Regulation of Media Ownership by the Federal Communications Commission

An Assessment

Stanley M. Besen, Leland L. Johnson
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Stanley M. Besen, Leland L. Johnson

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PREFACE

To promote diversity in viewpoints available to the American public, and to prevent undue economic concentration, the Federal Communications Commission (FCC) has imposed a number of restrictions on the ownership of broadcasting stations and cable television systems. Because the broadcasting and cable industries have undergone rapid evolution since the time when these rules were adopted, the Commission has recently modified or abolished two of the rules and is considering changes in others.

In May 1984, the FCC abolished its regional concentration rule prohibiting common ownership of three commercial AM, FM, or television stations where any two stations are located within 100 miles of the third, and where the primary service areas of any of the stations overlap. In December 1984, the Commission modified its group ownership rule prohibiting a single entity from owning nationwide more than seven AM radio stations, and seven FM radio stations.

Other rules that have remained unchanged in recent years contain prohibitions against (a) a single entity owning two or more stations in the same service (AM, FM, or TV) in the same market, (b) the acquisition of stations in more than one service in the same market, and (c) the common ownership of cable television systems and either telephone companies or television stations in a market.

Produced under a grant from the John and Mary R. Markle Foundation, this report assesses the state of current knowledge about the likely effects of these rules and the consequences of the FCC's recent actions. An earlier Rand publication, *An Analysis of the Federal Communications Commission's Group Ownership Rules* (N-2097-MF), January 1984, was filed in the FCC dockets that reassessed the group ownership and regional concentration rules. The results of the present report should be of interest to government agencies, private industry, the academic community, and the public at large.
SUMMARY

The Federal Communications Commission has imposed a large number of regulations on the ownership of broadcast stations and cable systems to promote diversity of expression and to prevent the exercise of market power. Rules both restrict the ownership of stations in different markets and limit ownership combinations within markets. Among the combinations that are prohibited in the same market are those involving television stations and cable systems, telephone companies and cable systems, and broadcast stations in the same service (AM radio, FM radio, and television). Recently, however, the Commission has begun to reexamine of its rules. It has repealed its restriction on the common ownership of stations in the same region and has relaxed its rules that previously limited any entity to owning not more than seven stations in each broadcast service. Moreover, rules that restrict other combinations are also under reconsideration.

This study evaluates the available empirical evidence on the effects of media concentration to reach judgments about the desirability of modifying or eliminating existing FCC ownership regulations. Since much of this evidence is weak, and in some cases nonexistent, the examination is supplemented by economic analysis where necessary.

To analyze the effects of concentrated media ownership, a wide range of evidence is considered. Among the studies that are examined are those that relate ownership concentration to advertising rates, program prices, network compensation, network affiliation, profit margins, program ratings, station selling prices, and station programming practices.

The analysis of the effect of the ownership of stations in more than one market by a broadcast group reaches four basic conclusions. First, there is little evidence that substantial economies of scale result from combining stations into groups. Singly owned stations appear to be able to purchase efficiently the services that groups produce internally.

Second, there is no evidence that groups are able to exercise "leverage" in their dealings with networks, advertisers, and program suppliers. Although it has frequently been argued that group owned stations obtain more favorable terms than do singly owned stations, because they can threaten to withhold transactions with other members of the group, there is no evidence to support this view. Moreover, the theoretical case for the leverage hypothesis is weak.
Third, although the evidence is not strong, there appears to be little support for the proposition that group ownership facilitates collusive behavior. We conclude that group ownership is likely to facilitate collusion only where the same groups are present in a number of different communities that together form a single broadcast market and where that market is concentrated. One implication of this result is that the common ownership of broadcast stations in different markets is most likely to create market power when the stations are in the same geographic region.

Finally, it appears that there is no connection between group ownership and the diversity of viewing fare provided by a station, although there is only limited evidence on this point.

The analysis of the effects of group ownership implies that substantial relaxation of the rules restricting group ownership can probably be undertaken without great concern about an adverse impact, but that the FCC should carefully examine proposed broadcast station combinations to assure that they pose no anticompetitive threat. If, however, the Commission does not pursue such a policy, a rule limiting combinations in the same region—although not necessarily the now-abandoned regional concentration rule—should be considered.

Although there is less evidence about the effects of combinations of broadcast stations, or of broadcast stations and cable systems, within local markets than there is about the effects of group ownership, the following conclusions are, nonetheless, possible. First, there is little evidence that combinations of broadcast stations in the same market create market power. What evidence exists suggests that either there is no relationship or that combinations produce operating efficiencies. However, the tests of the hypothesis that ownership combinations create market power are far from definitive.

Second, there is little evidence that high concentration within a service in the same market results in anticompetitive behavior. Indeed, some evidence suggests that advertising rates are higher the greater is the number of a stations in a market. However, the theoretical case for the proposition that local market concentration can create market power is strong. Thus, the justification for retaining restrictions on combinations within broadcast markets is far greater than that for the group ownership rules. Nonetheless, where there are many competing stations in a local market, some combinations that are now prevented by FCC rules may be possible without great concern that the public will be harmed.

Third, although there is no evidence on the effects of combinations of broadcast stations and cable systems in the same market—because such combinations have long been prohibited—it seems unlikely that
substantial operating economies will result from combinations of these two services and that, except in markets already highly concentrated, these combinations are unlikely to create market power. We conclude that such combinations should be permitted except in markets where the number of broadcast stations is small.

For reasons similar to those regarding combinations involving broadcast stations within local markets, our analysis suggests that a prudent course would be to retain the ban on the common ownership of cable television systems and telephone companies in the same market. Although future technological developments may create a situation in which it is economically efficient for a single firm to provide all wire communications to the home, there now do not appear to be significant economies resulting from the joint provision of television and telephone services. At the same time, cable television systems and telephone companies are likely to compete in providing at least some services, although the provision of switched telephone service will continue to be a telephone company monopoly. For this reason, the retention of the ban on telephone-cable cross ownership appears warranted at this time. However, at some time in the future, if economies of scope between the two types of services become apparent, it may become appropriate to reconsider the restriction.
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I. INTRODUCTION

Only a few years after it came into being, the Federal Communications Commission began to regulate broadcast station ownership when it denied a second broadcast license in the same market to an existing station owner.\^1 Subsequently, the Commission gradually erected a system of regulations that (a) prohibited anyone from owning more than seven AM radio stations, seven FM radio stations, and seven television stations, no more than five of which can be VHF stations, anywhere in the United States (the group ownership rules),\^2 (b) limited the common ownership of broadcast stations in the same region (the regional concentration rules),\^3 (c) limited anyone to owning only a single station in the same service (AM, FM, or television) in each market (the duopoly rules),\^4 (d) prevented anyone from acquiring more than one station of any type in each market (the one-to-a-market rule),\^5 (e) prohibited the ownership of both a television station and a cable television system in the same market (the broadcast-cable cross-ownership rule),\^6 (f) prevented, except where grandfathered, the common ownership of a television station and a newspaper in the same market (the newspaper-television cross-ownership rule),\^7 and (g) attempted to limit the number of television stations that a single entity could own in the major broadcast markets (the top 50 policy).\^8 In addition to these rules, all of which involved the ownership of broadcast stations, the Commission also adopted rules that prevented the ownership of cable television systems by the three major broadcast networks\^9 and

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\(^1\)Genesee Radio Corp., 5 FCC 183 (1938).

\(^2\)Amendment of Multiple Ownership Rules, 18 FCC 288 (1953); Report and Order, 43 FCC 2797 (1964).

\(^3\)Amendment of Multiple Ownership Rules (Regional Concentration), 63 FCC 2d 824 (1977).

\(^4\)Amendment of Multiple Ownership Rules, 2 R.R. 2d 1588, 3 R.R. 2d 1554 (1964).

\(^5\)First Report and Order, 22 FCC 2d 306 (1970). This rule has since been modified in a number of ways.


\(^8\)Report and Order, in Docket No. 16068, 12 R.R. 2d 1501 (1968).

prohibited, except in limited circumstances, the operation of a cable television system by the telephone company operating in the same market.\textsuperscript{10}

Some of these rules have been abolished in recent years, and the Commission is reconsidering the appropriateness of others in light of the technological and market changes that have occurred since their adoption. The top 50 policy was eliminated in 1979.\textsuperscript{11} The regional concentration rule was recently repealed.\textsuperscript{12} One network, CBS, has obtained a waiver that permits it to own a limited number of cable systems,\textsuperscript{13} and the FCC is presently considering the total elimination of the network-cable cross-ownership rule.\textsuperscript{14} Finally, the Commission recently attempted to relax its group ownership rules to permit the ownership of 12 stations in each service and to remove all restrictions on group ownership in 1990 if no further action is taken.\textsuperscript{15} Under pressure from Congress, however, the change in the television ownership rules was deferred.\textsuperscript{16} Given the FCC’s ongoing reappraisal of its ownership rules, an independent examination of the effects of concentrated media ownership and of the Commission’s rules is particularly appropriate at this time. Our approach is to examine critically the relevant quantitative analyses from past studies of the effects of media concentration to draw lessons about the need for, and effectiveness of, FCC rules limiting media ownership.\textsuperscript{17}

\textsuperscript{10}Applications of Telephone Companies for Section 214 Certificates for Channel Facilities Furnished to Affiliated Community Antenna Television Systems, 21 FCC 2d 507 (1970), reconsidered in part, 22 FCC 2d 746 (1970), aff’d sub. nom. General Telephone Company of the Southwest v. United States, 448 F. 2d 846 (5th Cir. 1971).

\textsuperscript{11}Amendment of Section 73.638(a) of the Commission’s Rules (Multiple Ownership of Television Stations), 75 FCC 2d 585 (1979), recon. denied, 82 FCC 2d 329 (1980), aff’d sub. nom. National Association for the Advancement of Colored People v. FCC, 682 F. 2d 993 (D.C. Cir. 1982).


\textsuperscript{13}CBS, Inc., 87 FCC 2d 587 (1981).

\textsuperscript{14}Notice of Proposed Rulemaking, in CT Docket No. 82-434, 91 FCC 2d 76 (1982).

\textsuperscript{15}Report and Order in the Matter of Amendment of Section 73.3555 (formerly sections 73.35, 73.240, and 73.636) of the Commission’s Rules Relating to Multiple Ownership of AM, FM and Television Broadcasting Stations (Gen. Docket 83-1009), adopted July 26, 1984, released August 3, 1984.

