Trying to Promote Network Entry: From the Chain Broadcasting Rules to the Channel Occupancy Rule and Beyond

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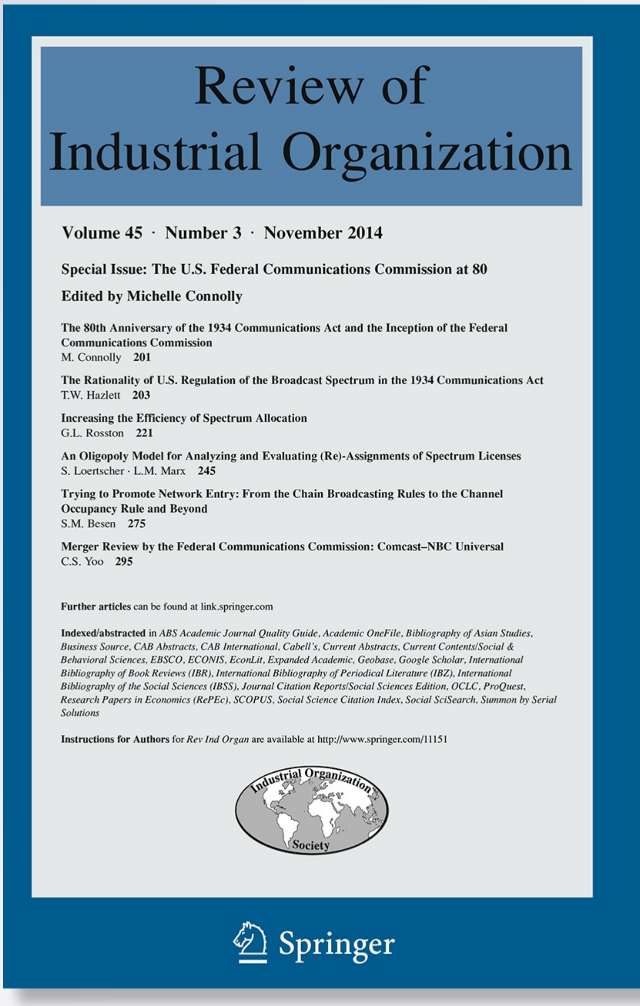
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Trying to Promote Network Entry: From the Chain Broadcasting Rules to the Channel Occupancy Rule and Beyond

Stanley M. Besen

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Abstract This article traces the efforts by the U.S. Federal Communications Commission to promote the entry of new networks, starting from its regulation of radio networks under the Chain Broadcasting Rules, through its regulation of broadcast television networks under its Financial Interest and Syndication Rules and its Prime Time Access Rule, and finally to its regulation of cable television networks under its Channel Occupancy and Leased Access Rules and its National Ownership Cap. The article's principal conclusion is that these efforts by the FCC were largely ineffectual and that only the removal of regulatory barriers to new network entry could, and indeed did, achieve the Commission's goal.

1 Introduction

Starting in the early 1940s, the U.S. Federal Communications Commission (FCC) expressed concern about the lack of competition among networks, first in radio and then in television. However, many of the policies that the Commission adopted that were intended to promote competition were either ineffectual or were undercut by others of its policies, primarily its efforts to promote "localism" in the origination of programming. Only the FCC's eventual removal of barriers to new network entry was successful in achieving the Commission's goal. This article recounts that history.

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2 The Chain Broadcasting Rules

The Communications Act of 1934 gave the FCC "authority to make special regulations applicable to radio stations engaged in chain broadcasting."[1] Seven years later, in its Report on Chain Broadcasting (Federal Communications Commission (1941), p. 4), the Commission observed that "Chain broadcasting makes possible a wider reception for expensive entertainment and cultural programs and also for programs of national or regional significance which would otherwise have coverage only in the locality of origin."

Nonetheless, the Commission expressed concern that the contracts between the four national radio networks (Columbia Broadcasting System (CBS), the Blue and Red networks, both of which were then owned by the National Broadcasting Company (NBC), and Mutual) and their affiliated stations "prevented the great majority of [affiliated stations] from broadcasting programs of any other network. This restriction hinders the development of other national networks. The evidence is convincing that the purpose, as well as the effect, of exclusive affiliation, is to prevent the growth of other national networks" (Ibid. p.51).

The tension between the recognition that networks provide a wide range of efficiencies and the concern that they might engage in practices that disadvantage their rivals has been a continuing theme of FCC regulation. This article traces this theme from the rules that grew out of the Chain Broadcasting Report to the present day and discusses the various ways in which the Commission has attempted to resolve this tension.

In modern parlance, the Commission concluded in its Chain Broadcasting Report that rival networks were being "foreclosed" by the exclusive or near-exclusive contracts between the radio networks and their affiliates. Starting from this premise, the Commission adopted rules the principal purpose of which was to limit the proportion of the time of network affiliated stations that could be cleared for (i.e., occupied by) the programs of any network. These rules prevented a station that was affiliated with a network from agreeing: (1) not to broadcast the programming of another network; (2) to affiliate with a network for a period longer than one year, later amended to two years; and (3) to give up the right to reject programs from a network. The rules also limited the amount of air time that a station could option (i.e., reserve) for a network.[2] The Commission apparently intended that these rules would encourage stations to carry the programs of one network during some time periods and the programs of other networks during other time periods.

The Commission also adopted a rule that prevented any entity from operating more than one broadcast network. This dual network rule led to the development of the American Broadcasting Company, which acquired one of the networks that the

[1] Communications Act of 1934, Sec. 303 (i). Chain broadcasting is the "simultaneous broadcasting of an identical program by two or more connected stations," (47 U. S. C. A. § 153 (9)), what today we would call networking.

[2] The Commission also adopted a rule that prevented a network and an affiliated station from agreeing to deny a network program that the station chose not to carry to another station that served the same market. If anything, this made it more rather than less likely that the station would choose to carry a network program since otherwise the program might be carried by another station with which it would have to compete.

