air to the subscriber's home with UHF or VHF signals from a locally based antenna. STAFF OF HOUSE SUBCOMM. ON TELECOMMUNICATIONS, CONSUMER PROTECTION, AND FINANCE OF THE COMM. ON ENERGY AND COMMERCE, 97TH CONG., 1ST SESS., TELECOMMUNICATIONS IN TRANSITION: THE STATUS OF COMPETITION IN THE TELECOMMUNICATIONS INDUSTRY 302 (Comm. Print 1981) [hereinafter cited as STAFF REPORT]. The signal is scrambled to limit reception to those who pay for the service. Subscribers receive a decoder which they attach to their televisions. *Id.* STV operates on a specified frequency and therefore, has only one channel to program. *Id.* at 302-03.

The House Staff Subcommittee Report noted the growing popularity of STV: The number of subscribers to STV systems more than doubled in 1980, from an

satellite master antenna television³² (SMATV). In the near future, direct broadcast satellites³³ (DBS) and low power television stations³⁴ (LPTV) will be available.³⁵ Video cassette recorders

estimated 399,000 at the beginning of the year to approximately 825,000 at the year's end. However, this still represents only about one percent of U.S. households. Nationwide, there are only 24 operating STV systems in a total of 23 cities. One station, ON-TV in Los Angeles, had approximately 44 percent of the industry's subscribers (360,000); the next largest, Wometco in New York, had about 100,000 subscribers; and three other systems had over 50,000 subscribers. Estimated total revenues for the STV industry in 1980 varied from \$143 million to \$192 million. These revenues resulted from service charges to subscribers of about \$20 per month, in addition to installation fees for new subscribers.

Id. at 303; *see also* G. K. WEBB, *supra* note 1, at 18-19; INDUSTRY VIEWPOINT, *supra* note 6, at 53-57; NCTA REPORT, *supra* note 6, at vii (discussing STV and impact on cable market).

31. MDS is transmitted through microwaves and can only be received within confined geographical areas. MDS serves as a common carrier from which programmers lease time. STAFF REPORT, *supra* note 30, at 304. MDS has a limited range of transmission and the installation of the special receiving antenna is expensive. Therefore, MDS is used primarily to serve multi-unit structures such as hotels and apartment buildings which can easily distribute costs among residents. *Id.*; *see* G. K. WEBB, *supra* note 1, at 17. MDS operators often broadcast scrambled signals, similar to STV, to prevent unauthorized reception. *Id.* Microwaves require a direct line of sight transmission. They can be easily deflected, thus limiting the suitability of MDS for individual subscribers. *Id.* at 17-18.

MDS subscriptions in 1980 were estimated at 400,000, with revenues of \$58 million. STAFF REPORT, *supra* note 30, at 304. 1.4 million subscribers and revenues of \$331 million are forecast for 1985. *Id.* The FCC currently permits MDS to provide only two channels. The MDS transmission band could, however, easily be expanded to twenty or thirty channels. Smith, *The Birth of a Wired Nation* in TELECOMMUNICATIONS FOR LOCAL GOVERNMENT 8 (1982). In an urban area it takes \$30 million to \$100 million to install cable; MDS can be placed in the same location for only \$100,000. *Id.* Furthermore, MDS is regulated only at the federal level. Local franchising procedures thus have no impact on MDS service. *Id.*; *see also* INDUSTRY VIEWPOINT, *supra* note 6, at 58-61 (discussion of MDS).

32. SMATV systems use an earth station to receive satellite signals which are then primarily delivered by wire to multi-unit structures such as hotels and apartment complexes. FCC Staff Report 1982, *supra* note 1, at 43. SMATV operators can provide as many channels as cable operators. SMATV systems deliver programming generated by pay network superstations and advertiser-supported conventional TV stations. INDUSTRY VIEWPOINT, *supra* note 6, at 61. "About 500,000 homes are passed by SMATV systems today and there are about 150,000 customers, indicating a somewhat lower penetration rate than cable achieves." *Id.* In 1983, the City of Chicago revoked permits obtained by Cablecom Corp., an SMATV company, to erect microwave dishes on twenty-five lakefront high rises. The city claimed the permits were issued incorrectly, denying that they were revoked because of the competitive threat SMATV posed to the cable franchise being negotiated by the city. *City pulls permit plug on 'dish' TV operators*, Chicago Trib., Dec. 4, 1983, § 4, at 1, col. 3.

In November 1983, the FCC ruled that SMATV systems could not be regulated by state or local authorities. *See* Earth Satellite Communications, Inc., FCC 83-526 (released Nov. 17, 1983); *infra* note 50. SMATV systems thus escape the regulatory burdens imposed by states and by local franchise agreements. *See infra* note 50 and accompanying text (discussion of substitutability between cable and SMATV).

33. For a description of DBS service, *see infra* notes 65-71 and accompanying text.

34. For a description of LPTV service, *see infra* notes 60-64 and accompanying text.

(VCRs) and video discs also provide services similar to those offered by cable.³⁶ A still broader market definition would include radio, telephone, records, movie theaters, live theater, live sports events, newspapers, books, and magazines as additional sources of consumer information and entertainment.³⁷

The House Committee on Energy and Commerce noted in a 1982 report on the cable television industry that, “[d]istinctions between products and services, prices, units of measurements, types of costs and expenses, and other variables are difficult to make an [sic] are often subject to considerable discretion. In communications, products compete with services, and prices may be bundled.”³⁸ Thus, a precise determination of which products are “reasonably interchangeable” with cable proves difficult. Further problems arise in attempting to define the geographic dimension of the cable market.

b. Geographic Dimension

Although the geographic boundaries of a cable system are easily defined,³⁹ territorial boundaries for conventional television are far from clear.⁴⁰ Transmitters have varying frequencies and power

35. In September 1983, the FCC approved another type of satellite-to-home TV service. This service is called a “quasi” or low-power satellite-to-home system which differs from the high-power systems approved by the FCC in 1982. The primary difference is the type of antenna needed to receive the satellite’s signals. With a high-power satellite, an antenna two feet in diameter can be used to receive signals. With the low-power system, an antenna roughly four feet in diameter is needed. The new low-power system is targeted at rural areas, where the larger antenna is not a drawback. The FCC determined that the new system would not be classified as a “broadcaster” for regulatory purposes. *Satellite-to-home TV service gets clearance*, Minneapolis Star & Trib., Sept. 12, 1983, at 3B, col. 5.