\textsuperscript{16}FCC strikes the flag on TV ownership rules,” Broadcasting, August 13, 1984, at 35, 38–39. While this study was in press, the Commission reaffirmed its decision to permit group ownership of up to 12 television stations, as long as their combined audience share is less than 25 percent of the nation’s households. Special rules were established for UHF and minority-owned stations. Wall Street Journal, December 20, 1984, p. 4.

\textsuperscript{17}The effect of newspaper-broadcasting cross ownership was previously analyzed in W. S. Baer, H. Geller, J. N. Grundfest, and K. B. Possner, Concentration of Mass Media Ownership: Assessing the State of Current Knowledge, The Rand Corporation, R-1584-
available evidence does not support definitive judgments, we undertake additional economic analyses to shed further light on these issues. However, original quantitative work is beyond the scope of this report.

Section II, the largest portion of the study, is devoted to the evidence on the effects of group ownership. The greater length of this chapter than of others does not imply any greater importance of the group ownership issue over other issues, but rather reflects the fact that most of the available empirical evidence on the effects of media concentration is in this area. The section concludes with an analysis of alternatives to the FCC’s previous group ownership rules.

Section III examines the effects of concentrated regional ownership. Since there is virtually no empirical evidence on the effect of such concentration, we use economic analysis to examine the likely effects of the common ownership of television stations that are in geographic proximity to one another but not in the same local market. We also examine the rationale provided by the FCC in its recent order eliminating the regional concentration rule.

Section IV focuses on the effect of broadcast station ownership within a single market. Evidence is drawn from cases in which combinations that would otherwise have been prohibited have been grandfathered, as well as from comparisons of behavior in markets where ownership is concentrated with those where it is not. The section also examines the effect of the FCC rule banning the common ownership of cable television systems and broadcast stations in the same market. Section V examines cable television-telephone cross ownership. Since there is no empirical evidence with which to assess FCC rules in these areas, we apply economic analysis to assess their likely effects.

This report reaches three broad conclusions. First, although the available empirical evidence is not strong, it suggests that concentrated ownership leads neither to large operating efficiencies nor to anticompetitive behavior. In short, existing studies provide neither a basis for retention of the Commission’s ownership rules nor one for their repeal.

Second, economic analysis suggests that there is little or no basis for the FCC’s group ownership rules, some possible support for rules limiting regional concentration, and the strongest case for rules that limit cross ownership within narrow geographic areas. However, where local markets are unconcentrated, combinations that are presently prohibited by FCC rules can probably be permitted without fear that anticompetitive behavior will result. A corollary is that the

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NSF, September 1974, and is not considered here. Moreover, we do not examine rules such as the network-cable cross-ownership rule that apply only to the broadcast networks.
Commission should be most concerned about media combinations in markets where the number of outlets is small. For this reason, continuing the ban on telephone-cable cross ownership may be appropriate, if these entities are alone in providing certain services.

Finally, present FCC rules, and many of the proposals for their repeal or modification, are often deficient because their arbitrary nature fails to take into account actual competitive conditions in the markets where combinations are being proposed. As a result, the Commission may permit combinations that, on competitive grounds, should be denied, and may forbid others that pose little or no threat to competition. For this reason, we recommend that the Commission's ownership rules be replaced by a case-by-case approach to media combinations. Proposed combinations would be subject to scrutiny by the FCC, which would permit or deny them based on whether, given the extent of market concentration, they would increase the likelihood of anticompetitive behavior.
II. GROUP OWNERSHIP

In enacting the group ownership rules to limit national ownership of broadcasting stations, the goals of the Federal Communications Commission were "to maximize diversification of program and service viewpoints as well as to prevent any undue economic concentration contrary to the public interest."\(^1\) However, the FCC has recently relaxed its restrictions to permit the ownership of 12 AM and 12 FM stations, proposed to do the same for television, and indicated that it would eliminate these restrictions altogether in 1990 unless further action is taken.\(^2\) The Commission reconsidered its group ownership rules because the basis for the limit of seven stations in each service has never been clear, nor did the rules take into account either the importance of the stations held or the extent of competition in the areas in which they operate. Moreover, the radio and television broadcast industry has changed greatly since the rules were adopted in their present form in 1954.\(^3\) Among the options considered were the elimination of the rules, changing the numerical limits, or limiting not simply the number of stations that may be owned but rather the number of viewers who can be reached by a single owner's stations.

THE DIVERSITY OF SERVICES AND THE ECONOMICS OF GROUP OWNERSHIP

Current restrictions on group ownership primarily reflect the desire to promote diversity of information sources to the American public. As it explained in its Notice of Proposed Rulemaking, "The Commission's principal concern in implementation of its policy of diversification of ownership has not been the enhancement of economic competition but, rather, the advancement of diversity in sources of information in order

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\(^2\) FCC, Report and Order, adopted July 26, 1984, released August 3, 1984, announced the modification of the rules to permit the ownership of up to 12 stations in each service.

\(^3\) Report and Order, at para. 34-35.
to further First Amendment values." Implicit in this statement is the fear that group owners tend to impose on their stations common points of view and sources of programming that reduce diversity below the level afforded by singly owned stations. Concerns have also been expressed that group ownership tends to increase the selling prices of stations, making it more difficult for them to be acquired by minority groups and others who would add to the diversity of viewpoints.

Thus, for example, Coffey argues that

The goal of diversity rests on the theory that separate coverage of social and political events will lead to more varied presentations, thereby facilitating greater accuracy, fairness, thoroughness and balance of the media. It is based on noneconomic considerations. It is a deeply ingrained legal belief that ownership diversity tends to enhance this country's democratic ideals by limiting the importance which any set of sources plays in shaping opinions and attitudes.

A factor both conflicting with and complementing the goal of diversity, however, is the effect of group ownership on the economic efficiency with which stations operate. Economies may well result when broadcast stations are joined together into groups. For this reason, the Commission has argued that: "The multiple ownership of broadcast stations does play an important role in our nationwide broadcast system." Groups may be able to provide services to their stations, including the production and acquisition of programs and the selling of advertising, at a lower cost than the combined costs of each of the stations operated independently. When current limitations on group size prevent these economies from being fully realized, i.e., if groups must operate below minimum efficient scale, station operating costs are higher than necessary. As a result, a conflict may exist between the goals of maximizing diversity and maximizing the efficiency of the broadcasting system. If the Commission relaxes its rules and the economies of group ownership are important, singly owned stations will be placed at an additional competitive disadvantage creating incentives for them to be acquired by station groups.

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4 Notice of Proposed Rulemaking, at 41.
7 Whether singly owned stations have higher costs depends importantly on whether their ability to purchase services from networks, program syndicators, and spot advertising representatives is an effective substitute for the services provided by groups to their members.
8 As we will see below, it is also argued that groups may be able to disadvantage their singly owned rivals even if groups are not more efficient.
At the same time, a complementary relationship may also exist between the two goals. The economies afforded by group ownership may permit better or different programs that also contribute to diversity. As the Commission recognizes: "There may be greater diversity of views in the programming made available by strong group owners than in the repetitive fare which may otherwise be available." Moreover, the number of economically viable stations may be reduced if efficiencies in station operation achieved through group ownership are not fully exploited.

A major issue, then, is the extent to which group ownership does, in fact, generate operating economies. If no economic advantages are conferred, it may be possible to increase the diversity of views without economic loss simply by restricting any entity to owning a single station. However, if the economic advantages of group ownership are large, the Commission must consider carefully the gains that might be achieved by liberalizing or eliminating its ownership restrictions and the effect of these gains on program diversity.

Finally, the FCC has been concerned with the issue of market power in the hands of groups. As it stated when the group ownership rules were amended in 1953:

One of the basic underlying considerations in the enactment of the Communications Act was the desire to effectuate the policy against the monopolization of broadcast facilities and the preservation of our broadcasting system on a free competitive basis. . . . This Commission has consistently adhered to the principle of "diversification" in order to implement the Congressional policy against monopoly and in order to preserve competition.

Addressing this concern raises questions about whether groups, either acting individually or in concert, engage in anticompetitive behavior.

Some have argued that group owners compete unfairly with singly owned stations by using their greater economic power in bargaining with advertisers, syndicated program suppliers, and networks. For example, Coffey has argued that

Independent stations compete with each other to purchase "off-network" syndicated programs. . . . Those independents which are part of a group have a distinct competitive advantage over single-owned independent stations in the same market by virtue of their buying power. The leverage may be illustrated by the hypothetical top fifty group owner with independent stations in markets one, two and eight. Such an owner is in a position to tie his purchase of a

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8 Notice of Proposed Rulemaking, at 46–47.
9 Amendment of Multiple Ownership Rules, 9 R.R. 1563, at 1568 (1953).
syndicator's programs in markets one and two to the supplier's promise to sell the same program to him in the less lucrative market eight. A single station owned independent station in market eight is thereby at a competitive disadvantage.\textsuperscript{11}

Thus, it is contended, group owners may "leverage" their control of stations in some markets into obtaining more favorable terms in others.

In addition to the possibility that the behavior of individual groups may be anticompetitive, there is also the danger that group ownership may facilitate collusion among stations and further enhance their market power. If groups expand in size, the number of separate station owners within the relevant markets for advertising and programming might fall sufficiently to facilitate collusive behavior. Whether the threat of collusion would intensify if the group ownership rules were liberalized or eliminated is thus clearly relevant to the current debate.

\textbf{OUR APPROACH TO THIS STUDY}

First, we assess the empirical evidence from past studies about the effects of group ownership on competitive behavior. This task involves examining reported differences between group owned and singly owned stations with respect to advertising rates, program prices, network compensation, network affiliation, and profit margins. We conclude that no evidence exists to support the view that groups have engaged in anticompetitive activity. However, only a limited amount of evidence is available and, in some cases, it is in a form that does not permit the effects of economies of group ownership to be disentangled from those of anticompetitive behavior.

In light of the limited value of this evidence, we analyze the conditions under which groups, acting either individually or in collusion with others, would likely behave anticompetitively. We conclude that such behavior by individual groups is quite unlikely. A less remote possibility is collusion among groups, which might arise if certain patterns of group ownership were to emerge.

We also conclude that the economies resulting from group ownership are not large. This conclusion follows from an examination of studies of the effect of group ownership on program ratings, profit margins, advertising rates, and station program practices, and of the growth of group ownership.

Finally, we examine the implications of group ownership for program diversity. Although this evidence is not strong, it suggests that

\textsuperscript{11}Coffey, op. cit., at 319.
there is little or no relationship between programming performance and the existence of station groups.

We conclude this section by discussing options available to the Commission and show that either simply raising the limit on the number of stations that may be owned, or substituting an ownership limitation based on the size of the audience served, would fail to cope with the possible dangers of collusive behavior. We also discuss a possibly better option—lifting the blanket restrictions on the number of stations owned and instead evaluating proposed station acquisitions or applications for new licenses by existing station owners case by case under well-defined criteria.