National Broadcasting Company was required to divest.[3] By creating a fourth network operator, this clearly increased competition among networks for programming, advertising sales, and network affiliations.[4] However, it was less clear that the restrictions on network-affiliate contracts would have the same salutary effects, and, in fact, they did not.

A commentary on the effects of the rules after 10 years concluded the following:

> The separation of the Blue Network from NBC and its transformation into the American Broadcasting Company represents the one solid achievement of the [Chain Broadcasting] Rules. . . .But American and Mutual are still far from being the competitive equals of National and Columbia. . . .The newer networks are at a disadvantage in competing for advertising because NBC and CBS still control most of the nation's powerful stations. Sponsors prefer to reach a particular market through one dominant outlet; the newer networks, however, have been able to serve many areas only by combining a number of small stations. Conversely, the most powerful outlets cannot be induced to switch allegiance to American and Mutual because these networks do not have the high-paying advertisers and the most popular programs. The two year limitation on network-station contracts has in no way affected this basic dilemma, and the prohibition of exclusivity has not resulted in extensive dual affiliations.[5]

The Chain Broadcasting Rules were extended to the then nascent television industry in 1946 [11 Fed. Reg. 33 (1946)]; but only a few years later the FCC returned to the theme of television network dominance. In 1958, its Network Study Staff issued a report in which it concluded that:

> While networking profits, notably those of CBS and NBC, have risen to high levels in recent years, there are major obstacles to the entry of new firms. These barriers arise in part from the nature of the network-station affiliation arrangements and the mutual benefits derived therefrom, from the existing structure of A.T. &T, rates for interconnecting stations, and from certain economies of large-scale operations in networking. *The principal factor, however, accounting for both the high concentration in networking and for the effective barriers to*

[3] In 1941, the Department of Justice filed complaints against NBC and CBS, alleging extensive violations of the Sherman Act. After the Supreme Court upheld the FCC's authority to issue the Chain Broadcasting Rules and, as a consequence, NBC had agreed to divest its Blue Network, the Department withdrew its complaint. See Note (1951, p. 109), for a discussion of this episode.

[4] It is important to note, however, that, under some circumstances, greater program "variety" may result if networks are under common ownership. This can occur because independently-owned networks may choose to "duplicate" each other's programs, and thereby capture a share of a "mass" audience, whereas jointly owned stations may choose to offer differentiated programs in order to appeal to different audience segments. For an early model that obtains this result see Steiner (1952). Berry and Waldfogel (2001) found that greater concentration that results from a reduction in the number of different radio station owners in a market leads to an increase in the number of different program formats that are offered in that market. Similarly, Chipty (2007, p. 27) found that "stations are more spread out across existing formats in more concentrated markets." Finally, Sweeting (2010, p. 392) found that "common owners differentiate their stations, but also tend to make them more similar to their competitors."

[5] Note (1951, pp. 92–94).

> *the entry of new network is the shortage of competitive TV station facilities in the VHF spectrum.* These factors suggest that, absent a major technological change in the nature of the television industry or in the form of telecasting, networking will continue to be characterized by a small number of firms enjoying substantial profits without the possibility that new networks will be able to enter and compete for these profits.[6]

This statement is notable in several ways. First, as many observers have noted, the paucity of competitive stations in the major television markets was itself the result of a decision made by the FCC in 1952 when it: (1) rejected a proposal of the Westinghouse Corporation that would have created a large number of regional stations and thus increased the number of comparable affiliates with which a new network could have affiliated and (2) declined to "deintermix" markets, so that some contained only VHF stations and others contained only UHF stations, a policy that would have eliminated the competitive disadvantage that a new network would face by affiliating with UHF stations.[7]

Second, the Commission not only did not take advantage of the "major technological change in the nature of the television industry or in the form of telecasting" promised by the advent of cable television, it later adopted policies that prevented the development of new networks that would use cable systems as their local outlets.

Finally, despite its apparent belief that the "principal" barrier to the formation of new networks was not network-station affiliation agreements but rather the absence of competitive stations with which to affiliate, the Network Study Staff nonetheless proposed a large number of additional regulations of network affiliation agreements. Later, the Commission adopted the Prime Time Access rule, which limited the amount of time that a network affiliate could devote to network programming during the period of greatest viewing.[8] I consider each of these, in turn.

3 Spectrum Policies that Limit Television Broadcast Network Competition

Television broadcast networks reach their audiences both through stations that they own (Owned & Operated Stations, or O&Os) and through affiliation relationships with stations that are owned by others. For a very long time, stations that operated in the Very High Frequency (VHF) band were superior outlets to those that operated in the Ultra High Frequency (UHF) band.[9] Moreover, relatively few viewers resided

[6] Network Study Staff (1958, pp. 637–638), emphasis added. Similarly, Barrow (1957, p. 615) noted: "There is little prospect that the degree of concentration can be reduced by entry of new nationwide networks until there are substantially more comparable station facilities than now exist in the top 50 or 100 markets of the country." Roscoe L. Barrow was the Director of the Network Study.

[7] For a good discussion of this episode see Schuessler (1981, pp. 895–926).

[8] At the same time, the Commission also adopted rules that affected the relationship between the television broadcast networks and the suppliers of their programs, further expanding its regulation of the small number of networks that its policies had created.

[9] The reasons for this involve both the superior technical characteristics of VHF transmissions and the fact that, at least in the early days of television, many receivers did not have tuners that were capable of receiving UHF transmissions. This disparity is now largely eliminated since the vast majority of viewers

in markets in which there were four or more VHF stations. As a consequence, a new television network was severely handicapped because it would have to reach many viewers through UHF stations that had to compete with superior VHF outlets.