36. See G. K. WEBB, *supra* note 1, at 21-22. Depending upon the consumer’s geographic area, the purchaser of a VCR or videodisc has access to unlimited material. FCC Staff Report 1982, *supra* note 1, at 44.

The services provided by VCRs and video disc players do differ from those of over-the-air and cable delivery media. VCRs and disc players display pre-recorded material rather than real-time signals, and so may be less satisfactory than other media for presentation of news or sports, where viewers may consider instantaneous delivery important.

Id. By 1980, an estimated 1.4 million VCRs had been sold to U.S. consumers. STAFF REPORT, *supra* note 30, at 305. Estimates are that by 1985 there will be 5.3 million VCR users in the U.S. *Id.*

37. FCC Staff Report 1982, *supra* note 1, at 41-42.

38. STAFF REPORT, *supra* note 30, at 48.

39. “[C]able reception is limited to the geographic areas where cable systems have been installed.” FCC Staff Report 1982, *supra* note 1, at 53.

40. See K. GRODON, J. LEVY & R. PREECE, FCC POLICY ON CABLE OWNERSHIP 20-21 (November 1981) (Staff Report by FCC Office of Plans and Policy) [hereinafter cited as FCC Staff Report 1981].

levels; thus the coverage areas of different stations can vary greatly within a single metropolitan area.⁴¹ Other technologies in the communications field also have boundaries which are not easily defined.

Nevertheless, in 1982 the Federal Communications Commission's (FCC) Office of Plans and Policy concluded that the geographic market for video products was local rather than national.⁴² According to the Report, "[t]he range of choices available to viewers depends on the number of outlets available at the local level."⁴³ Thus, the fact that a cable operator owns a franchise in a city that is five hundred miles away from the market under consideration should have no effect on the level of competitiveness in that market.⁴⁴

B. Substitutability

Despite the difficulties in assessing the substitutability among cable and its competitors, several studies which address this issue have been conducted. The House Committee on Energy and Commerce⁴⁵ and the FCC Office of Plans and Policy⁴⁶ have both compiled extensive market studies on the substitutability between cable television and conventional television,⁴⁷ STV,⁴⁸ MDS,⁴⁹

41. *Id.* at 21. "[T]he coverage of different stations will never be identical, nor will the coverage area of any station necessarily correspond to the cable service area." *Id.* at 21.

42. FCC Staff Report 1982, *supra* note 14, at 6. "[T]he national programming delivery market is nothing more than a collection of local markets." *Id.*

43. *Id.* at 5.

44. The FCC has recently acknowledged this fact. Currently, under title 47 of the Code of Federal Regulations, a party may not own or control three commercial AM, FM or TV stations where there is primary service contour overlap or where any two stations are within one hundred miles of the third. *See* 47 C.F.R. §§ 73.35(b)(1), 73.240(a)(2), 73.636(a)(2) (1982).

In January 1984, on a petition from the National Association of Broadcasters, the FCC proposed the repeal of these rules. *See* Ownership Rules, *supra* note 6, at 2478. The FCC noted its recent refusal to adopt multiple ownership rules for cable television, LPTV, and DBS services. *Id.* at 2481.

45. STAFF REPORT, *supra* note 30.

46. FCC Staff Report 1982, *supra* note 1; FCC Staff Report 1981, *supra* note 40. The FCC reports were compiled to assist the FCC in its review of cable and other media ownership rules. FCC Staff Report 1982, *supra* note 1, at 1; FCC Staff Report 1981, *supra* note 40, at 1. The House Staff Report was prepared to assist Congress in determining when to regulate or deregulate the communications industry. STAFF REPORT, *supra* note 30, at xiii.

47. The House of Representatives Telecommunications Subcommittee was not optimistic about cable's ability to overtake conventional television. Data submitted to the House Staff indicated that in 1979, for the counties containing the twenty-five largest metropolitan areas, cable penetrated only eight percent of the homes, a figure that had

risen to thirteen percent by 1981. STAFF REPORT, *supra* note 30, at 348. "Cable penetration measures the total number of television households in a market opting to receive cable service as a percentage of all television households in the market." *Id.* at 349. Counties of at least 150,000 in population, accounting for another thirty percent of all households, had a cable penetration figure of nineteen percent, a figure that rose to twenty-nine percent in 1981. *Id.* at 348. These figures appear quite low when compared with the ninety-eight percent of the nation's households that own television sets. *Id.* at 349.

Only limited data is available which quantifies the cross-elasticity between conventional television and cable television. Substantial data does exist, however, on the impact cable television has had on the audience share of traditional broadcast television in markets where the two coexist. The FCC 1980 CATV Syndicated Program Exclusivity Rules concluded that, even if every household in the top one hundred markets had access to cable, less than forty percent of all households in those markets would actually subscribe to cable. *In re* Cable Television Syndicated Programming Exclusivity Rules, 79 F.C.C.2d 663, 685 (1980). The FCC premised its determination on the assumption that in these markets, the demand for cable would be less than the demand in less populous, outlying areas, due to the greater number of signals available in the larger markets, and the reduced need for enhanced reception. Thus, the FCC concluded that future cable penetration would not exceed forty-eight percent. *Id.* at 684-87; *see also* FCC Staff Report 1982, *supra* note 1, at 38; Besen & Crandall, *The Deregulation of Cable Television*, 44 LAW & CONTEMP. PROBS. 77, 111, 117 (1981) (analyzing impact of cable on conventional television).

48. In 1981, the FCC indicated that STV could compete with cable for those consumers who wanted at most one additional channel. FCC Staff Report 1981, *supra* note 40, at 65. The House Committee noted, however, that STV accounts for less than one percent of all television households. STAFF REPORT, *supra* note 30, at 25. In 1981, STV was available in only seventeen markets. *Id.*; *see also* G. K. WEBB, *supra* note 1, at 18-19 (discussing market position of STV).