ANTICOMPETITIVE BEHAVIOR

Advertising Rates

Group ownership can affect advertising rates if groups are more efficient than are singly owned stations or if group ownership promotes anticompetitive behavior. Consequently, it is important to identify the differences in behavior of group owned and singly owned stations to permit these effects to be isolated from one another. To do so we must consider five cases: (1) group owned stations operate more efficiently than do singly owned stations but do not engage in anticompetitive activities; (2) group owned stations are more efficient, and engage in collusion; (3) group owned stations are no more efficient and engage in collusion; (4) group owned stations are more efficient and exert leverage in their dealings with others; and (5) group owned stations are no more efficient and exert such leverage.

Case 1: Greater Efficiency Without Anticompetitive Behavior. In Case 1, we would expect markets containing only group owned stations to have lower per-viewer advertising rates (everything else held constant) than markets with only singly owned stations or markets with a mixture of the two types of stations. In a mixed market, for example, advertising rates presumably would be determined by the higher costs of the singly owned stations. Advertisers, concerned with cost per viewer reached, would be indifferent as to which stations they use.\textsuperscript{12} Hence, rates per viewer for all stations would tend to be identical.

\textsuperscript{12}However, if advertisers are willing to pay higher rates per viewer to stations with larger audiences, group owned stations will have higher rates if their greater efficiency produces larger audiences. It is widely believed that some advertisers are willing to pay for "reach," to avoid repetitive exposure of their advertisements to the same viewers.
These rates would be just high enough to cover the costs of the singly owned stations (which are the "marginal" stations), whereas group owners would enjoy higher profit margins because of their lower costs. Hence, the rates in mixed markets would be above those in group-only markets where the marginal stations have lower costs. Moreover, rates in mixed markets would be lower, the larger the proportion of a market served by the more efficient group owned stations. Rates would be highest in markets without any group owned stations.

**Case 2: Greater Efficiency and Collusion.** If group owned stations are able to collude, the extent to which they are able to raise advertising rates depends on the competition they face from singly owned stations. At the same time, if group ownership produces operating efficiencies, advertising rates will tend to be reduced by the presence of group owned stations in a market. As a result, comparisons of advertising rates among markets will fail to distinguish between the effects of efficiency and those of collusion. The greater efficiency of groups will drive down rates, whereas collusion would push these rates in the opposite direction. Conceivably, rates could be similar across markets with the downward pressure from group efficiencies being offset by the upward pressures of collusion among groups.

**Case 3: No Greater Efficiency and Collusion.** Without the offsetting effects of group efficiencies, group ownership would raise advertising rates in group-only and mixed markets if groups collude more effectively than singly owned stations. Thus, one can identify and measure the efficiencies produced by group ownership only if no collusion exists among groups, since otherwise advertising rates will reflect the combined effect of both factors.

**Case 4: Greater Efficiency and Leverage.** In cases 1–3, advertising rates of group owned stations were the same as those of other stations in a mixed market, with any differences in costs being reflected in higher profit margins of group owned stations. If groups are able to raise advertising rates, an “umbrella” is placed over their less efficient singly owned rivals. However, if groups are able to use leverage across the markets in which they operate in bargaining with advertisers, we would expect the advertising rates of their stations to be higher than those of other stations in the same markets. To examine this possibility, one would compare the rates of group owned and singly owned sta-

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13The conditions under which group owned stations are more likely to collude than singly owned stations are discussed below.
tions within markets—in contrast to the previous cases where one would be concerned with comparisons among markets.\textsuperscript{14}

Case 5: No Greater Efficiency and Leverage. Again leverage would be manifested in higher advertising rates for group owned stations, but their profits would be lower than those in case 4 because there is no efficiency gain from group ownership.

What Does the Evidence Show?

With respect to the issue of collusion, three studies are notable. One, by Peterman,\textsuperscript{15} involves the estimation of regression equations in which the dependent variable is the discounted 20-second national spot rate for prime time. Peterman seeks to determine whether group ownership affects advertising rates by constructing a sample of 97 TV markets containing those with three stations plus all other markets in which three stations obtained more than 90 percent of the audience, i.e., very small and very large markets were excluded. For each of the 97 markets, he derives the average number of homes reached per dollar expenditure per 20-second advertisement. After controlling for homes reached and market income, and estimating separate regressions for the 54 small markets and the 43 large markets in the sample, Peterman finds no evidence of collusion. Neither the percentage nor the number of group owned stations in the market is significant in explaining advertising rates.

Although Peterman's analysis is the most useful we have seen in addressing the question of collusion, his results are subject to three caveats. First, he distinguishes markets only by the percentage or number of group owned stations in each. Although this approximates the tests discussed above, differentiating markets by the relative market shares of group owned and singly owned stations would better measure their competitive positions.

Second, Peterman leaves untested the question of the proper definition of the relevant market, implicitly assuming that the market is local.\textsuperscript{16} However, Peterman's tests may fail to detect collusion if the relevant markets for advertising are larger than the city or metropolitan markets in his sample.

\textsuperscript{14}If, however, group owned stations generate larger audiences than singly owned stations and advertisers are willing to pay more per viewer for larger audiences, group owned stations can have higher rates even if they do not exert leverage.


\textsuperscript{16}This assumption can be inferred, since his elimination of very large and very small markets and his measures of the extent of group ownership are based on the number of stations and group owned stations in a particular city or metropolitan area.
To demonstrate, consider four cities, each containing group owners drawn from the set A, B, C, D, E, F, G, H, I. These owners are distributed among the four cities as follows:

<table>
<thead>
<tr>
<th>City</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>A,B,C</td>
<td>A,B,C</td>
<td>D,E,F</td>
<td>G,H,I</td>
</tr>
</tbody>
</table>

Suppose that cities 1 and 2 form one market for selling advertising, whereas cities 3 and 4 form another advertising market. Looking at each of the cities separately, one would conclude that groups are equally represented with three stations in each city. However, the market consisting of 1 and 2 contains only three separate owners but the market containing 3 and 4 contains six. Thus, the advertising market containing 1 and 2 is more concentrated.

Even if these differences in ownership produce higher rates in the advertising market containing 1 and 2, no measured correlation will appear between group ownership and advertising rates, since all of the stations are group owned. Thus, Peterman’s tests would not be able to explain why rates are higher in cities 1 and 2.\textsuperscript{17}

Third, as we point out above, rates can be similar across markets even if group owned stations collude, if group ownership leads to greater operating efficiency. Only if group owned stations are no more efficient than their singly owned rivals will a comparison of advertising rates reflect solely the effects of collusion.

A second study, by Fournier and Martin,\textsuperscript{18} tests whether the presence of a network owned station in a market affects spot advertising rates. Their analysis has the advantage of being based on data from actual advertising contracts rather than on rate cards or on synthetic prices constructed from advertising revenue data that Peterman and others rely on. They relate these data to the audience exposed to the advertisement, sometimes disaggregated into demographic categories, as well as to various measures of the degree of concentration among stations in the locality served by the station in question.

Fournier and Martin find that the presence of a network owned station in the market does not affect advertising rates, suggesting that the networks do not collude. This finding is notable because the major

\textsuperscript{17}We are not arguing that advertising markets are necessarily larger than those Peterman uses. But we emphasize that if advertising markets are larger than his local markets, collusion could exist that Peterman would fail to detect.

networks with their owned stations, face each other in several major metropolitan markets such as New York, Chicago, and Los Angeles. If these cities together constitute a sufficiently distinct advertising market to permit broadcasters there to collectively exercise market power against advertisers, the networks would be in a particularly good position to exploit this opportunity. If they do so, rates in markets with network owned stations would be higher (again with everything else held constant) than the rates elsewhere.¹⁹

Fournier and Martin also conclude that advertising rates “appear to be unrelated to measures associated with market power.”²⁰ Thus, for example, they find no statistically significant differences in rates between markets with few stations and those with many. However, they do not replicate Peterman’s approach of distinguishing among markets by the number and percentage of group owned stations. Thus, their failure to find a significant relationship between market concentration and advertising rates does not indicate whether collusion is facilitated by group ownership.

Finally, Fournier and Martin, like Peterman, implicitly define advertising markets as encompassing a city or metropolitan area. Thus, if advertising markets are larger than conventionally defined television markets, their tests may fail to detect evidence of collusion, even if it exists.

A third study, by Wildman, also bears on the question of the effect of network station ownership on advertising rates.²¹ After controlling for a number of other factors, Wildman tests whether a station that is network owned or competes with a network owned station has higher spot advertising rates. He finds that network owned stations have significantly higher rates, other things equal, but that stations with which they compete have rates that are not significantly different from those of other affiliates.

However, Wildman does not attribute the higher rates of network owned stations to collusion among the networks. Instead, he hypothesizes that, since network owned stations will “clear” (carry) a larger proportion of the network lineup than other affiliates, other things equal, there will be fewer spot advertisements to be sold where such stations are in the market. The result will be higher spot rates.

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¹⁹Note that this comparison is analogous to those in cases 2 and 3 discussed earlier. “Mixed” markets convert here to markets with network owned stations, and markets with “only singly owned” stations convert to markets without network owned stations.

²⁰Op. cit., at 44.

In Wildman’s view, therefore, higher rates result not from coordinated behavior among the networks but from differences between the behavior of network owned stations and affiliates. He does not attempt to explain why other stations in the market fail to benefit from the restricted supply of spots on network owned stations.\textsuperscript{22}

A larger number of studies address the issue of leveraging—relevant to cases 4 and 5 above. The earliest, by Cherington et al., involves comparisons of advertising rates between group owned and single owner stations.\textsuperscript{23} The authors conclude that “there was no difference in the overall averages [of prime 20-second spot rates] for the group-owned stations vs. the single-owner stations (\$3.27 and \$3.28, respectively, in 1965). . . . For market group 101–150, group-owned station averages were slightly, but not significantly, higher, while for the market group with the smallest audiences the single-owner stations showed higher cost-per-thousand figures.”\textsuperscript{24}

The authors also examine rates based on network gross class \textit{A} hourly time charges for the years 1960 to 1965. For all markets taken together, group owned stations charge less than do singly owned stations. When the results are disaggregated by market size and analyzed separately for 1964 and 1965, singly owned stations have lower rates with the exceptions of markets 51–100 and markets 101–150 for 1965.\textsuperscript{25}

In another report based on the same study, Levin\textsuperscript{26} notes that “the URI analysis of prime 20-second spot rates for 464 TV stations in 1964 and 1965 reveals no significant difference in CPM’s (cost per thousand viewers) as between group and non-group stations in the top 100 markets. In the third fifty markets, group owners do command slightly higher rates, but in the smallest markets (151 and over) the single owners do so even more.”\textsuperscript{27}

Although this evidence suggests that groups do not exert leverage in their dealings with advertisers, the Cherington study has weaknesses. It reports averages of rates for group owned and singly owned stations

\textsuperscript{22}The FCC’s Network Inquiry Special Staff reached, and verified, the same conclusion regarding the respective clearance rates of network owned and affiliated stations although it did so through a different route than did Wildman. See, Federal Communications Commission, Network Inquiry Special Staff, \textit{New Television Networks: Entry, Jurisdiction, Ownership, and Regulation}, Vol. II, October 1980, at 247–53, 260–268, and 273–86.