This situation was not the result of physics alone. In 1952, the FCC had an opportunity to alter its spectrum allocation plan in a way that would have significantly reduced the competitive disadvantage that a new network would face. One proposal, advanced by the Dumont Network, would have replaced a system of local stations with one based on regional stations. This proposal, which would have increased the number of viewers that would have been served by four or more VHF station, thus facilitating new network entry, was rejected, largely as a result of the opposition of the incumbent VHF station owners.

Later proposals would have retained a system of local stations but would either have created all-VHF and all-UHF markets, a policy known as "deintermixture", or shifted all stations to the UHF band.[10] Both of these proposals, which were intended to eliminate the barrier to entry faced by new networks because all stations in any given market would have been more or less equally attractive as affiliates, were rejected. More than 20 years later, economic analysis continued to show that a new broadcast television network would not be economically viable, largely as a result of the "UHF handicap".[11]

4 Regulatory Barriers to Cable "Network" Entry

The three dominant television networks could have faced competition much earlier than they eventually did had the FCC taken advantage of the "major technological change in the nature of the television industry or in the form of telecasting" promised by the advent of cable television. By the mid-1960s, cable television systems, which had begun largely to provide service to areas in which there were few, if any, broadcast stations and to improve reception in areas in which tall buildings or mountainous terrain prevented viewers from receiving clear over-the-air signals, began to "import" the signals of "distant" stations into markets that were already being served by at least affiliates of the three major networks, thus subjecting incumbent television broadcast stations to additional competition.

As part of this development, a number of "independent" (i.e., non-network affiliated) stations began to be carried by cable systems in a large number of markets.

Footnote 9 continued
receive broadcast network programs through cable television systems. Earlier, the Congress had enacted the All-Channel Television Receiver Act of 1962, which gave the Federal Communications Commission the authority to require that all television receivers sold to the public had the capability of receiving both VHF and UHF signals. For an analysis of the impact of the Law see Webbink (1969).

[10] See Note (1962) for a discussion of these proposals.

[11] See Park (1975). For that reason, the eventual entry of the Fox Network in the 1980s came as a surprise to many industry observers. Two other broadcast television networks, UPN and WB, later combined into the CW Network, began operation after the launch of Fox. However, neither they nor their successor were financially successful. For example, it was reported that UPN and WB lost about $2 billion during the period when they were on the air (Dana 2008). In an attempt to achieve profitability, CW has recently turned to expanded Internet distribution (Schechner and Stewart (2012)).

The most prominent examples of these were WTBS (Atlanta), WGN (Chicago), and WOR (New York), which eventually came to be called "superstations" and which were, in effect, television networks that competed with the three broadcast networks in households that subscribed to cable television service. Indeed, the availability of independent stations was a major determinant of the proportion of households in a local market that subscribed to cable.[12]

Once cable systems were established in enough areas, moreover, entrepreneurs began to offer programs through networks that did not simply retransmit the signals of a single broadcast station but instead offered programs that were available only to cable television viewers. A prominent example was Home Box Office, which offered recent motion pictures to cable television subscribers in return for a separate monthly payment.

Despite the fact that these developments promised to increase the competition that the existing broadcast networks would face—or perhaps because of it—the Commission acted quickly to limit their effect. The growth of superstations was constrained by rules that limited (to two) the number of broadcast stations whose signals could be imported into the top 100 markets and by "leapfrogging" rules that required that, if such signals were from a top 25 market, they must be from one of the two closest such markets. The growth of networks that offered programs that were not available from broadcast stations was constrained by severe limits on the types of programs that they could offer. For example, FCC rules prevented cablecasting for which a per-program or per-channel charge was imposed of: (i) movies that had been in theatrical release more than 2 years prior to the cablecast; (ii) sporting events that had been telecast in the community on a nonsubscription basis during the previous two years; and (iii) series programming of any type. These regulations also limited feature films and sporting events to 90 % or less of total programming hours and banned advertising on pay channels entirely.[13]

The Commission justified these rules by the need to protect local broadcast *stations* from competition, which, of course, also protected broadcast *networks* from competition.[14] For example, in defending its leapfrogging rules, the Commission wrote:

> . . .it is arguably desirable to allow cable systems the greatest possible choice [in the broadcast signals that they carry] on the assumption that they will select

[12] Park (1972, p. 147) found that cable systems that carried large numbers of distant signals had significantly higher penetration rates than did systems where signal carriage was more constrained by FCC rules. In particular, he concluded that "Distant signals carried in accordance with the FCC's proposed rules contribute substantially to expected [cable system] penetration. Without distant signals, penetration would be 5–10 percentage points lower than the figures cited above."

[13] For a review of these developments see Besen and Crandall (1981, pp. 85–97).

[14] Not surprisingly, broadcasters tended to exaggerate the extent to which they would be adversely affected by the introduction of cable. For example, Park (1971, p. 73) found that "concern over the potential impact of cable growth on television broadcasting is misdirected on several counts. . . .Stations in larger markets. . .would on average be little hurt by unrestricted cable growth. . . .non-network UHF stations (the objects of particular FCC concern) stand to gain substantially from cable growth, because cable puts them on the same technical footing as competing VHF stations." He also found that "Stations in smaller markets, *for which FCC policy provides no protection*, would suffer severe revenue reduction due to cable at ultimate penetration." (Ibid., emphasis added)

> those signals that will most appeal to their subscribers at the least expense. But in that event there is a risk that most cable systems would select stations from either Los Angeles, Chicago, or New York, or one of the other larger markets. There would be no general participation by broadcast television stations in the benefits of cable carriage.[15]

Two developments eventually led to the removal of the regulatory barriers that the FCC had erected to the formation of cable networks. First, in Home Box Office v. Federal Communications Commission, the U.S. Court of Appeals for the D.C. Circuit overturned the FCC's pay cable rules. In its decision, the Court stated:

> . . .we. . .require that at a minimum the Commission, in developing its cable television regulations, demonstrate that the objectives to be achieved by regulating cable television are also objectives for which the Commission could legitimately regulate the broadcast media. Where the First Amendment is involved, more will be required. . ..Further, we require that the Commission state clearly the harm which its regulations seek to remedy and its reasons for supposing that this harm exists.[16]

The Court concluded that the FCC had failed to meet this burden. Although the Court left open the possibility that the Commission could provide the needed justification, the Commission did not appeal the Court's decision, and the rules were vacated.