One empirical study has researched substitution between cable and STV. NCTA REPORT, *supra* note 6. The Report focused on the relative demand for cable and STV in two Los Angeles franchises. *Id.* at 1. The study revealed that STV attracted a relatively large number of subscribers even where cable television was available. *Id.* at 8. This result was partly attributable to STV's arrival as the first subscription service in those areas, and to an aggressive advertising effort by the STV stations. *Id.* at 6, 8. The survey data indicated that STV had difficulty penetrating areas where cable television was available prior to the entrance of the STV station. Conversely, STV did well in non-cabled areas and appeared to retain a significant share of its subscribers even when the area was finally cabled. *Id.* at 8. The NCTA Report expected that when STV was the first subscription service to arrive in an area, fifty percent of its subscribers would switch to cable when cable arrived; in Los Angeles, however, only fifteen percent did switch. In general terms, if cable could normally expect a fifty to fifty-five percent penetration rate in a given area, STV, established first, could retain more than one-third of the potential market. INDUSTRY VIEWPOINT, *supra* note 6, at 54.

49. Like STV, MDS accounts for less than one percent of all television households. STAFF REPORT, *supra* note 30, at 25. Nonetheless, MDS systems can be set up in a matter of months, compared to cable systems which can take several years to complete. Technological advances have resulted in MDS antennae selling for as little as \$100, making MDS more affordable. INDUSTRY VIEWPOINT, *supra* note 6, at 59.

A local newspaper looked at the impact of MDS in the Twin Cities market. Clark, *Pressures Cut Into Growth of Cable TV*, St. Paul Pioneer Press/Dispatch, Mar. 7, 1983, at B1, col. 1. TVQ, the local supplier of MDS, reduced its monthly subscription rates to apartment dwellers from \$16.95 to \$7.50. Twin Cities cable operators admitted that the price change hurt their businesses. The article also reported that the advent of SMATV in the

SMATV,⁵⁰ VCRs and video discs,⁵¹ as well as other sources of consumer information and entertainment.⁵² Their reports evaluated

southwestern suburbs halted cable penetration into large apartment complexes. *Id.* at B6, col. 2.

The Microband Corporation of America recently urged the FCC to increase MDS channel capacity by switching the frequency assignments of a portion of the spectrum allocated to private and governmental institutions. Currently, these frequencies are largely unused. *INDUSTRY VIEWPOINT*, *supra* note 6, at 59. Microband has proposed multiple channelled MDS systems, of five to eight channels under common control. *Id.* These changes will substantially increase the level of competition between MDS and cable.

The NCTA Report concluded that a multichannel MDS system could be serious competition for cable. Evidence suggested that most or all of a consumer's multichannel demand could be met by a four or five channel service. *NCTA REPORT*, *supra* note 6, at 34. The NCTA Report's analysis of data taken from the pay television census demonstrated strong evidence of diminishing incremental demand with increasing premium channels. *Id.* at 29. The data suggested that per subscriber revenues are maximized when four or five premium channels are made available. *Id.* at 31. Nonetheless, the NCTA Report still concluded that cable has an advantage if it can offer a fifty channel package at the same price as a five channel MDS system. *Id.* at 36. At that point it would be up to the MDS operator to reduce the rate of his service by the marginal value of the forty-five other channels. *Id.* at 6. The NCTA Report estimated that competing multichannel technologies have the potential of reducing cable penetration by five to twenty percentage points. *Id.* at 36.

50. For the businessman, SMATV offers the advantage of low start-up costs and few regulatory constraints. G. K. WEBB, *supra* note 1, at 15. For subscribers, however, the \$5,000 cost of the receiving antenna is prohibitive, limiting SMATV's appeal to multi-unit structures such as hotels and apartment complexes. *Id.*; see also *INDUSTRY VIEWPOINT*, *supra* note 6, at 62.

SMATV operators have proposed a sixty channel system linking a number of buildings together by microwave, with a central earth station to form an extensive SMATV system. Given the high cost of cable in urban areas, this method may be a cost effective alternative to conventional cable. G. K. WEBB, *supra* note 1, at 15. The FCC decided in early November that FCC rules preempted local and state regulation of private cable systems such as SMATV. See *Earth Satellite Communications, Inc.*, FCC 83-526 (released Nov. 17, 1983). The FCC held that "private cable systems are part of a national communications network, subject to federal regulation only." Tauber & Costlow, *FCC Preemption Serves as Watershed for Private Cable*, *LEGAL TIMES*, Feb. 6, 1984, at 14. Preemption will allow private cable operators to compete vigorously in the home video market. *Id.*

51. The FCC's 1982 Report supported a finding of competition between cable and VCRs. FCC Staff Report 1982, *supra* note 1, at 46. It noted that the \$650 purchase price of a VCR would be equivalent to a monthly fee of \$8.01, assuming a lifetime of ten years and an interest rate of ten percent. The cost of cassette rental would be additional. Video disc players are considerably less expensive than VCRs but cannot record material off the air. The FCC believed that while the average per channel cost appears to be lower for cable, the comparable prices suggested that VCRs would be close substitutes for cable. *Id.*

The House Committee had a different view of the situation. It stated that video players were too expensive and had not been purchased in sufficient numbers to make inroads into the video market. *STAFF REPORT*, *supra* note 30, at 25. One author, Eli Noam, has concurred in this assessment. He noted that the availability of movie cassettes, has not significantly reduced television viewing. See Noam, *supra* note 18, at 240.