\textsuperscript{24}Id., at 54.

\textsuperscript{25}Id., at 54.


\textsuperscript{27}Id., at 798.
within particular ranges of market size (like markets 51–100) rather than differences within specific markets. Conceivably in some markets large differences could exist without much affecting the average for the category. The study fails to assess the statistical significance of the observed differences in rates. Nor does it control for other variables, such as the age of stations, family incomes, differences in market competition, and other characteristics that could affect the results.

In another study, Levin estimates a number of regressions that explain a station’s 20-second spot rate. The large number of equations reported and the wide variety of specifications employed make it difficult to briefly summarize his findings. In one set of results, group ownership has no significant effect on advertising rates, in another the effects are mixed, and in others, group ownership significantly raises advertising rates. In all cases, ownership by a network significantly raises a station’s rates. It is impossible to identify why the effect of group ownership varies from equation to equation, since Levin’s equations are complex and he does not conduct explicit sensitivity tests.

Program Prices

The expected effects of group efficiencies, leverage, and collusion on program prices are the opposite of their effects on advertising rates. Lower operating costs conferred by group ownership would tend to increase the demand for programs, forcing program prices upward, whereas collusion among groups or leverage exerted by individual groups would tend to force program prices downward. Thus, cases 1 through 5 discussed earlier are applicable, but with the directions of effects reversed.

The FCC’s Network Inquiry Special Staff tested the hypothesis that group owned stations are able to obtain more favorable terms than singly owned stations from program suppliers, by analyzing the determinants of the prices paid by stations per viewer-minute for syndicated off-network programs. Controlling for the amount of competition for programs, the staff found that the price per viewer-minute is significantly higher when the purchaser was owned by a large group or by a network. These results fail to support the hypothesis that group owners are able to take advantage of their position to acquire programs at lower prices than can those of their singly owned rivals.


The finding that groups pay more for programs is, however, a puzzle. One possible explanation stems from the linear relationship assumed between program prices and the number of viewers. If this relationship is nonlinear, and if group owned stations tend to be in larger markets and thus command larger audiences than the average station, a variable representing group ownership will show a positive effect on price per viewer.

**Network Compensation**

Leverage by groups could also be manifested in compensation paid to network affiliates. The Barrow report,\(^30\) in particular, asserted that network-affiliated stations owned by large groups are able to obtain greater compensation from the networks than their singly owned rivals.

Multiple station owners, by bargaining with networks, national spot representatives, and independent program suppliers for their group of stations as a whole, have been able to obtain more favorable terms which give them a competitive advantage over single station owners. . . . In bargaining with networks, the multiple station owner is in a position to seek network affiliation for all his stations, to have stations placed on the "must buy" list, and to establish the rates for his stations and the division of compensation between the network and the stations on a more favorable basis than the standard network arrangements.\(^31\)

The Network Inquiry Special Staff examined this assertion. After controlling for (a) the audience delivered by the affiliate, (b) the strength of the network with which it is affiliated, and (c) the presence and strength of independent stations that might compete for the affiliation, the staff found no significant difference between compensation received by stations that are members of the 10 largest stations groups and all other stations.\(^32\) This result, like that for syndicated program prices, further weakens the case for the proposition that group owned stations exercise leverage to the disadvantage of their singly owned rivals.

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\(^{31}\)Id., at 555.

Network Affiliation

The exercise of bargaining power by station groups might also be expected to be manifested in their ability to obtain better network affiliations than their singly owned rivals. Again, the Barrow report asserts that this is the case. However, the Cherington study challenges this claim. Presumably, if groups were able to exert such influence, they would tend to be affiliated with NBC and CBS, the stronger networks at that time, rather than with ABC. Yet, in the top 50 markets ABC "had the same proportion (33%) of stations affiliated with it for both group and single owners." Moreover, for both the top 50 markets and for all markets, the percentage of network affiliated group stations is only slightly greater than the percentage for nongroup stations—79 percent vs. 73 percent in the top 50, and 93 percent vs. 86 percent in all markets.

Profit Margins

Differences in profit margins between group owned and singly owned stations is another way that the exercise of market power by groups would be manifested. The Cherington study concludes, however, that, except for the smallest markets, there are no substantial differences in profit margins between group owned and singly owned stations. Drawing from station financial data collected by the FCC for 1964, the study finds consistently higher profit margins for group owned stations for all size markets. But the differences are small except for markets below 150 where group owned stations showed a profit ratio of 15.1 percent as against a loss of 1.7 percent for singly owned stations. Among network affiliated stations classified by net weekly circulation, singly owned stations outperform group owned stations in markets with more than 500,000 net weekly circulation, whereas group owned stations show an advantage in the smaller markets.

As in its inquiry into advertising rates, the Cherington study fails to assess the statistical significance of the differences in profit margins

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34 Cherington et al., op. cit., at 46.
35 This comparison tests whether leverage is being exerted by group owners if group owned stations are no more efficient than their singly owned rivals. If market power is exerted collusively as a result of group ownership, and if all stations are equally efficient, there will be no difference in profitability, since collusion benefits all stations. If group owned stations are more efficient, any difference in profitability will reflect that factor as well as the effect of any leverage that they exercised.
36 Id., at 60–65.
reported, or to control for other factors that may affect the results. Moreover, the quality of the underlying data is subject to substantial question, since there was no requirement that the data be provided to the Commission on a consistent basis, nor did the FCC audit the data that were submitted. Nevertheless, this pattern of results is intuitively plausible. If groups bargain unfairly or collude, they would likely be successful in doing so in smaller, less competitive markets.

Levin also examines whether the presence of group owned stations in a market significantly increases station profitability. He uses published FCC data on market income to estimate profit per station and then relates profit per station to, among other things, the proportion of group owned station in the market. His results are generally negative. He reports, for example, that "group ownership [has] only weakly significant effects . . . on the market averages of income." And, in another estimate in which the effect of public television is taken into account, he finds that the effect of group ownership on average station income is not significant. However, Levin's results are consistent either with the hypothesis that group owned stations do not have higher profits than singly owned ones or with the hypothesis that group ownership redistributes profits among the stations in a market without affecting the amount to be divided among them.

Is There Reason To Expect Anticompetitive Behavior?

Because the abolition or relaxation of the Commission's group ownership rules might change the behavior of groups in ways that would not be disclosed by past empirical studies, we use economic analysis here to assess the likelihood of the two forms of anticompetitive activities discussed above: (a) the use of leverage by individual groups, and (b) collusion among groups.

The Leverage Hypothesis. On theoretical grounds the leverage hypothesis is implausible. Consider a hypothetical group owner of the sort described by Coffey. Suppose that the program in question is worth 100 to him in market 1, 50 in market 2, and 20 in market 3, so that he is willing to pay up to these amounts rather than carry his best alternative. Rival stations in each of these markets value the program at 90, 40, and 30, respectively. Without leveraging, the group owner

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38 Fact and Fancy in Television Regulation, op. cit.
39 Id., at 150, based on results reported at 144.
40 Id., at 255.
will carry the program in markets 1 and 2 and another station will carry it in market 3. If each purchaser pays the minimum price necessary to acquire the program in a market, producer revenues will be just over 150 (= 90 + 40 + 20), the group owner's surplus will be just under 20, and the surplus of the nongroup owner is market 3 will be just under 10, for a total of 180. If the prices paid exceed these minima, the surpluses of station owners decrease and the profit of the producer increases, but the total remains unchanged at 180.

Now consider a situation in which the group owner, using his leverage, attempts to acquire the program in all three markets. If he succeeds, the amount available to be divided between the group owner and the program producer is 170 (= 100 + 50 + 20). If we call the combined price paid by the group owner P, the producer's revenues are, of course, P and the group owner's surplus is 170 - P, for a total of 170.\(^1\) But the producer can offer an alternative deal in which the group owner acquires rights only in markets 1 and 2 for a combined price that is smaller than P by (20 + e1). The supplier then sells the rights to the nongroup owner in market 3 for 20 + e2 where e2 > e1. The group owner's surplus rises by e1, the nongroup owner's surplus rises by 10 - e2, and the producer's revenues rise by e2 - e1. The total surplus is now 180 rather than 170 in the case where the group owner acquires the rights to the program in all three markets.

However, might not the group owner find it in his long-term interest to accept a short-term loss to deny programming to the nongroup owner in market 3 and, possibly, drive him out of business? Such behavior by the group owner seems implausible because of the stringent conditions that must be met for the short-term losses to be more than offset by the increase in long-term profits. First, since all other stations in the market would share in the audience inherited from the singly owned station, the benefits against which short-run costs must be compared are commensurately reduced. Unless these stations can somehow collude against the single station owner—cooperative action that becomes increasingly difficult as the number of stations in the market increases—a group owner may gain little by trying to use his leverage against a single station.

Leveraging seems to pose the greatest danger—if there is a danger—in the smallest markets with only two or three stations, where cooperative behavior to eliminate other stations would be most easily accomplished. But here we face a second problem. Stations in such small markets are network affiliates, giving them assured access to

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\(^1\)P must, of course, be at least 160, the combined amount available from other stations in the three markets.
much of their required programming regardless of the group owner's behavior. Moreover, the amount of syndicated programming available per station is larger in small markets than in large ones. Attempts by a group owner to deny programming to his competitor would likely be frustrated by a high elasticity of program supply resulting from the existence of many sources from which the singly owned station in a small market can buy.