Second, the FCC first relaxed,[17] and subsequently repealed,[18] its distant signal carriage rules. This allowed both the carriage of a larger number of broadcast signals into distant markets and, by eliminating the leapfrogging rules, gave cable operators a wider choice of the signals that they could import. Despite this, the FCC justified the repeal of these rules not because they would permit superstations to attract a larger number of subscribers but because, according to the Commission, doing so would not have a large effect on the number of viewers attracted by over-the-air broadcasters. As the Court of Appeals for the Second Circuit noted in rejecting a challenge to the repeal of the rules:

> After considering several econometric and case studies concerning the impact of cable television on local station audiences and future cable penetration rates, *the Commission found that the impact on broadcasting stations from the deregulation of cable television would be negligible*, and that consumers would be decidedly better off due to increased viewing options from the greater availability of expanded cable services.[19]

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15 Federal Communications Commission (1972, para. 92).

16 Home Box Office, Inc. v. Federal Communications Commission, 567 F.2d 9, 35 (1977).

17 Federal Communications Commission, Cable Television Report and Order, 36 FCC 2d 143 (1972). These rules are analyzed in Besen (1974).

18 Federal Communications Commission, Report and Order in Docket Nos. 20988 and 21284, 79 FCC 2d 663 (1980).

19 Malrite T.V. of New York, et al. v. Federal Communications Commission, 652 F.2d 1140, 1147 (1981), emphasis added.

Not only did the growth of cable television increase the number of competing networks, it also changed significantly the method by which networks were financed. Whereas broadcast television is supported entirely through advertising revenues, cable television networks are supported either through a combination of subscription and advertising, in the case of "basic" cable services, or entirely through direct payments from viewers, in the case of "premium" services. The result has been a proliferation not only in the number of viewing alternatives but also in the growth of networks that cater to the demands of narrow viewer groups.[20]

Finally, it is important to note that the growth of cable program services was greatly reinforced by the widespread availability of communications satellites that could efficiently distribute these services to geographically dispersed cable systems. This was first stimulated by a 1970 decision by the Federal Communications Commission that invited applications for domestic satellite licenses.[21] Subsequently, the Commission rejected a proposal to significantly limit the number of licensees[22] and later approved applications by AT&T, GTE, RCA, Hughes Aircraft Company, and American Satellite to construct and operate domestic satellite facilities.[23] Still later, the Commission authorized the sale of transponders, so that cable program services could own rather than lease the satellite transmission capacity that they employed.[24] Together, these developments significantly reduced the costs of network "interconnection", which had previously been carried out using relatively expensive terrestrial microwave systems.

[20] See Spence and Owen (1977) for an analysis of the effects of the introduction of direct viewer payments on the types of programs that are offered. The existence of ANA Television ("provides news, public affairs, educational and entertainment programming in Arabic and English to Arab-Americans and Arab-Canadians"), SPEED ("motor sports and the passion for everything automotive"), FEARnet ("horror, thriller, and suspense entertainment"), Collectors Channel ("entertaining and educational programming, with some shopping elements, for collectors and vendors of eclectic and investment-quality collectible merchandise"), Ovation ("art and contemporary culture"), Military History Channel ("dedicated exclusively to the vast array of military history, to air 24-hours/seven-days-a-week"), Golf Channel ("offers in-depth coverage of more than 100 tournaments including the PGA Tour, Champions Tour, Nationwide Tour, LPGA, European Tour, Sunshine Tour and PGA Tour of Australia. Also featured is private instruction from golf's top teaching professionals, plus up-to-the-minute golf news and stats each day"), and Food Network ("one-time and recurring (episodic) programs about food and cooking") gives some sense of the wide variety of offerings that are now available. The increase in the number of networks has also led to reduced concern about multiple-network ownership. Whereas the Dual Network Rule, which applied to both radio and television broadcasting networks, limited any owner to a single network, entities such as Comcast/NBCU, CBS, Fox, and the Walt Disney Company each have interests in a number of national programming services. Indeed, as this list indicates, all four of the national television *broadcast* networks are owned by entities that also own national *cable* program services.

[21] Federal Communications Commission, First Report and Order, 22 FCC 2d 86 (1970).

[22] Federal Communications Commission, Second Report and Order, 35 FCC 2d 844 (1972).

[23] American Telephone & Telegraph Company, 42 FCC 2d 654 (1973); GTE Satellite Corp., 43 FCC 2d 1141 (1973); RCA Global Communication, Inc./RCA Alaska Communications, Inc., 42 FCC 2d 774 (1973); Hughes Aircraft Co./National Satellite Services, Inc., 43 FCC 2d 1141 (1973); and American Satellite Corp., 43 FCC 2d 348 (1973).

[24] Federal Communications Commission, Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1238 (1982).