52. The FCC's 1982 Report found that some nonvideo sources of entertainment and information provide substitutes for video services. For example, AM and FM radio can

all currently available data to assess the potential impact of each on the cable services market.⁵³

C. Conclusion on Current Market Participants

The House Committee found that the existing video market consisted of conventional television, cable, movie theaters, STV, MDS, video cassettes, and discs. It also found that a separate audio market existed, consisting of radio, phonograph records, and tapes. It admitted that its market definitions were largely based on the similarities in the method of receiving video information transmitted through different conduits.⁵⁴

The FCC had a much more expansive notion of market participants and substitutability. With regard to the various video alternatives, the FCC Report suggested that the video alternatives are very similar products with prices demonstrating that subscription video services are close substitutes for conventional television for a large segment of the population.⁵⁵ According to the FCC, although the services of VCRs, video discs, and motion picture thea-

provide news and information like conventional television. For entertainment, radio provides a different function than television, though it does compete for audience attention. FCC Staff Report 1982, *supra* note 1, at 48.

"The [national] print media offer another imperfect substitute for home video services. Newspapers provide a major source of political information and opinion. While they cannot provide instantaneous information such as disaster reports and traffic alerts, they can provide much more detailed information and analysis." *Id.* at 49. In its newspaper-television ownership proceedings, the FCC also noted its determination that "newspapers and television stations in the same community operated in the same market." *Id.* In addition, "[t]he distinction between the electronic and print media will be blurred by the advent of teletext and videotext, which will take advantage of unused portions of the television signal to deliver textual information on the television screen." *Id.*

Furthermore, "[e]mpirical evidence from the Roper organization poll suggests that the various media are substitutes in the provision of news. In 1981, when asked to list primary news sources, 64 percent of those surveyed listed television, 18 percent listed radio, and 44 percent listed newspapers." *Id.* This information implies that many people actually use more than one medium as a news source. *Id.*

The Report noted other nonvideo services which compete with video programming: Live performances, including live theater, concerts, night club acts, and live sporting events, provide yet another substitute for home video services. While they do not occur in the home, they provide similar cultural and entertainment services and provide alternative uses of a viewer's leisure time. The fact that professional sports events are frequently blacked out on television in the market in which they occur reflects the sports interests' recognition of the substitutability of live and broadcast performances.

Id. at 50.

53. Local telephone companies may also have an impact on cable television markets.

See *infra* notes 72-86 and accompanying text.

54. STAFF REPORT, *supra* note 30, at 22.

55. FCC Staff Report 1982, *supra* note 1, at 51.

ters appear less similar to conventional television than subscription television, both services and prices are similar enough to deserve attention in any market assessment. The FCC concluded that nonvideo services are substitutable in some ways but not others.⁵⁶ The FCC believed that the existence of even imperfect substitutes for a firm's product can have a major effect on the firm's behavior. By reducing the market for a product by only a small percentage, nonvideo services reduce other firms' profits and create incentives to change prices or service characteristics.⁵⁷ The FCC concluded that "[d]efining the market narrowly as consisting only of home video services, and excluding the audio, print, live, and other media, will cause measures of concentration to underestimate drastically competition for audience's attention."⁵⁸

D. Future Market Participants

A final dimension of the cable market must be considered—that of time. Although the time dimension is usually overlooked in a market analysis, it has particular importance in the area of communications. A market which presently appears limited in a number of product alternatives will become increasingly competitive over time.⁵⁹ The prospects for new and developing technologies that will provide added competition for cable are favorable.

The possibility of increased channel capacity for STV and MDS may cause those video services to become more cross-elastic with cable. In addition, there are two new video services on the horizon, low power television (LPTV) and direct broadcast satellites (DBS), that will add to the marketplace of information technologies. Potential competition from the recently divested Bell Operating Companies (BOCs) raises additional questions regarding the communications marketplace.

1. Low Power Television

The FCC has proposed a system of LPTV stations that would add significantly to the number of conventional television outlets.⁶⁰ Broadcasting with less power than a conventional television

56. *Id.* at 52.

57. *Id.* at 53.

58. *Id.*

59. FCC Staff Report 1981, *supra* note 40, at 20.

60. *Id.* at 25. A 1978 FCC Task Force estimated that the cost of creating a LPTV station would be roughly \$55,000. Smith, *supra* note 38, at 8. In September 1983 the FCC

station over previously unassigned VHF and UHF channels, LPTV will provide signals to small geographic areas.⁶¹ The advantages of LPTV include lower start-up costs and fewer regulatory responsibilities than a conventional broadcast station.⁶²

One commentator has pointed out that before 1981, four thousand LPTV stations were already operating as television translators around the country. Translators are stations used as relays to extend the broadcast area of a conventional television station. As more LPTV stations are licensed, cable will face more competition from over-the-air broadcasting.⁶³ Many applicants for LPTV licenses also propose to construct STV stations. This increase in pay television stations will also provide competition for local cable operators.⁶⁴

2. Direct Broadcast Satellites

Direct Broadcast Satellites have two distinguishing characteristics. The transponders, devices that amplify the signals from earth and send them back to earth, are substantially more powerful and operate at higher frequencies than SMATV.⁶⁵ The power of these transponders will make it possible to beam a signal strong enough to be received by a small home station on earth.⁶⁶ These home stations could be built for as little as \$300.⁶⁷

A 1981 report by the FCC noted that DBS could offer a strong alternative to cable because DBS can furnish more than one channel of programming.⁶⁸ This capability will spread the fixed costs of hook-up over a larger quantity of products. In addition, the purchase price will be relatively low.⁶⁹ The House Committee Report recognized the competitive potential of DBS, but argued that there was no guarantee that DBS would increase the number of available video outlets, because no system was currently

awarded twenty-three licenses for LPTV stations in sixteen states. See *FCC lottery awards 23 low-power, limited-range TV licenses*, Minneapolis Star & Trib., Sept. 30, 1983, at 8C, col. 2.

61. FCC Staff Report, *supra* note 40, at 43.

62. G. K. WEBB, *supra* note 1, at 19-20. Start-up costs may be as low as \$20,000 compared to the approximation of \$2 million for the start-up cost of a full-power station. *Id.*

63. *Id.* at 18.

64. *Id.* at 19-20.

65. FCC Staff Report 1982, *supra* note 1, at 43.

66. *Id.*

67. *Id.*

68. FCC Staff Report 1981, *supra* note 40, at 23.

69. INDUSTRY VIEWPOINT, *supra* note 6, at 65.

operational.⁷⁰

Most analysts predict that DBS systems will be a billion dollar market with three to five million subscribers by 1990.⁷¹ Thus DBS appears to enjoy great potential substitutability with cable services.