Third, once the group owner seeks to recoup his losses by drawing from a larger audience and driving down the price of programming in market 3, he must be assured that no one else will enter. Unless it is costly to reestablish the station, others may try to enter the market to capture some of these profits.²³

Fourth, in addition to the single station owner, the program supplier would, in the long run, also be disadvantaged by the exercise of leverage by the group owner to exclude his rival, since the demise of the singly owned station leads to a reduction in the price of programs. If suppliers anticipate this outcome, however, they can enter into long-term contracts with the singly owned station to protect it against predation.⁴⁴ If such long-term contracts are possible, the problem reverts to the formulation described above. The group owner will find it more profitable not to purchase the program in market 3, since the supplier can offer him a better deal when he does not do so.⁴⁵

*Collusion.* Consider two simple cases in which collusion among groups would be no more likely than among singly owned stations. In the first, no firm regards placing an advertisement in one local geographic area as substitutable for advertising in another. Thus, for example, if all advertisers were local automobile dealers, they would value advertisements only on stations that serve their marketing areas. It would make no difference, say, to a dealer in Washington, D.C., that advertising rates were higher there than in Baltimore, if his customers were drawn solely from the Washington area. Here, even if the same

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²³Indeed, under Section 73.658(1) of the FCC's rules, in markets where two stations are affiliated with networks and a station with "reasonably comparable facilities" is not, the affiliates are prohibited from taking prime time and weekend sports programs from their secondary networks unless the unaffiliated station has been offered the programs.


⁴¹Note that nothing in the predation argument requires that the predator be a group owner. Conceivably, even the owner of a single station could bid more for a program than it is "worth" to him to deny it to his rivals in the hope that they will be driven out of business.
set of owners held stations in both Washington and Baltimore, they would have no greater ability to collude than would singly owned stations.\textsuperscript{46}

The second case is one in which (a) firms regard advertising in two geographic areas as substitutes, so that if the prices in the two markets diverge, they will make all of their purchases in the lower-price market, and (b) group owners face one another in different combinations in the two geographical areas. Suppose, for example, that all advertisers in Washington and Baltimore are indifferent as to where their advertisements appear.\textsuperscript{47} Suppose, moreover, that the stations in the two cities are all group owned but that no one owns a station in both cities. Under these assumptions, the number of station owners that would have to collude to raise advertising rates is unaffected by the existence of group owners in the two markets. To raise rates to the Baltimore-Washington customers, all of the stations in both cities would have to agree on prices—and this number is not reduced by the presence of group owners in both. In other words, the number of owners is no smaller than the number of stations, despite the fact that some stations are members of groups.

This analysis suggests two conditions that must both be met for group ownership, through collusion, to be an effective way to raise advertising rates. First, the geographic areas in question must constitute a single relevant market. Two metropolitan areas containing stations that reach distinct groups of viewers might be in the same advertising market if a significant number of firms with rising short-run marginal cost curves sell products in both areas. In such circumstances, a fall in the price of advertising in one area induces such firms to increase their advertising and sales in that area. This, in turn, raises marginal production costs and reduces the incentive to sell and to advertise in the other. Whether there are enough firms that behave in this way to produce linkages among geographically dispersed advertising markets remains an open question.

Second, the number of station owners in the relevant market must be smaller than the number of stations in the market. Thus, if a collection of cities represents a relevant market, the presence of group

\textsuperscript{46}This condition is actually too strong. All that is necessary is that at the margin no advertiser is willing to substitute between the two areas.

\textsuperscript{47}Again, this condition is too strong. All that is required here is that enough advertisers are indifferent at the margin between the two areas that they are willing to shift advertising expenditures between them when price divergences appear. Thus, not all advertisers need regard advertising in the two cities as substitutes, nor need any particular advertiser do so for his entire advertising budget.
owners in these cities will not affect prices if no group owns more than a single station in the market. 49

This second condition, however, is only necessary and not sufficient for collusion to occur. If the relevant geographic market is large, the fact that some entities own more than a single station in the market may be of little consequence if there are many other competitive stations in the market. Thus, if the relevant market were defined as the entire United States, where the number of stations is clearly greater than the number of station owners, effective collusion is rendered unlikely by the large number of different station owners.

If the number of owners is below the number of stations, we must consider an additional factor: The presence of overlapping group owners must reduce the number of owners sufficiently below the number of stations to render collusion a feasible option. Moreover, a simple count of the number of nongroup owners will generally be inadequate to assess the effect of overlapping group ownership on the opportunity for collusion. Group owners who possess a relatively small market share are less a threat than those with large shares. Therefore, a combination of independent UHF stations in, say, Washington and Baltimore will be of less concern than a combination of network-affiliated VHF stations.

Where, then, would we expect group station ownership to affect advertising rates through collusion? A likely candidate would be a collection of cities in relatively close geographic proximity to one another, where several owners are represented in more than one city and where the total number of stations is small. Geographic proximity is important because it makes more likely the substitution of advertising in one

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49 Group ownership may facilitate collusion even if metropolitan areas are the relevant markets. This would occur if the same groups are present in more than one area and the costs of collusion are not proportional to the size of the combined markets in which the groups operate. To detect such collusion, it is necessary to take into account not only the number of group owned stations in a metropolitan area but also their identities.

Scherer argues, however, that collusive behavior can be promoted by the presence of firms in more than one market even if each firm faces different firms in each market: “If rivals come to fear from a multimarket seller’s actions in Market A that entry or expansion in Markets B and C will be met by sharp price cuts or other rapacious responses, they may be deterred from taking aggressive actions there. Then the conglomerate’s expected benefit from predation in Market A will be supplemented by the discounted present value of the competition-inhibiting effects its example has in Markets B and C.” F. M. Scherer, Industrial Market Structure and Economic Performance, Second Edition, Rand McNally, Chicago, 1980, at 338. See also D. M. Kreps and R. Wilson, “Reputation and Imperfect Information,” 27 J. of Econ. Theory 250 (1982); and P. Milgrom and J. Roberts, “Predation, Reputation, and Entry Deterrence,” 27 J. of Econ. Theor. 280 (1982). This theory implies that the mere presence of group owned stations in a market may facilitate collusive behavior, since the group owners will wish to cultivate their reputations for aggressive behavior to discourage competitive behavior elsewhere. The evidence on the effects of group ownership discussed above tests, and generally rejects, this hypothesis.
city for advertising in another. The limiting case is, of course, where the stations are in the same city. The fact that several owners are represented in more than one of the cities is important because it reduces the number of owners substantially below the number of stations. Finally, a small number of stations is important because there the presence of several groups owning stations in more than one city can more easily lead to sufficient concentration to make collusion feasible.

The preceding discussion focused only on advertising markets. But behavior in program markets is also relevant. Here the argument that group ownership creates market power is weaker than in the case of advertising, because the relevant market for programming is likely to be geographically smaller than that for advertising. The reason is that geographically separated markets do not represent alternative ways in which a program supplier can market its products. A sale of a program to a station in Washington does not affect the ability of the supplier to sell the same program to a station in New York. Consequently, so long as the signals of two stations do not substantially overlap, they are not in the same market from the point of view of program suppliers. Since television stations located in geographically separated markets do not compete with one another for audiences, a program syndicator wishing to sell a program to stations in two separate cities will regard each of those cities as distinct markets and establish the prices of its programs separately in each.

GROUP OWNERSHIP AND AD HOC NETWORKS

Two views have been advanced about the effect of relaxing the numerical limit on the size of television station groups on the viability of ad hoc, or occasional networks, that broadcast individual programs rather than an extensive program lineup. The FCC, in discussing why it favored a relaxation of the limit, referred to “the inhibiting effects of

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49 Advertisers of national brands may, however, regard advertising in two cities that are far apart as close substitutes, at least at the margin.

50 Again, if no entity owns a station in more than one of the cities that make up the relevant market, group ownership creates no additional market power.

51 An exception might appear to be so-called “superstations” whose signals are carried into many cities for distribution by cable systems. Under some circumstances, the sale of a program to a superstation might preclude sales to stations in the markets served by these cable systems. However, this situation is more appropriately analyzed as a sale to a network, where network distribution probably precludes, for a period of time, the sale of the same program to individual stations.
the rule in the development of new programming.\textsuperscript{52} In this view, allowing groups to expand in size will, by assuring them outlets for their programming, permit them to compete more effectively with the three major networks by providing network programming on an occasional basis.

The Motion Picture Association of America has argued that any relaxation of the limit on the size of television station groups should not apply to the three major networks.\textsuperscript{53} MPAA contends that increased station ownership by the networks would foreclose access to network owned stations by ad hoc networks, thus reducing competition in the network market.

We are skeptical about both of these arguments. It is by now well established that the most important barrier to the creation of new networks is the FCC’s spectrum allocation plan for television.\textsuperscript{54} The inability of a new network to reach a substantial portion of the viewing public using existing stations, and the fact that many of its affiliates would have to operate in the less attractive UHF band, combine to make a fourth network unlikely in the near future. Relaxing the FCC’s group ownership rules would do little to alter this situation. A marginal impact might result from the ability of a group to assure the carriage on its own stations of programs that it produces or distributes, but the same result could be achieved by amending the Commission’s network affiliation rules.\textsuperscript{55} But permitting groups to grow larger is unlikely to alter the considerable economic advantage that the major networks have as result of offering to their affiliates a program lineup that covers a substantial portion of the broadcast day. It is improbable, therefore, that permitting groups to grow in size will make ad hoc networks substantially more competitive.

The argument put forth by the MPAA is no more compelling. Affiliates of the major networks already carry a very substantial proportion of the offerings of those networks and the proportion is unlikely to be greatly affected by network ownership.\textsuperscript{56} Therefore, only if a network were to own or affiliate with more than one station in a market would the threat to which MPAA refers be a real one. But the FCC, in proposing to relax its rules, indicated that it would not permit a network

\textsuperscript{52} FCC, Report and Order, adopted July 26, 1984, released August 2, 1984, at para. 63.

\textsuperscript{53} "Hollywood and the FCC Argue 12-12-12 and Network Domination," Broadcasting, August 6, 1984, at 29.

\textsuperscript{54} See, for example, R. E. Park, New Television Networks: An Update, The Rand Corporation, N-1526-FCC, August 1980.


\textsuperscript{56} Id., Vol.II, at 257-266.
to affiliate with one station in a market in which it owned another.\textsuperscript{57} Thus, the concern expressed by MPAA does not appear to be important.

The conditions under which leveraging would be viable are so stringent that such behavior is most unlikely. Collusion is a less remote possibility if group ownership reduces the number of owners relative to the number of stations to such an extent that concentration is high in the \textit{relevant} markets. The upshot is that a primary goal of the Commission should be to prevent undue economic concentration in such markets. We discuss below the options available to the Commission and how well they are likely to meet this goal.