5 Television Network Regulation

At the same time that it was erecting regulatory barriers to the entry of networks that used cable television systems as their local outlets, the FCC was placing additional restrictions on the three "dominant" television broadcast networks in what turned out to be a largely futile effort to increase the number of broadcast networks.[25] It initially extended the previous limitations on option time by banning option time completely. Subsequently, the Commission held that a television network compensation plan in which "the average hourly rate of compensation varies greatly or is heavily influenced by the number of hours taken" violated its rules. Although it did not ban such compensation plans entirely, it proscribed plans that contained "an extreme sliding-scale formula which severely penalized the affiliate which does not clear the bulk" of the network's programs.[26]

Like the Chain Broadcasting rules, the ban on option time and the restriction on the form of network compensation were intended to limit the extent to which network affiliates would carry network programs and thus open the way for programs from alternative sources to be carried on these stations. However, the effect of these rules was quite limited. For example, the FCC's Network Inquiry Special Staff reported in 1979 that, on average, network programs were cleared 95 % of the time during the prime time hours and 87 % of the time during other time periods.[27] Moreover, as in the case of the Chain Broadcasting Rules as applied to radio, these rules did not lead to dual network affiliations. Instead, during the periods in which the primary network's programs were not being carried, stations either aired local programs, primarily news and public affairs, or syndicated programs, which were licensed on a station-by-station basis, rather than to a fixed lineup of network affiliates.

In part in response to the very high clearance rates of network programs, the FCC adopted (in 1970) the Prime Time Access Rule (PTAR), which precluded stations in the top 50 television markets from carrying more than three hours of network programming during the hours of 7-11 PM (6-10 PM in the Central Time Zone). However, the Rule defined network programs "to exclude special news programs dealing with fast-

[25] In addition to the regulations of the network-affiliate relationship discussed here, the Commission also began to regulate the relationships between the broadcast networks and the suppliers of their programs. For a discussion of the Financial Interest and Syndication Rules, see Besen et al. (1984).

[26] In modern parlance, these would be characterized as loyalty contracts. For an analysis of such contracts see, e.g., Zenger (2012). Stations are paid for carrying network programs through a combination of cash compensation and revenues from the sale of advertising spots that are reserved for them within and between network programs. For a description of this arrangement, see Federal Communications Commission (1980, Volume II, Background Reports, pp. 144–153) and Besen and Soligo (1973).

[27] Federal Communications Commission (1980, Volume II, Background Reports, pp. 260–268). The results reported in the text are based on data supplied by the networks. Similar results were obtained using data obtained from Arbitron. The analysis found that clearance rates were higher for network-owned stations than for affiliates, for stations in smaller markets than for those in larger markets, and when there was a competing VHF independent station in a market. The current author was Co-Director of the Network Inquiry Special Staff. Economists Incorporated (1995) reported that average clearance rates in 1994 were about 98 % in prime time and about 90 % in non-prime time. They also reported that the total number of hours of programming offered by ABC, CBS, and NBC had declined by about 25 hours per week between 1977 and 1994, with the entire decline occurring in non-prime-time programming.

breaking news events, on-the-spot coverage of news events and political broadcasts by legally qualified candidates for public office," the effect of which was to limit the "access period" to a single half hour each night. Although the application of the Rule was limited to the top 50 markets, all of the networks ceased offering programs in any markets during this period because there were too few viewers in the remaining markets to support their programming.

One result of PTAR might have been the formation of networks to program all of the affiliates of one of the networks, say, ABC, between, say, 7:30 and 8:00 PM. In fact, such part time networks did not emerge. Instead, the access period came to be populated by relatively inexpensive first-run syndicated programs: programs that had not previously been offered by the networks that were offered on a station-by-station basis.[28] Apparently, the economic advantages of networking were not achievable by a network that could offer programs only during a very limited time period each day.[29] Not surprisingly, the number of viewers watching television during the access period declined,[30] and even those viewers who continued to watch television during that period likely experienced a decline in satisfaction.

6 Regulation of Cable Networks

The issue of broadcast television network dominance has receded substantially and some regulations, such as the Prime Time Access and Financial Interest and Syndication Rules, have been repealed. Nonetheless, network regulation has emerged in a new form. Many cable operators have ownership interests in program services, which has led to complaints that large vertically-integrated operators have "favored" their own program services by failing to carry rival services, giving these rivals inferior channel placement or inadequate promotion, or charging subscribers artificially high prices for them.[31] That is, the claim is that, as a result of these ownership arrangements, these "networks" would be sheltered from competition by rivals, just as the radio networks

[28] The rule banned the carriage during the access period of "off-network syndicated programs": programs that had previous been carried on one of the networks.

[29] Note that this is similar to what occurred when the Chain Broadcasting Rules were adopted for radio. In neither case did part-time networks enter in response to the change in policy.

[30] Economists Incorporated (1995) estimated that total viewing was about 1.5 percentage points lower than what it would have been if network programming had been offered during that time period.

[31] In addition to allegations that cable operators have engaged in foreclosure of rival program services, there have also been claims that vertically integrated operators had or could deny competing Multichannel Video Program Distributors (MVPDs) and competing Internet Service Providers (ISPs) access to their programming services. In response to these concerns, the FCC adopted a series of "program access" rules and imposed similar conditions in approving mergers in order to ensure that rival MVPDs—primarily Direct Broadcast Satellite (DBS) operators and telephone companies—would have access to popular program services. These rules make it extraordinarily difficult for cable operators to obtain exclusive distribution rights in the program services that they carry. In recent years, both DBS service and telephone companies have become formidable competitors to cable in the distribution of video programming together accounting for about 45 % of all multi-channel video subscribers (Broadcast Engineering 2012). Goolsbee and Petrin (2004) found that DBS entry has reduced cable prices by about 15 % and raised cable service quality.

were alleged to have been sheltered from competition by their contracts with their affiliates.[32]

In response to these complaints, the Federal Communications Commission ("FCC"), under a mandate from the Congress: (a) adopted restrictions on the proportion of a cable operator's channel capacity that can be occupied by program services in which the operator has an ownership interest ("the channel occupancy rule");[33] (b) limited the proportion of all MVPD subscribers, whether on cable or satellite, that can be served by a single entity ("the national ownership cap");[34] and (c) required all cable operators to make a portion of their channel capacity available for lease by independently owned program services (the "leased access rule").[35]