3. Telephone

Perhaps the most significant prospect for change in the cable industry stems from potential competition from local telephone companies. Beyond legal restrictions, which are currently being lifted,⁷² cable and telephone systems are extremely different in their technical capability.⁷³ The telephone wire in an average home has about one-thousandth of the information carrying capacity of the typical cable wire. Telephone lines are designed to transmit speech while cable wires can carry multiple and broadband signals.⁷⁴ A telephone system, however, is connected by a switched network, meaning that every point on the system can be connected with every other point on the system.⁷⁵ Obviously, this type of network is much more complicated than a cable system which sends television signals down a main trunk line and into subscribers' homes.⁷⁶

Replacing the entire cable network with a switched network might be completely impractical and infeasible; substituting a telephone wire with a wire that has more information carrying capacity is not.⁷⁷ Telephone companies clearly have the capability to

70. STAFF REPORT, *supra* note 30, at 385.

71. INDUSTRY VIEWPOINT, *supra* note 6, at 63-65.

72. Under the 1956 consent decree, AT&T was precluded from engaging in any business other than telecommunications. Under the terms of the Modified Final Judgment (MFJ) the Bell Operating Companies (BOCs) are permitted to engage in any business they desire, with court consent. The court must determine whether a BOC would have an unfair advantage in the market it seeks to enter. Although provision of cable services by the BOCs is not specifically authorized by the MFJ, a BOC could petition the court to provide this service; BOCs can provide their customers with video capability where necessary, without court approval. Similarly, the BOCs can provide the transmission vehicle for cable if the local cable franchisee requests this service. Telephone conference with John Walker, Manager-Information, and Greg Ludvigsen, Attorney, Northwestern Bell (Feb. 21, 1984).

73. F. WILLIAMS, *THE COMMUNICATIONS REVOLUTION* 57 (1982).

74. *Id.* "Broadband" is a high capacity communications channel that can carry more than a voice signal. *Id.* For example, one television channel on a cable could carry six hundred phone conversations. *Id.*

75. *Id.*

76. *Id.* at 57-58.

77. *Id.* at 58.

lay and operate fiber optic cable to increase their ability to transmit signals.⁷⁸ The question thus becomes one of economics and philosophy rather than technology.⁷⁹

The distribution system for basic telephone service and cable is a natural monopoly.⁸⁰ If cable and telephone systems offer the same services in a natural monopoly market, one will eventually succeed in driving the other out of the market.⁸¹ Thus, from a public policy standpoint a single line supplier would appear to be the best alternative.⁸² Legislation and regulations at all levels of government, however, have discouraged the combination of cable, telephone, and other wire services into a single monopoly firm.⁸³

Competition between cable and telephone is already beginning to develop as customers seeking to bypass the traditional telephone system have turned to cable networks.⁸⁴ In the next few months,

78. Smith, *supra* note 31, at 12.

79. *Id.*

80. See Hamilton & Hamilton, *supra* note 9, at 285 (1983). Natural monopoly conditions exist where one producer is the lowest cost method of supply in the long run. *Id.* at 285 n.10. This situation arises where services are being distributed along networks from a relatively small number of points to a relatively large number of points. *Id.* at 285; see also S. BREYER, *supra* note 17, at 291-92 (local telephone service is a natural monopoly).

The possibility also exists that utility companies, such as electrical companies, will ultimately use fiber optic cable. At that point, an electric utility could provide the same home video or communications services as cable. See Hays, *Fiber Optics: The future is now*, ELECTRICAL WORLD, Feb. 1984, at 51.

81. Hamilton & Hamilton, *supra* note 9, at 285.

82. *Id.* at 284. The costs of duplicate service will almost certainly outweigh the benefits which result from duplication. *Id.* at 284-85. The problem then becomes regulating the natural monopoly aspect of the service provided and allowing the remainder of the market to be unregulated. The problem of joint cost allocation between intrastate and interstate phone service has already been tackled in the divestiture of the Bell Operating Companies from AT&T. See S. BREYER, *supra* note 17, at 285-87, 314. This experience could prove very instructive in trying to accomplish a similar cost allocation for a cable or telephone system that provides both telephone and cable services.

Mr. Gene Bier, Chief Executive Officer of Northwestern Bell, indicated in a recent newspaper interview that he believed local service should remain regulated, while the remainder of services provided by Northwestern Bell should be unregulated. In other words, Bier favored competition to the greatest extent possible. See Cariedo, *Bell chief says market should set phone rates*, Minneapolis Star & Trib., Feb. 27, 1984, at 1J, 8J, cols. 1-2.

83. G. K. WEBB, *supra* note 1, at 166.

84. "Telephone bypass" refers to the actions being taken by many large corporations to set up their own local telephone networks. Arief, *Debate Builds Over 'Telephone Bypass'*, LEGAL TIMES, July 11, 1983, at 1. The primary reason for this activity is cost. Although business service is priced at marginal cost, the access charge which is assessed per line makes it economical for large users to install their own systems. See Northwestern Bell Interim Tariff § 33 (effective Nov. 28, 1983) (especially true for Centrex users who pay per line, rather than PBX users who pay per trunk).

Westinghouse Electric, Citicorp, General Electric, and Arco are just a few of the

states must decide how to operate in the new communications environment created by the FCC and Judge Harold Greene in the AT&T divestiture.⁸⁵ Clearly, at the federal level, the theme is deregulation and increased competition.⁸⁶ Whether states will adopt this theme remains to be seen.

III. REGULATORY IMPLICATIONS OF A COMPETITIVE VIDEO MARKET

As the discussion in Part II illustrates, considerable cross elasticity of demand exists among cable service, conventional television, and the developing technologies in the communications industry. Despite the number of apparent substitutes for cable, state and local governments have chosen to regulate cable systems throughout the country. Regulation has been the response to the perceived market failures of cable, which stem from the natural monopoly characteristics of the individual cable systems.⁸⁷

A variety of regulatory approaches have been used to regulate cable; these forms of regulation principally have included rate regulation, franchise fees and access requirements, and franchising procedures. In most situations a combination of these methods is used. A brief description of each follows.