**ECONOMIC EFFICIENCY**

**Program Ratings**

If group owned stations enjoy lower costs than do singly owned stations (or if they exercise leverage in dealings with or collude against program suppliers), we would expect them to broadcast programs with higher audience shares or ratings than do their rivals. An empirical study on this subject, by Parkman, suggests that local news programs produced by group owned stations do tend to attract larger audiences.\textsuperscript{58}

Parkman uses a multiple regression analysis in which the dependent variable is audience rating and the independent variables include joint ownership with other television stations. The ratings data, for the years 1965 and 1975, are drawn from local television news programs in the top 100 markets. Parkman finds that, for 1965, group ownership has a positive but statistically insignificant effect on local television news ratings. However, for 1975 there is a positive and statistically significant effect. Indeed, the coefficient of the group ownership variable is the largest of the three ownership variables and is the only one that is statistically significant. In 1975, the group ownership coefficients are of substantial size, showing that group ownership increases ratings by 2.65 and 1.99 for the early and late news programs respectively, compared with average market ratings of 12.02 and 9.97.


\textsuperscript{58}A. M. Parkman, "The Effect of Television Station Ownership on Local News Ratings," \textit{64 Rev. of Econ. & Stat.} 289 (1982).
To be sure, higher program ratings could result from anticompetitive behavior as well as from greater economic efficiency. However, Parkman's study covers only local news that is produced by the station, rather than including also syndicated programming where any effects of leveraging or collusion would more likely show up. Thus, his study is useful in suggesting that groups do enjoy cost advantages, at least for local news production. As Parkman says, his "results would tend to support the contention that group owners were able to adapt to changes in the production techniques of local TV news programming better than other owners with a resulting higher audience." 59

Profit Margins

If group ownership confers efficiencies, we would expect profit margins to be higher for stations that are members of groups than for other stations, regardless of whether groups engage in anticompetitive behavior. However, as discussed earlier, both the Levin (1980) and Cherington studies find that these margins do not differ significantly between group owned and other stations, suggesting that the cost advantages of group ownership are small.

Advertising Rates

We would also expect advertising rates to be reduced if efficiencies result from group ownership. However, even if groups are more efficient, if group ownership facilitates collusion or permits the exercise of leverage, rates could be higher in markets where group owned stations have large shares if the effects of anticompetitive behavior offset those of greater efficiency. The basic tenor of the results reported above, however, is that the presence of group owned stations in a market does not affect advertising rates. This can result either because group ownership does not create efficiencies or because the effects of greater efficiency and greater collusion are offsetting. 60

However, the findings by Levin and Wildman, discussed earlier, that network owned stations have higher per viewer advertising rates than

59 Id., at 294. In the welter of empirical tests carried out by Levin (1980), op. cit., he also examines the relationship between audience size and group ownership. The general tenor of his results appears to be that there is no significant relationship. See, for example, tables at 175 and 183.

60 This discussion implicitly assumes that advertisers are concerned only with the cost per viewer reached, so that rates per viewer are identical for all stations. However, if advertisers are willing to pay higher rates per viewer to stations with larger audiences, group owned stations will have higher rates if their greater efficiency produces larger audiences.
do their rivals may constitute evidence of group efficiencies. Differences in rates would arise if economies permit the group owned station to provide programs that attract larger audiences, and if advertising rates rise faster than audience, i.e., the relationship is nonlinear.\textsuperscript{61}

**Station Programming Practices**

We would expect group efficiencies to be exhibited in centralized purchases of syndicated programming, and strong control by headquarters over local station activities, as ways to reduce transactions costs and to spread overhead. The evidence suggests, however, that local stations exercise a good deal of autonomy, implying that group efficiencies are weak. We review this evidence in the subsequent subsection on program diversity, where it is especially relevant.

**Growth of Group Ownership**

If large economies flow from group ownership (or if groups engage in anticompetitive activity) we would expect rapid growth in group ownership. Surely, if there were large economies of group operation, or opportunities to exert leverage or engage in collusive behavior, significant incentives would exist for groups to purchase singly owned stations. If so, we probably would have seen rapid growth of groups after the FCC's 1954 decision increasing the ownership limit to seven stations, with many or most groups at the limit. However, in mid-1984 only 15 of the 175 television station groups owned seven stations. Only one had the full complement of seven television, seven AM radio and seven FM radio stations, and a total of 27 groups held the limit of five VHF stations.\textsuperscript{62} In 1982, almost 20 percent of the nation's 518 VHF stations remained singly owned.\textsuperscript{63}

The growth of group owned stations has proceeded at a steady but not strikingly rapid pace. During the 26-year period from 1956 to 1982, the percentage of group owned television stations grew from 45 percent

\textsuperscript{61}One might suppose that group efficiencies (as well as anticompetitive behavior) would show up in station selling prices, which would be higher when a station is purchased by a group than by a nongroup. Indeed, both the Levin and the Cherington studies extensively analyze station selling prices by type of buyer and seller to test this proposition. However, this evidence is irrelevant to the question. Even if groups have advantages over nongroups, they would not pay higher prices when purchasing stations. However, if groups have efficiency advantages, they would tend to outbid others and, thus, buy stations from nongroups.

\textsuperscript{62}Broadcasting, July 30, 1984, at 30. These numbers include currently announced sales with transfers of ownership pending.

\textsuperscript{63}Notice of Proposed Rulemaking, at 25.
to 72 percent, with a substantial number of stations—219 out of 790—remaining in the hands of individual owners.\textsuperscript{64}

An anomaly in the pattern of empirical evidence, however, is the higher concentration of group ownership in the larger markets, despite the fact that profit margins of groups are higher than for singly owned stations in the smaller markets. Howard reports that as of January 1, 1983, 94.7 percent of the VHF stations in the top 25 markets were group owned, compared with 68.3 percent in markets 75–100. For VHF and UHF combined, the respective numbers are 81.6 percent and 69.6 percent.\textsuperscript{65} The Cherington study discloses that (in 1964) the profit margins of group and singly owned stations were nearly the same in the top 50 markets (39.1 percent vs. 37.4 percent) but that the difference was greater in markets 50–100 (24.3 percent vs. 18.1 percent).

One might argue that groups are attracted to the larger, more lucrative markets where the dollar profits are higher—all the more so if groups are limited as to the number of stations they may own. But this explanation is flawed. In the first place, the FCC constraint is not binding on most groups. Owning fewer than the permitted number of stations, they are free to expand into the smaller markets. Second, if the markets with smaller dollar profits are less attractive to group owners, they should also be less attractive to single station owners. The lower profits of stations in small markets do not, therefore, explain why group owners are less well represented in these markets than in the large ones. Third, whatever economic advantages would accrue from centralizing management, spreading program costs over larger audiences, reducing (per-viewer) costs of marketing, and such would likely be more important for small rather than for large markets. If so, however, we would expect greater, rather than less, group ownership in smaller markets than in larger ones.

**DIVERSITY IN PROGRAMMING**

The final category of evidence about the effects of group ownership concerns program diversity. Defining diversity is not a straightforward matter. For some, it refers to the variety of viewpoints expressed in the editorials presented by various stations. By this definition, group ownership reduces diversity if the views presented by stations that are members of a group are more similar than those of stations that are

\textsuperscript{64}Id.

not under common ownership. Others view diversity as referring to the types of programming presented on various stations. From this perspective, group ownership reduces diversity if the range of program types provided by group owned stations is smaller than that provided by stations that are individually owned.

The Cherington study is one of the few that shed light on this issue. The analysis involved (a) sending questionnaires to all of the 532 commercial stations in the country, of which 15.2 percent were returned, and (b) conducting 35 interviews "with a representative cross-section of station managements, a majority of which had not answered the questionnaire." 67

The authors conclude that group ownership has little effect on opinion molding or on editorializing. Responses from both group owned and singly owned stations disclosed that the station manager and news director have "moderate" to "great" influence on editorial positions. For group owned stations "headquarters" and the "owner" played "very little" role, whereas for single owner stations, the "owner" played a "moderate role." 68 For both types of stations, the national wire services network news organizations and station reporting staff were of "moderate or great importance," whereas group news organizations for the group owned stations was of "very little" importance. 69 The interviews also disclosed a high degree of autonomy by station managers in the selection of programming.

If there were significant group efficiencies, one would expect them to arise in part from the economies of centralized management, news collection, and presentation. However, if station managers operate as autonomously as is described in the Cherington study, and if they rely so little on headquarters for news content, the economies of group ownership are likely to be small. 70

The Cherington study is subject to the obvious criticism that the low response rate of 15.2 percent to the questionnaire could have introduced a self-selection bias. And the evidence is based on self-reporting by station respondents rather than on data about how stations actually behave. A content analysis of programs carried by group and singly owned stations, while tedious and costly to perform, would provide a far better measure of differences in programming.

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66 Robert Crandall argues, however, that viewers in small cities may benefit from exposure to ideas originating in larger ones, where otherwise they might receive only the parochial viewpoints of local stations owners.
67 Cherington et al., op. cit., at 82.
68 Id., at 93.
69 Id., at 87.
70 It is possible, of course, that station managers claim more autonomy than they actually have.
More recently, Levin\textsuperscript{71} reports that 

a reduction in group ownership would have no impact on diversity, however measured, so long as network affiliations remained unchanged. . . . Loss of a group tie would have deprived viewers of no more than 3.5 minutes of news daily, and of 5.5 minutes of non-network shows, whereas public affairs, fine arts, and local programming would each have remained unaffected. . . .

He also concludes that "the loss of group ties . . . has no significant programming effect, nor any even approaching significance."\textsuperscript{72}

In response to the FCC’s Notice of Proposed Rulemaking on group ownership, Capital Cities Communications and Knight-Ridder Newspapers commented that

[T]he employment and supervision of key station personnel at Knight-Ridder stations are conducted by the station managers, with only very generalized review by corporate headquarters. Each of the company’s stations makes its own selection of national news sources. Some use UPI; some, AP; some, both wire services. The format of local news programs is also a matter committed to station discretion. Knight-Ridder’s Flint station, for example, extended its news program to an hour, and later compressed it to half an hour, both at the initiative of the individual station manager.\textsuperscript{73}

As with the Cherington study, this situation suggests that group ownership does not reduce diversity—nor does it contribute significantly to economic efficiency.

Also in response to the FCC’s Notice, the National Association of Broadcasters conducted a study of 107 group and nongroup owned commercial television stations in 29 markets. The percentages of a broadcast day devoted to public service programming were measured using \textit{TV Guide} listings for a randomly selected composite week.