In addressing essentially the same concern over potential favoritism, the Federal Trade Commission (FTC) conditioned its approval of the merger between Time Warner and Turner Broadcasting on a commitment by the merged entity to carry an unaffiliated news service that competed with Turner's Cable News Network (CNN) on a substantial proportion of Time Warner cable systems.[36] After Time Warner decided to meet this obligation by carrying MSNBC, Fox brought a private suit seeking to undo the Time

32 This theory underlies those portions of the Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act") that led to the adoption of the FCC's national ownership cap and channel occupancy rules. The adoption of the 1992 Cable Act was itself preceded by private antitrust suits that were brought by Viacom against Time Warner and TCI, alleging that these vertically integrated Multiple System Operators (MSOs) had favored their own movie services, either by failing to carry Viacom's Showtime service, or by demanding onerous carriage terms for doing so. These suits, which were eventually dismissed, alleged that Time Warner and TCI, by unfairly favoring their own movie services, had denied Showtime the "critical mass" of subscribers that it needed to survive and prosper. In addition to the rules described in the text, the FCC also adopted "program carriage rules", which prohibited a cable operator from requiring a financial interest in a program service as a condition of carriage, coercing exclusive rights as a condition of carriage, refusing to carry a program service because it was unaffiliated with the MVPD, and discriminating against an unaffiliated service in the terms or conditions of carriage.

33 The rule provides that no more than 40 % of the first 75 channels on a cable system can be occupied by program services in which the system owner has an "attributable interest," i.e., more than a 5 percent voting interest, more than a 33 % equity-plus-debt interest, any general partnership or limited partnership interest, or Board membership or officer status.

34 The idea behind the cap is that large cable operators are, because of their size, able to harm rival program services significantly, either by refusing to carry them or disadvantaging them in some other way, while smaller MVPDs are not. To prevent any MVPD from acquiring such power, the Commission placed a ceiling on the proportion of MVPD subscribers that can be served by a single entity.

35 The rule requires that a cable operator with 36 channels or more make available 10 % of its channel capacity, and a cable operator with 55 channels or more make available 15 % of its capacity, for commercial use by "persons unaffiliated with the operator" and requires the operator to place leased access programming on tiers (i.e., bundles of cable channels that are offered to subscribers) that have a subscriber penetration of more than 50 % where the lessee desires to have the programming placed in a program tier.

36 For an analysis of the merger see Besen et al. (1999). Later, in connection with the AOL-Time Warner merger, both the FTC and the FCC imposed conditions that required the merged entity to provide access to Time Warner cable systems to competing Internet Service Providers and not to discriminate against these competitors. See Federal Communications Commission, Memorandum Opinion and Order In the Matter of Application for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner Inc., Transferee, CS Docket No. 00-30, Adopted: January 11, 2001, Released: January 22, 2001, ¶57, which describes some of the terms of the FTC Consent Agreement, and ¶99–100, which describe additional conditions that were imposed by the FCC to prevent discrimination beyond those in the Agreement.

Warner-Turner merger. This suit was settled after Time Warner agreed to carry the Fox News Network.

Similarly, in connection with its review of Time Warner's acquisition of cable systems owned by Adelphia, the FCC concluded that, after the transaction, Time Warner would have an increased incentive to deny carriage to rival unaffiliated Regional Sports Networks (RSNs). To address this concern, the Commission required that Time Warner engage in commercial arbitration with any RSN with which it was unable to reach a carriage agreement.[37]

Finally, the FCC imposed a series of conditions regarding the carriage of unaffiliated program services in connection with its approval of the acquisition of NBC Universal by Comcast.[38] One provision requires that Comcast not discriminate in video programming distribution on the basis of affiliation or nonaffiliation of a program service with respect to price or terms or conditions of carriage. Significantly, this provision is effective "regardless of the medium or method used for distribution"[39] so that it would apply, for example, to programming offered over Comcast's Internet access service; i.e., it is not limited to distribution via Comcast's cable television service. This and related conditions were adopted because, according to the Commission, the transaction "increases Comcast's incentives to discriminate in favor of its affiliated programming."[40] Thus, like the Chain Broadcasting Rules, these conditions are intended to maintain or promote competition among program networks.

According to the theory that underlay the FCC rules, the terms of the Time Warner-Turner consent decree, and the conditions imposed on the Time Warner-Adelphia and Comcast-NBC Universal transactions, the foreclosure of rival program services would increase the per-subscriber costs of these services as their programming and other costs are spread over a smaller number of subscribers. Because their costs have increased, these rival services would, again according to this theory, be less formidable competitors to the vertically-integrated services, which would then be able to charge higher prices ("affiliate fees") to other cable operators, DBS providers, and other MVPDs, as well as to charge higher rates to advertisers. In an extreme case, a rival service might actually fail, further enhancing the market power of a vertically-integrated program service.

However, even if foreclosing rivals permitted a cable operator to raise affiliate fees and advertising rates for its own program services, the effect could be more than offset by losses from a reduction in the operator's cable subscribers that resulted from the

[37] See Federal Communications Commission (2006).

[38] Federal Communications Commission (2011), Appendix A, III, Conditions Concerning Carriage of Unaffiliated Video Programming. The FCC also imposed a number of other conditions including provision for commercial arbitration in the event that a competing MVPD is unable to reach a carriage agreement for Comcast-NBC Universal programming. For an analysis of the merger, see Rogerson (2014).

[39] Ibid., Appendix A, I, Definitions.