A. Regulatory Methods

1. Rate Regulation

Three principal methods of rate regulation are used by public utility commissions: cost of capital, rate of return, and operating ratio.⁸⁸ The cost of capital method sets a total dollar figure that

larger businesses which have begun establishing private communications networks. Arief, *supra*, at 4, col. 1.

Local phone companies and public utilities commissions have, however, already taken steps to prevent cable television companies from offering telephone services. *Id.* In Nebraska, Oregon, and New Mexico the BOCs have challenged efforts by cable companies to bypass the local phone exchanges in delivering high speed data transmissions to businesses. *Id.*

In Minnesota, if a cable company provides two-way voice communications it will be regulated as a telephone company. *See* Minnesota Microwave, Inc. v. Public Serv. Comm'n., 291 Minn. 241, 248, 100 N.W.2d 661, 665 (1971); MINN. STAT. §§ 237.01-47 (1982).

85. Bryson & Danner, *States Uneasy Partners in Communications Revolution*, LEGAL TIMES, Aug. 29, 1983, at 12, col. 1; *see also* Hoffman, *State Regulatory Problems*, 10 WM. MITCHELL L. REV. 489 (1984).

86. Bryson & Danner, *supra* note 85, at 12.

87. *See* S. BREYER, *supra* note 17, at 15.

88. M. HAMBURG, ALL ABOUT CABLE § 7.03 [2][a]-[c] (1983).

should cover both financial and operating costs.⁸⁹ The rate of return method is most often used in utility ratemaking. This method fixes a percentage rate of return on investment plus operating costs.⁹⁰ Finally, the operating ratio is established by determining operating costs and then adding a fixed percentage to cover financial costs.⁹¹

2. Franchise Fees and Access Requirements

The FCC has determined that municipal authorities may charge a maximum of five percent of gross revenues as an initial franchise fee.⁹² Notwithstanding this express limitation, municipalities have successfully circumvented the intent of the FCC. Some cities have negotiated lump sum cash payments from franchisees while others have required extensive investment in public facilities. Other municipalities receive payment in the form of free use of the cable company's equipment.⁹³

In addition, local cable companies may be subject to a variety of access requirements.⁹⁴ These access requirements are typically contained in the franchise agreement. Many municipalities require the cable company to provide channels for specified purposes, such as local government programming, local educational programming, and leased access channels.⁹⁵

3. Franchise Procedures

The most pervasive control over the development of cable televi-

89. *Id.* § 7.03[2][a].

90. *Id.* § 7.03[2][b].

91. *Id.* § 7.03[2][c].

92. 47 C.F.R. § 76.31 (1982). The regulation provides that:

Franchise fees shall be no more than 3 percent of the franchisee's gross revenues per year from all cable services in the community (including all forms of consideration, such as initial lump sum payments). If the franchise fee is in the range of 3 to 5 percent of such revenues, the fee shall be approved by the Commission if reasonable upon showings: (a) By the franchisee, that it will not interfere with the effectuation of federal regulatory goals in the field of cable television, and (b) by the franchising authority, that it is appropriate in light of the planned local regulatory program. With respect to a system community unit that was franchised or in operation prior to March 31, 1972, the provisions of this paragraph shall not be effective until the end of the system's current franchise period, or until 15 years from the date of initial grant of the franchise, whichever occurs first.

Id.

93. See G. K. WEBB, *supra* note 1, at 39, 175, 179.

94. See Herbst, *supra* note 7, at 390, 409; Donaldson, *Minnesota's Approach to the Regulation of Cable Television*, 10 WM MITCHELL L. REV. 413, 425-26 (1984).

95. Herbst, *supra* note 7, at 409.

sion results from the municipal franchise agreements which company owners must negotiate with municipal authorities. Local franchise ordinances and contracts vary greatly,⁹⁶ although a typical franchise agreement will contain provisions regarding initial service and programming, local programming, access requirements, rates, and rate change procedures. Once granted, the franchise contract becomes the controlling document for determining the respective rights and obligations of the municipality and the franchisee.

B. Analysis

1. Drawbacks of Regulation

The methods of regulation typically applied to cable systems may have significant drawbacks for the efficient operation of a cable system. These regulatory tools become even more disabling if the cable industry is competitive rather than monopolistic. Given the increased competitiveness in the cable market, regulation may impose discriminatory obligations on cable not shared by its competitors, and thus inhibit both its growth and the consequent consumer welfare.

In addition to the specific problems for each particular form of cable regulation, any regulatory system contains inherent defects, suggesting that a cautionary approach be taken. As one author has noted, regardless of the problems surrounding the unregulated status quo, the problems surrounding a regulatory scheme will also prove difficult.⁹⁷ "Before advocating the use of regulation, one must be quite clear that the unregulated market possesses serious

96. *Id.* at 407-08.

97. S. BREYER, *supra* note 17, at 184. In addition to the drawbacks inherent in any regulatory scheme, consideration must be given to the industry subject to regulatory controls. Cable systems occupy a unique position in the communications field. The systems use coaxial cable or optical fibers to deliver programming to the consumer; no use of limited airwaves occurs. Yet, cable provides services similar to those provided by conventional over-the-air broadcast systems. As a result, the early court decisions of the 1960's allowed the FCC to regulate cable as "reasonably ancillary to broadcasting." I. DE SOLA POOL, *TECHNOLOGIES OF FREEDOM* 164 (1983).