The results of the study indicate that overall, group-owned stations offer more public service programming than non-group owned stations. Group-owned stations devoted 18.4%, 10.1% and 32.0% of an average broadcast day to informational, local and total non-entertainment programming. Non-group owned stations devoted 12.9%, 6.9% and 24.8% of a broadcast day to these same program categories.\textsuperscript{74}

\textsuperscript{71}Levin (1980), op. cit., at 170–171.
\textsuperscript{72}Id., at 205. Program minutes is not the only possible measure of diversity, of course.
\textsuperscript{74}Comments of the National Association of Broadcasters, FCC Gen. Docket No. 83–1009, January 19, 1984, at 1.
GROUP OWNERSHIP

These data also suggest that group owned stations promote diversity, provided one accepts additional public service programming as a valid measure of additional diversity.

In view of the great importance that the FCC has, for decades, placed on maintaining and expanding diversity, we are surprised by the paucity of empirical analysis directed to the question of whether its group ownership rules, in fact, contribute to or compromise attainment of this fundamental goal.\(^7\)

Our review of the empirical evidence does not leave us with much confidence that the effects of group ownership are well understood, since many of the studies have important shortcomings. The best that can be said is that the studies are consistent with the view that the economies of joint station operation are small and that, as suggested by theory, group ownership does not create market power. Only Parkman's study demonstrates that costs are significantly lower for group owned stations, although the Levin and Wildman findings are consistent with the presence of group efficiencies. Nor is there evidence that groups, other than those controlled by the networks, significantly raise advertising rates. In the case of network owned stations, the evidence is mixed, with the Wildman and Levin studies suggesting that they charge higher rates than do other stations in their markets, the Fournier and Martin study indicating that rates are no higher in markets with network owned stations, and the Wildman study concluding that rates are no higher for other stations in markets containing network owned stations.

\(^7\)One opportunity to assess the effects of group ownership on programming was, however, missed. In Broadcasting in America, The Performance of Network Affiliates in the Top 50 Markets, 42 FCC 2d 1 (1973), a group under the direction of FCC Commissioner Nicholas Johnson surveyed the programming practices of a large number of television stations. The authors "had hoped to be able to compare the performance of the 'media barons' — the corporate owners possessed of conglomerate interests both within and without the various media — with that of independent local owners who would have no such outside interests. That comparison has proved impossible, because it is apparent... that virtually none but a small handful of those network affiliates would qualify as even reportedly resembling 'local' owners." (at 71) Unfortunately, having failed to distinguish among station groups, newspaper ownership, and ownership by corporations engaged in non-media activities, the authors did not examine separately the performance of group owned stations nor compare the performance of the largest groups with those of other stations.
In view of the limited utility of the evidence, one must place more weight on a priori analysis than is perhaps desirable. Our analysis, which is broadly consistent with the empirical evidence, indicates that group ownership is unlikely either to enhance efficiency or create market power. The issue of collusion may be a problem, however, if group ownership becomes regionally concentrated. We consider the Commission's recently abolished regional concentration rule in Sec. III.

POLICY IMPLICATIONS

The past growth of group ownership, and the lack of evidence about strong group economies and anticompetitive practices, suggest that no dramatic increase in group ownership will occur as a result of the relaxation of the group ownership rules. With changes resulting from the relaxation of the rules moving slowly, the Commission could monitor the evolution of the industry and take further action if developments in the industry warrant.

But this assessment cuts both ways. Why, one might argue, if the economic advantages of group ownership are modest, should one take the risk that increased concentration might reduce diversity or create greater market power?

The answer is that in particular situations, substantial gains in economic efficiency might result if groups were permitted to expand beyond current limits. The fact that past studies do not disclose large and consistent differences between profit margins of group and singly owned stations, for example, does not necessarily mean that in all cases group ownership confers few economic benefits. The existing pattern of ownership reflects decades of marketplace "selection" of stations into group and singly owned categories. Simply put, group owned stations are likely to be those that most benefit from group ownership. Hence, were they singly owned, their profit margins would be lower. Similarly, stations that operate well as single entities are likely to show relatively high profit margins. Consequently, it is not surprising that singly owned (network affiliated) stations with large new weekly circulations have higher profit margins than do group owned stations, as

\footnote{Trade press reports following the modification of the group ownership rule suggests that, although the change will permit some transactions that would otherwise not have occurred, the effect will not be great in the near term. See, "How Will Market React to New Limits?," 107 Broadcasting 29 (1984). Dertouzos and Thorpe argue that the estate- and income-tax laws create important incentives for shifts from single to group ownership. For an analysis of these incentives in the case of newspaper groups, see J. N. Dertouzos and K. E. Thorpe, Newspaper Groups: Economies of Scale, Tax Laws, and Merger Incentives, The Rand Corporation, R-2878-SBA, June 1982, at 55-82.}
reported in the Cherington study. If they did not have such profit margins, they too would likely have been acquired by a group.

A possible benefit of relaxing the Commission's group ownership rules is, therefore, that the process by which stations decide whether or not to become part of a group is now less constrained. As the industry continues to evolve, with the status of particular stations changing as a consequence of competition, changes in management, and other circumstances, the advantages of being a member of a large group will also vary. Perhaps singly owned stations whose profit margins are healthy today will see their margins decline in the future. If so, the economic attractions of joining a group may increase. Relaxation of the FCC's rules gives these stations and group owners greater freedom of choice in making matches that contribute to the economic health of the broadcasting industry.

OPTIONS FOR MODIFYING THE GROUP OWNERSHIP RULE

We conclude this section by examining three options that were available to the Commission in reconsidering its group ownership rule. The first—which was adopted by the Commission—would simply increase the permissible number of stations beyond the current limit of seven. The second would have limited the total audience that may be reached by a group with audience measured, for example, by net weekly circulation. The third would have the Commission consider combinations of stations case by case in a manner similar to that employed by the Department of Justice under its merger guidelines.

Option 1: Raise the Numerical Limit

Drawing from a range of possible rationales, the Commission could raise the numerical ceiling on group ownership. In its Notice of Proposed Rulemaking, the Commission describes M. O. Wirth's recommendation that the standard for radio should be modified "to allow one entity to own the same percentage of commercial stations nationally at present 'as they were allowed to do in 1953,' which would permit ownership of 72 radio stations without regard to type." Transferring this proposal to television, the Commission notes that "a single entity would be permitted to own 14 television stations of any class, based on the number of commercial stations broadcasting when the seven station television limit was established in 1954 compared to the number

\(^{77}\) Notice of Proposed Rulemaking, op. cit., at 49.
licensed in 1983.” In the end, the Commission adopted a “rule of twelve.”

Adoption of such a rule is unfortunate. As is well recognized, the rule of seven was arbitrary to begin with. Indeed, the arbitrary nature of the rule was an important factor that has helped trigger the Commission’s present inquiry. Any formula that sets a new fixed limit related is no less arbitrary. “A rule of twelve” (or any other number), like “the rule of seven,” fails to take into account the extent to which the stations in a group compete with one another, nor does it reflect the importance of the stations in a group in the various markets in which they operate. In other words, a higher ceiling does not deal with the fundamental flaw of the present rule—that simple numerical limits have little merit.

Option 2: Impose Ceilings Based on Audience Size

As is well recognized, the present group ownership rule fails to distinguish between groups owning stations in the seven largest television markets and those owning stations in the seven smallest. Both such groups would be forbidden from acquiring an eighth station although one would reach over a 25 percent and the other fewer than one quarter of 1 percent of all households with television sets. Thus, some argue that a rule based on the audience served by a group would be superior to a ceiling on its number of stations.79

The problem with this option is that, like the “rule of seven,” it does not take into account the locations of the stations that are part of a group. Common ownership of two stations in two adjacent small cities might have a far more anticompetitive effect than the ownership of seven stations in large markets that are far apart. It is not simply the number of stations that are owned by a group or the size of the audiences that they serve that determines whether group ownership is anticompetitive. Rather, it is the likelihood that the operations of the stations in the group can be combined to create market power. As we have argued above, this requires that the stations be in the same market, and two stations are more likely to be in the same market the closer they are located to one another. “Weighting” station ownership by the size of the audiences served would not overcome this limitation of the present rule.

78Id., at 50.
Option 3: Use A Case-By-Case Approach

This option involves two basic steps:

1. Determine whether the station being acquired is in the same market as a station owned by the acquiror. If it is not, grant the application. If it is, proceed to the second step.

2. Determine the present degree of concentration in the market and the increase in concentration that the acquisition will produce. If either (a) the market is unconcentrated or (b) the increase in concentration produced by the acquisition is small, grant the application. If the market is concentrated and the acquisition will substantially increase the extent of concentration, deny the application.86

Use of this approach can lead to the denial of applications that would be granted under present rules as well as to the granting of applications that would presently be denied. Thus, the owner of a single station who proposes to acquire a second station, both of which are in the same market, although not in the same city or ADI, may be denied the right to do so if the market is already concentrated and the two stations have substantial market shares.

In this regard, we agree with a criticism of the Commission’s multiple ownership rules expressed many years ago by Commissioner Hennock: “. . . an interest in less than the permitted maximum number of stations, concentrated in one state or a given geographical region, may often have a more deleterious effect on competition and constitute a more stifling concentration than the ownership in excess of the permitted maximum scattered throughout the United States.”81 At the same time, Option 3 would permit the owner of seven stations to acquire others so long as either (a) the acquisitions are not in the same markets as any of his other holdings, or (b) the market is unconcentrated and the acquisition does not substantially increase concentration.

Although stating this procedure is straightforward, applying it in practice will be more difficult.82 The Commission will be forced to deal

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82 In some respects, the application will be easier here than in the case of the DOJ Merger Guidelines, since the FCC can focus its attention on a single industry, with analysis developed for one case being transferable to others. The DOJ, on the other
with claims that the station to be acquired is not in the same market as other stations held by the same owner or, if it is conceded that the proposed acquisition is in the relevant market, that the market is unconcentrated, or that, in any event, the acquisition will not substantially increase concentration.

Although it is difficult to establish “bright line” tests for defining relevant markets, certain characteristics of the relationship between the cities in which the station to be acquired and other holdings of the owner are obviously relevant to such a determination. If the two stations are in the same city they are certainly in the same market. If two stations are widely separated geographically, they are almost certainly not. If they are in adjacent cities, or in cities that are relatively close together, the determination of whether they are in the same market will be difficult. As in the application of the Department of Justice merger guidelines, such factors as (a) evidence that buyers do or do not perceive advertising purchases in the different cities as substitutes, (b) correlations of movements of advertising prices in the cities, and (c) evidence that sellers perceive advertising spots in different cities to be substitutes will be important in determining the appropriate market delineation.\textsuperscript{83} Unfortunately, current knowledge about the relationship between group ownership and such variables as advertising rates is based almost entirely on studies that assume, without verification, that the relevant markets are ones defined by the national program rating services, Arbitron and A. C. Nielsen. The Commission will, therefore, be required to conduct analyses that permit it to identify relevant markets for its ownership policies.