[40] Ibid., para. 118. The FCC recently upheld a ruling of its Media Bureau that had found that Comcast had failed to live up to its promise to carry independent networks within blocks of similar channels and ordered Comcast to place Bloomberg Television in a "news neighborhood" (Federal Communications Commission 2013).

decline in the quality of its cable service, so it is an empirical question as to whether a vertically integrated cable operator would, in fact, foreclose rival program services.[41]

Waterman and Choi (2011, p. 973) summarize the results of a number of studies of the effects of vertical integration on cable carriage as follows:

> Integrated cable systems are more likely to carry their vertically affiliated networks than are other systems.... Integrated cable systems tend to exclude or unfavorably market rival networks in at least some cases; more recently, rivals may be carried but placed on less accessible digital tiers. . ..Vertical effects diminish in larger capacity systems but do not disappear.[42]

The effects of vertical integration on the carriage of rival program services can also be affected by the availability of alternative outlets through which these services can reach viewers. For example, as DBS has grown in importance, program services now have a significant alternative outlet through which they can reach potential subscribers, thus reducing the harm that these services might experience from foreclosure by cable operators and, consequently, the benefits cable operators might obtain from such behavior. At the same time, the cost to cable operators of foreclosing rival program services has increased because cable subscribers can now turn to DBS and other MVPDs to obtain the programming that might be foreclosed. In short, the benefits of foreclosure have declined, and the costs have increased. Although Goolsbee (2007, p. 29) found "nine [of eleven cable networks] show significant evidence that having an ownership interest in a network makes systems significantly more likely to carry it," he also found that "the higher is the DBS share in the local market, the more attenuated that relationship becomes." One should expect a similar effect as an increasing number of viewers receive their video service from systems that are owned by their local telephone companies.[43]

Finally, a notable development over the last two decades is the decline in the proportion of national program services that are integrated with cable operators. In 1994, the FCC reported that 53 % of national cable program services (53 of 166) were vertically

[41] In a recent decision, the United States Court of Appeals for the D.C. Circuit overturned an FCC ruling that would have required Comcast to carry the Tennis Channel as widely as (i.e., on the same tier as) its own sports channels: the Golf Channel and Versus. The court's ruling was based on its finding that the Commission had not shown "any benefit for Comcast from incurring the additional fees for assigning Tennis Channel a more advantageous tier. . .." [Comcast Cable Communications v. FCC, 717 F.3d 982, 988 (2013)] The United States Supreme Court declined to review the Tennis Channel's appeal.

[42] Earlier, Crandall and Furchtgott-Roth (1996, pp. 17–18) had observed that "There is no evidence that MSOs discriminate against basic cable networks that they do not own. . . there is considerable evidence that the two major premium networks. . .are more likely to be carried by systems that are controlled by the [Multiple System Operator] that owns the network and less likely to be carried by systems controlled by the MSO owning the other network." Nonetheless, they concluded that, rather than being evidence of foreclosure, these results "may reveal little more than the rationality of the companies' managements or the difficulty in negotiating efficient contracts, or both."

[43] Federal Communications Commission (2012, para. 4) reports that "video services of Verizon FiOS and AT&T U-verse were available to one-third of U.S. homes and accounted for approximately 7 % of all MVPD subscribers" at the end of 2010. More recent data suggest that telephone companies currently account for about 9 % of all multi-channel video subscribers (Broadcast Engineering 2012).

integrated in that year.[44] In its most recent Report, which is based on data for early 2012, the Commission noted that, of the approximately 800 national program services, only 127 (about 15 %) were affiliated with one of the five largest cable operators.[45] Even allowing for the fact that the recent comparison takes account only of vertical integration with the largest cable operators, these data clearly reveal a dramatic decline in vertical integration.[46]

7 The National Ownership Cap

Whereas the channel occupancy rule is intended to deal with the putative *outcome* of vertical integration, the national ownership cap is intended to deal with the *ability* of vertically integrated cable operators to engage in vertical foreclosure.[47] The idea behind the cap is that large cable operators are, because of their size, able to harm rival program services significantly, either by refusing to carry them or disadvantaging them in some other way, while smaller MVPDs are not.[48] To prevent any MVPD from acquiring such power, the Commission attempted to place a ceiling on the proportion of MVPD subscribers that could be served by a single entity.

The FCC calculated that a network would reach about 27 % of the subscribers on the cable systems that carried it five years after it was launched, that the minimum viable scale of a network was about 19 million subscribers, and that there were about 96 million MVPD subscribers.[49] According to the Commission, this implied that "as long as the largest cable operator does not serve more than 28 % of all MVPD subscribers, that operator cannot significantly undermine the viability of a programming network by refusing to carry the network".[50] The Commission then rounded this figure up to 30 %.

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44 Federal Communications Commission (1994, para. 48).

45 Federal Communications Commission (2012, para. 44).

46 Several recent transactions have had significant effects on the extent of integration between program services and MVPDs. These include the sale of News Corporation's interests in DIRECTV and Time Warner's spin-off of Time Warner Cable, both of which reduced the extent of integration, and Comcast's acquisition of NBC-Universal, which increased the extent of integration. Some small program services have expressed concern that the proposed acquisition of Time Warner Cable by Comcast would make it more difficult for them to obtain distribution. See Flint (2014).

47 The rule is also intended to deal with the possibility that large MSOs would be able to exercise monopsony power in their dealings with program services.

48 Recall, however, that the rule applies to all cable MSOs, whether or not they have program service interests.

49 Federal Communications Commission (2008, paras. 49–68).

50 Ibid., para. 67. The Commission had earlier calculated that the "open field" had to be 40 % of all MVPD subscribers by combining an assumed 50 % carriage rate with the assumption that 20 % penetration was required for program service viability. This, in turn, implied a 60 % cap. The FCC then derived a 30 % cap for any single MSO by assuming that two large MSOs could collude to foreclose a rival service. That analysis was rejected by the Court of Appeals, which found no basis for the FCC's collusion assumption, and remanded the matter to the FCC for further consideration. [Time Warner Entertainment Co. v. FCC, 240 F.3d 1126 (D.C. Cir. 2001)]

It should be noted, however, that program services can be, and are, viable even if they reach fewer than the number of MVPD subscribers that the FCC has posited are needed for viability. This reflects, among other things, the fact that program service costs vary from service to service and can be adjusted in response to changes in the number of subscribers they serve, and that program services can be supported by revenues from distribution on other media or in foreign markets, as well as by revenues from MVPDs in the U.S. Indeed, many services have remained viable with far fewer subscribers than the minimum number posited by the Commission.