Gradually, the courts became uneasy with this position. Rather than admit that the FCC had no jurisdiction over cable, however, the courts overturned specific regulations as beyond the authority of the FCC. *Id.* at 163. This approach disregards, in effect, the FCC's engagement in content regulation of a communication method which could be entirely unregulated, as are newspapers and other print media. *Id.* at 166; *see also* Lee, *Cable Franchising and The First Amendment*, 36 VAND. L. REV. 867 (1983) (discussing cable franchising procedures and possible violations of first amendment freedoms).

defects for which regulation offers a cure."⁹⁸ Furthermore, regulatory tools cannot be used as a method of fine tuning a market or an industry. At best, regulation can correct "worst cases"; any effort to extend regulation beyond this basic level will prove fruitless and perhaps even detrimental to the industry.⁹⁹

Thus, regulation must be viewed as a "weapon of last resort."¹⁰⁰ Once in place, regulatory systems are not easily dismantled,¹⁰¹ nor do they respond quickly to changing conditions in the marketplace.¹⁰² Regulation may inhibit scientific and technological developments which would otherwise appear in an unregulated atmosphere.¹⁰³

2. Recommendations

Given the inherent drawbacks created with any regulatory scheme and the rapid innovations occurring in the communications industry, continued governmental control over cable is inefficient and increasingly undesirable. The trend to deregulate cable has already begun at the federal level,¹⁰⁴ and should be pursued at

98. S. BREYER, *supra* note 17, at 184.

99. *Id.* at 185.

100. *Id.*

101. *See* R. SCHMALENSEE, *supra* note 10, at 6-7. Schmalensee points out that regulators are as attached to their jobs as anyone else. Thus, regulators cannot be expected to recognize or point out the desirability of dismantling the regulatory mechanism. *Id.* at 7.

102. *Id.*

103. *See id.*; S. BREYER, *supra* note 17, at 115.

104. S. 66, 98th Cong., 1st Sess. (1983); H.R. 4103, 98th Cong., 1st Sess. (1983) [hereinafter Senate Bill 66 and House Bill 4103]. These companion bills are intended to amend the Communications Act of 1934 to deregulate the cable television industry. Senate Bill 66 passed the Senate by an 87-9 vote on June 14, 1983. House Bill 4103 had passed through the House Subcommittee on Telecommunications, Consumer Protection and Finance but had not yet been considered by the House Energy and Commerce Committee when Congress adjourned in November 1983.

The cable industry lobbied hard for the passage of this legislation. *See* NATIONAL CABLE TELEVISION ASSOCIATION, THE NEED FOR A NATIONAL POLICY (September 1983) (industry report urging passage of Senate Bill 66) [hereinafter cited as NCTA NATIONAL POLICY]. The industry believed it faced a competitive disadvantage when compared to its unregulated competitors. CONG. Q., 1983 Weekly Report, at 2207.

Specifically, Senate Bill 66 would take action in the following three areas: rates, franchise fees, and franchise renewals. Sections 607(d)(1)(2) and (3) all provide for rate deregulation. Section 608(b)(1) would limit maximum franchise fees to five percent of gross revenues, removing the current restriction of three percent. Finally, section 609(a) would raise the presumption that a current franchise holder is entitled to renewal of the franchise.

House Bill 4103 contains several restrictions not contained in Senate Bill 66. The House Bill would require cable operators to provide leased access to any programmer desiring access to the cable channels. H.R. 4103, 98th Cong., 1st Sess. § 613 (1983). In

the state level as well. With the rapid technological developments certain to occur in communications, regulation that attempts to control monopoly profits may cause more harm than allowing market forces to govern. Specific recommendations for reducing regulation in the cable industry fall into three categories: rates, franchise fees and access requirements, and franchise procedures.

a. Rate Regulation

Rate regulation can impose significant costs on an industry. It can impose artificially low rates which will serve as a disincentive for expansion of a system's coverage, dampen incentives for innovation, discourage a system operator from upgrading service to existing customers, and create cross-subsidization among various rate classes.¹⁰⁵ In addition, if price is regulated, the monopolist has an incentive to reduce program quality to recapture some of the monopoly profits restricted by rate regulation.¹⁰⁶

Ten states had imposed some form of rate regulation on cable systems by 1979.¹⁰⁷ In the majority of these jurisdictions the public utility commissions bear primary responsibility for rate regulation.¹⁰⁸ By 1980, three of these states had already decided to deregulate rates, either in whole or in part. Many municipalities, however, continue to regulate rates through franchise agreements.¹⁰⁹

Over the next few years, as competition among new technologies develops, rate regulation should be eliminated entirely. Several

addition, the House Bill would prevent the owner of a local newspaper or phone company from owning the cable system in the same community. *Id.* § 614. See Black, *House bill seeks leased access to cable TV*, Minneapolis Star & Trib., Oct. 12, 1983, at 5C, col. 1.

105. H. SHOOSHAN, C. JACONS & A. KAHN, *CABLE TELEVISION: THE MONOPOLY MYTH AND COMPETITIVE REALITY* 60 (1982).

106. See Posner, *The Appropriate Scope of Regulation in the Cable Television Industry*, 3 BELL J. ECON. & MGMT. SCI. 98, 110 (1972).

107. See G. K. WEBB, *supra* note 1, at 39. Those states regulating rates were: Alaska, California, Connecticut, Delaware, Hawaii, Massachusetts, Nevada, New Jersey, New York, and Vermont. *Id.* For a current listing of state cable regulatory statutes, see Donaldson, *supra* note 15, at 418 n.28.

108. *Id.* Local regulatory authorities are already predicting a reduction in local authority to regulate rates. See Gustafson, *Cable members seek to squelch cuts in service*, Minneapolis Star & Trib., Jan. 25, 1984, at 4B, col. 1.