Moreover, a cable operator's incentives to foreclose a rival program service might actually *decrease* as it increases in size. This is because large operators have fewer *opportunities* for exploiting any market power that they might acquire through vertical foreclosure than do smaller ones because, according to the theory, this market power is exploited in geographic areas in which the putatively foreclosing operator does *not* operate.[51]

In any event, the national ownership cap was struck down by the U.S. Court of Appeals for the D.C. Circuit. The court found that:

> . . .the Commission has failed to demonstrate that allowing a cable operator to serve more than 30 % of all cable subscribers would threaten to reduce either competition or diversity in programming. First, the record is replete with evidence of ever increasing competition among video providers: Satellite and fiber optic video providers have entered the market and grown in market share since the Congress passed the 1992 Act, and particularly in recent years. Cable operators, therefore, no longer have the bottleneck power over programming that concerned the Congress in 1992. Second, over the same period there has been a dramatic increase both in the number of cable networks and in the programming available to subscribers.[52]

The Court concluded that "the Commission failed adequately to take account of the substantial competition cable operators face from non-cable video programming distributors."[53]

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[51] For a somewhat more extended discussion of the factors that limit the incentives of a vertically integrated cable operator to foreclose a rival program service, see Besen et al. (1999, pp. 469–472).

[52] Comcast Corp. v. FCC, 579 F.3d 1, 8 (2009).

[53] Ibid. A number of years ago, Owen (1999, p. 324) speculated that "the Web may compete with television simply by offering consumers and advertisers another alternative"; and a number of companies—most notably Amazon, Hulu, and Netflix—have begun to offer original programming that is available only over the Internet. [See Barr (2013) and Gim (2013) for descriptions of these initiatives.] Although this development is very new, it may further limit the incentives of traditional television outlets to deny or limit access to their viewers by competing programmers. In addition, a number of cable operators are in discussions about an arrangement in which they would offer Hulu's Internet subscription service as part of their television bundles. [See Ramachandran and Sharma (2013).] In Verizon v. Federal Communications Commission, 740 F.3d 623, 630 (2014), the U.S. Court of Appeals for the D.C. Circuit recently vacated the FCC's anti-discrimination and anti-blocking rules, which regulated the relationships between broadband providers and "edge providers. . . who. . ..provide content, services, and applications over the Internet", because the Commission had failed to establish that these rules did not impose common carrier obligations on broadband providers.

8 The Leased Access Rule

The channel occupancy rule limits the proportion of system capacity that a cable operator can employ to carry program services in which it has an ownership interest; various merger conditions are intended to prevent discrimination against, or require the carriage of, rival program services; and the national ownership cap is intended to prevent MVPDs from becoming so large that they would have the power to foreclose rival program services. The leased access rule is intended to give rival program services direct access to a cable operator's subscribers by requiring the operator to make available a portion of its channel capacity for lease to unaffiliated video program services.[54] The rule requires that a cable operator with 36 channels or more make available 10 % of its channel capacity, and a cable operator with 55 channels or more make available 15 % of its capacity, for commercial use by "persons unaffiliated with the operator" and requires the operator to place leased access programming on tiers that have a subscriber penetration of more than 50 % where the lessee desires to have the programming placed in a program tier.

For tiered program services, the FCC requires cable operators to set the maximum lease rate no higher than the *average implicit access charge* paid by the program services that it carries on certain tiers. This implicit charge, which is essentially the per-channel incremental profit obtained by the cable operator, is calculated as the difference between the operator's subscriber revenues from the tiered services and the affiliate fees that it pays to program services for carrying them on such tiers, divided by the number of services in the tier on which the leased access channel will be carried. For premium services, the cable operator is permitted to set the maximum lease rate as high as the *maximum implicit access charge* for any of the premium services it carries.

In regulating access rates in this manner, the FCC attempted to balance its desire to encourage the carriage of unaffiliated program services with its concern that its policies might undermine the ability of cable operators to cover their significant capital costs, especially if low lease rates caused a substantial number of program services to "migrate" to leased access channels. In fact, relatively few program services have employed leased access, preferring instead to be included among cable operators' basic and premium service offerings and no national program services (i.e., networks) have come into existence by leasing channels on a large number of cable systems. Like the Prime Time Access Rule, reserving capacity for use by rival networks seems not to have been an effective tool for promoting network entry.

9 Conclusion

For many years, Federal Communications Commission policies toward the entry of new television networks were either ineffectual—as exemplified by its Chain Broadcasting rules and other regulations of the existing networks—or misguided—as exemplified by its spectrum allocation policies—or harmful—as exemplified by its rules regarding the carriage of programs by cable television systems. However, starting in

[54] The operator can use any of the capacity that is not leased for other purposes.

the 1970s with the Home Box Office decision by the U.S. Court of Appeals for the D.C. Circuit and continuing with the adoption by the Commission of more liberal cable carriage rules and deregulatory policies with respect to communications satellites, this situation has changed dramatically. Whereas the FCC was still concerned with the "dominance" of the three broadcast television networks at the end of the 1970s, today there are literally hundreds of competing networks that cater to an extremely wide range of viewer tastes. These developments confirm that the FCC's Network Inquiry Special Staff was correct when it wrote in 1980 that:

> . . .the Commission should actively seek to remove existing regulatory barriers to entry by additional networks. If these regulatory barriers are eliminated, we are confident that competition among networks can provide effective solutions to problems that heretofore have been addressed unsuccessfully through the regulation of network behavior.[55]

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