109. Those states deregulating cable rates were Alaska, Massachusetts, and Vermont. G. K. WEBB, *supra* note 1, at 39. New York has recently deregulated rates for smaller cable companies and California is contemplating similar action. M. HAMBURG, *supra* note 88, § 304. The cable industry points out that in the 915 cities which have deregulated or refused to regulate cable rates, the cost of service is essentially the same as in regulated cities. See NCTA NATIONAL POLICY, *supra* note 103, at 7.

states have already taken steps in this direction.¹¹⁰ Municipalities should also refrain from rate regulation. Dropping rate regulation requirements would allow cable companies to price their services closer to actual cost, and encourage efficiency in providing services. Particularly as developing technologies compete directly with cable for new service areas, cable systems will be forced to price competitively to capture their share of the market.

b. Franchise Fees and Access Requirements

Franchise fees reduce the value of the franchise to the cable firm and raise fees paid by subscribers. Although municipal revenues are generated by these fees, neither subscribers nor cable companies clearly benefit from them. Essentially, the fees impose a tax on cable subscribers for the benefit of those who watch the dedicated channels.¹¹¹ This sort of "hidden" tax reduces the accountability of government. The ratepayer must incur high information costs to monitor this type of taxation. These costs will greatly reduce effective public control of government action. A tax on a cable company facing an elastic demand curve, may also have allocative efficiency effects more adverse than alternative taxation methods.¹¹²

The additional burdens placed on cable systems, such as channel access and public service channels, should be removed. These responsibilities are not placed upon other competitors in the communications field. Furthermore, these required services force cable systems to charge higher rates to regular customers, thereby reducing cable's competitiveness. A tax on all communications competitors could be used to distribute evenly the costs of providing these special services.¹¹³ Regardless of the name given to this "communications" or "amusement" tax, such a tax would significantly reduce the additional costs placed on cable companies by access

110. *See id.*

111. Posner, *Taxation by Regulation*, 2 BELL. J. ECON. & MGMT. SCI. 22, 28-29 (1971). Generally, the franchise fee corresponds, not to the value of the municipal services, but to the value of the "governmentally mandated exclusive cable franchise. An artificial monopoly bestows inflated profit potential upon the franchisee, which in turn profits the franchisor through the franchise fee. Such an arrangement, however, burdens the purported beneficiary of government regulation—the subscriber, who pays increased costs." *Hearings on S. 66 Before the Subcom. on Communications of the Senate Comm. on Commerce, Science, & Transportation*, 98th Cong., 1st Sess. 27 (1983) (statement of Paul I. Bortz, Managing Partner, Browne, Bortz & Coddington).

112. *See* Posner, *supra* note 110, at 38.

113. *See* G. K. WEBB, *supra* note 1, at 39, 59-60.

requirements. The tax would also eliminate the disproportionate burden placed on cable companies to raise municipal revenues through franchise fees. Finally, the tax would be visible to the ratepayer, thus increasing accountability of state and local governments.

c. Franchise Procedures

In many cases, the franchise agreement involves detailed programming, levels of service, public access, and rate regulation provisions. This type of agreement imposes discriminatory obligations on cable not shared by its competitors. A principled approach to the franchise process involves examination of the original reasons for awarding the franchise.

The natural monopoly characteristics of cable television systems provide the economic justification for the franchising process. Awarding a franchise to one firm eliminates the possibility of wasteful duplication in a local market. Furthermore, if monopoly profits can be earned in a particular market, awarding a franchise contract through a competitive bidding process will result in a capture of the anticipated monopoly profit by the municipality, leaving the franchisee with a normal profit level.¹¹⁴

A franchise bidding scheme assumes the existence of a sufficiently large demand for producers so that firms that do not win the franchise will still be able to bid on renewals. Future bidders must have the means to remain in existence. If this is not the case, then significant start-up costs and higher degrees of uncertainty exist for new bidders than for incumbents, thus substantially diluting the rigor of the competition.¹¹⁵

It is critical to keep the focus of the franchise process on the capture of any monopoly profits that may exist in the market. This focus suggests that the process should involve bidding by potential cable operators for the franchise to operate a specified system.¹¹⁶ The highest dollar bid would be awarded the franchise. This simplified process would substantially increase public understanding of the franchising process as well as increasing the accountability of municipal authorities.

Franchising can be used to capture any monopoly profits which

114. *Id.* at 165.

115. *See id.* at 177.

116. For this process to work effectively, bids from nonqualified operators must be screened out of the bidding.

may in fact exist in a market. Limiting a franchise to a duration of roughly ten years can also provide a competitive check on the franchisee. If competing firms can enter and acquire control of a cable system, franchisees will have incentives to maintain the quality of their services and to expand and innovate whenever possible.¹¹⁷ Monopoly power can also be checked if the franchise contract remains nonexclusive. The threat of entry into the market strengthens the position of the municipality in seeking compliance with the contract. Entry threats should also discourage cable operators from pricing far above competitive levels.¹¹⁸ If franchising procedures are intended to control cable's monopoly power, monopoly power must in fact exist. As developing technologies emerge, any monopoly power currently held by cable systems will substantially diminish, and no monopoly profits will remain for the municipality to capture through the bidding process.

IV. CONCLUSION

As the communications industry continues to innovate at an unprecedented rate, continuing regulation of cable systems appears ill-advised.¹¹⁹ Competing technologies, including conventional television, MDS, STV, VCRs, LPTV, DBS, and potential competition from the telephone industry, significantly reduce the possibility of monopoly power or profits for a cable system. In many instances market forces will provide the necessary "regulatory tool" to force cable systems to compete actively for the consumer's television viewing time and dollars.

Regulation and its detrimental effects can significantly reduce the incentives to innovate and operate efficiently. Serious consideration must be given to deregulation of cable enabling it to actively compete in the communications industry. Regulatory agencies must reevaluate their roles in this fast-paced, increasingly competitive field. While deregulation continues as the theme for

117. Williamson, *Franchise Bidding for Natural Monopolies*, 7 BELL J. ECON. & MGMT. SCI. 73, 74 (1976).

118. *Id.* at 83-88.

119. Another reason for allowing competition rather than regulation to govern the cable industry is the potential for corruption in the franchising process. See *Affiliated Capital Corp. v. City of Houston*, 700 F.2d 226 (5th Cir. 1983); Cirace, *An Economic Analysis of the State-Municipal Action Antitrust Cases*, 61 TEXAS L. REV. 481, 509 (1982); Brown, *From the Air: Programs By Satellite and Cable*, N.Y. Times, Feb. 17, 1980, § 3, Magazine, at 1, col. 1; *Powerful Groups Clash in Battles to Acquire Cable TV Franchises*, N.Y. Times, July 22, 1980, § 1, at 1, col. 2.

telephone services and other forms of communication, restrictions on cable systems must be lifted to provide consumers with the widest variety of communications alternatives available at competitive prices.