If, after conducting its analyses, the Commission were to conclude that existing market definitions are appropriate, its conclusion would indicate that the present group ownership rule does not limit the collective exercise of market power. Even if two groups face one another in several markets, their pricing policies would have to be coordinated separately in each of the markets. Therefore, collusion would appear no easier in these situations than if ownership were limited to a single station.\textsuperscript{84} The Commission’s rules that prohibit the ownership of two stations in the same service (AM, FM, or TV) in the same market might still be appropriate, although if a local market were unconcen-

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\textsuperscript{83}DOJ Merger Guidelines, op. cit., at 637–638.

\textsuperscript{84}The results of the Peterman study, indicating that the presence of group owned stations does not raise advertising rates under standard market definitions, would be relevant here.
trated and a particular proposed combination had little effect on concentration, the combination might be permitted.

On the other hand, if the Commission were to conclude that markets were wider than currently defined, it would face the task of establishing whether proposed combinations involving stations in different cities are anticompetitive. It would probably not be wise for the Commission to attempt to produce a list of relevant markets within which combinations are likely to be rejected. Compiling such a list would be an expensive undertaking and might easily become outdated. Moreover, the appropriate definition to employ may depend on the particular combination proposed. Advertising in cities A and C might each be close substitutes for advertising in city B but be weak substitutes for advertising in each other. In some sense A, B, and C form a market, but combinations involving stations in A and B or B and C should receive greater scrutiny than ones involving stations in A and C.

The determination of the relevant market, although it is a challenging task, may, in some cases, turn out to be unnecessary to conduct with great precision. In some circumstances, a finding that two stations are in the same market may produce a market that is so large that it is not concentrated. If, for example, the Commission concludes that Washington and New York are in the same market that market is likely to also include stations in Baltimore, Harrisburg, and Philadelphia. Thus, instead of the market containing only the 19 stations in New York and Washington, there would be 37 stations in the relevant market. Here a combination of stations in the two cities might pose little risk of anticompetitive behavior.

Still another situation in which the precise market definition would be relatively unimportant occurs where, even under the narrowest possible definition, the combined market shares of the station being acquired and the owner’s other holdings is very small. Thus, even if Washington and Baltimore are treated as a market, a combination of an independent UHF station in Baltimore and an independent UHF station in Manassas, Virginia, south of Washington, which is in the Washington market as defined by Arbitron, may be of little concern. The Commission might, as the Department of Justice has, publish numerical standards that divide combinations into those that are likely to be found acceptable and those that are not. Thus, the Commission could indicate that it will measure market concentration by the Herfindahl index—the sum of the squares of the market shares of each firm in the market. It could then indicate how large an increase in concen-
tration it would accept as a result of a combination—which would depend, in turn, on the existing level of concentration in the market.85

The relevant market for a given station may differ depending on whether its sale of advertising time or its acquisition of programs is involved. Although it is possible that advertising markets are larger than metropolitan areas, program markets are certainly local since stations that serve discrete groups of viewers can purchase the same program without affecting the audience of the other. Thus, a combination of two stations in the same area that might be permitted because the area is part of a larger advertising market and does not substantially increase concentration in that market may, nevertheless, be rejected if the two stations are in the same program market.

This third option is far different from the path the Commission has taken virtually from the beginning of its history. Although the Commission has always indicated that any application might be denied if it led to excessive concentration of ownership, as a practical matter this policy has been enforced through rigid quantitative limitations on station ownership. Indeed, when the Notice of Proposed Rulemaking that led to the regional concentration of control rules was adopted in 1975, the Commission stated that the new rules were intended to replace a policy under which

an applicant seeking to acquire a broadcast station near to, or in the midst of, several of its commonly-owned broadcast stations, is asked to submit a compelling showing disproving the possibility that a grant of its application might result in a regional concentration of control. This process requires an evaluation of a plethora of factors, such as the number of competing media, other signals available, population, areas to be served and distances between stations, which factors have no exact measurable significance, and which tend to give only an apparent precision to our decisions. Dealing with this issue on a case-by-case basis has tended to submerge the Commission’s policy in this area.86

The Commission indicated that it wished to “move away from its current policy in the area of regional concentration, which requires

85One problem that is likely to become increasingly difficult to deal with over time in measuring market concentration is how to take into account alternative methods for distributing television programs, cable, multipoint distribution services, direct broadcast satellites, and others. As these grow in importance, they are likely to constrain the exercise of market power by broadcast stations so that markets that appear concentrated when only broadcasters are taken into account will appear less so when alternative media are considered. Thus, if concentration in the advertising market is of concern, the market shares of existing advertiser-supported cable or direct satellite broadcast services should also be considered in measuring concentration and assessing the effect of a combination in increasing concentration.

8654 FCC 2d 331, at 332 (1975).
extensive showings and determinations, toward a policy employing hard-and-fast rules, as is now the case in the other multiple ownership rules.\textsuperscript{87}

In short, the Commission expressed its unwillingness to conduct a complete analysis of every case in which the regional concentration of control issue might arise. Although the "plethora of factors" the Commission lists seem significant, the agency was apparently willing to dispense completely with most of them to obtain a rule that could easily be applied. Indeed, one of the reasons given by the Commission for the adoption of a rule was that the previous process imposed large burdens on would-be acquirors.\textsuperscript{88} Thus, it appears that one of the Commission's purposes in adopting the rule was to make it easier for station combinations to be formed, since many combinations would be permitted under the rule which might be challenged, if not prevented, under the previous policy. Moreover, the Commission's solicitousness toward applicants seems itself a bit misplaced, since the rule presumes that those combinations that violate the rule will not be permitted. In such cases, the cost of the showing is not avoided if a waiver is sought, and if the policy prevents a combination the would-be applicant is clearly worse off.

We do not have in mind a policy like the one the Commission employed before adopting its regional concentration rule. At that time, challenges to combinations were made by outside parties, and the applicant was forced to defend the combination before the Commission. The Commission indicated in its order that most of these challenges were rejected, so that for those combinations permissible under the rule the costs of defending against a challenge would be avoided. The Commission apparently did not play a major role unless such challenges were mounted.

The approach we are suggesting here would be quite different. When station acquisitions are contemplated, the applicant would, of course, notify the Commission. The Commission staff would be required, within a limited period of time, to determine whether or not to challenge the acquisition. If it did not do so this would be prima facie evidence that the transaction was acceptable so that outside challengers would face a heavy burden. On the other hand, rejection by the

\textsuperscript{87} Id., at 333.

\textsuperscript{88} 63 FCC 2d 824, at 826 indicates that the Commission "found that applicants with limited resources were being required to conduct expensive media surveys and submit extensive showings to disprove this regional concentration policy. Our experience has shown that the bulk of these applications raising a regional concentration issue have been granted because our examination of these applications has shown that a regional concentration would not result."
staff would produce either a hearing, if the applicant chose to proceed, or the withdrawal of the application. Over time, as the outlines of the Commission’s policy became clear, applicants would be able to determine the likelihood that a particular application would be approved. At the same time, no one would be foreclosed from defending a combination before the staff or the Commission if it felt that the particular circumstances warranted.

Moreover, the approach would not be without standards. Indeed, if the Commission wished, it could issue guidelines for combinations. But these guidelines should be based on analyses that take into account information about concentration in broadcasting and competing media, and should be periodically revised as new knowledge becomes available. At the same time, parties should be permitted to attempt to convince the Commission staff or the Commission, through the administrative process, that a particular combination should be permitted.

The Federal Communication Commission’s group ownership rules have correctly been criticized for their arbitrary nature. It is unfortunate, therefore, that the present reconsideration of these rules produced merely an increase in the ceiling on station ownership. At the same time, elimination of all restrictions on combinations of broadcast stations would be unwise. It would be far better if the outcome were an improved understanding of the goals the rules are intended to serve so that rules better suited to achieving these goals might be fashioned.
III. THE REGIONAL CONCENTRATION RULES

Group ownership of broadcast stations increases the likelihood of anticompetitive behavior if (a) the stations are in the same relevant market, e.g., advertisers regard purchases on the two stations as substitutes, (b) the relevant market is concentrated, and (c) the existence of a station group substantially increases concentration in the market. Therefore, a combination of stations in adjacent cities, each of which contains a relatively small number of stations, is more likely to create market power than a combination in widely separated cities, or in cities that contain many other stations or other competing media. The Federal Communication Commission's regional concentration rules were important to the extent that they prevented stations that were not in the same locality, but were in the same market, from operating under common ownership.

These rules have recently been repealed. It is instructive, therefore, to examine the rationale provided by the Commission for the repeal in light of our previous analysis. We conclude that, although the Commission's rules were far from ideal, the Commission's analysis of their effects is not entirely satisfactory. In particular, the Commission's indication that it intends to rely solely on rules regulating ownership within local markets could, in some circumstances, lead to station combinations that are anticompetitive.

The principal reason provided by the Commission for the repeal of its rules is that the "substantial rise in the multiplicity of media voices considerably attenuates both the diversity and economic competition justifications underlying our regulatory limitation of multiple ownership on the regional level.... [T]his growth in media outlets directly diminishes the likelihood that multiple ownership on a regional level might afford licensees sufficient economic power to permit anticompetitive behavior."  

Second, the Commission argued that "the rule does not address economic concentration of broadcasting stations in any market relevant to antitrust concerns. Specifically, stations compete with one another for advertising at national and/or local levels. DOJ found that '...advertisers do not generally view the different local markets in a region as good substitutes for each other'.... Similarly, program

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1Repeal of the "Regional Concentration of Control" Provisions of the Commission's Multiple Ownership Rules, 49 Federal Register 19670, May 9, 1984.
2Id., at para. 16-17.
acquisition by stations occurs primarily on a national or local basis, making the regional concentration rules unnecessary for ensuring competition in the program acquisition market." For this reason, the Commission argued that its "other multiple ownership rules, particularly its local market restrictions, will continue to restrain group ownership, often more stringently, in many situations that would have been subject to the regional limitations." Third, the FCC argued that "severely anomalous results" were produced by "the failure of the 'fixed' rules simplistic 'contour overlap' and 'geographic proximity' criteria to consider the number of competing media outlets and the sizes or classes of stations involved." Moreover, the Commission argued that it it was unwilling to return to the previous case-by-case approach to regional concentration because it was "too unpredictable and burdensome," the reason that it adopted the fixed standard in the first place.

Finally, the Commission argued that its rules "also impose significant costs on the broadcast industry and, ultimately, on the public, which conflict with the rule's underlying purposes of promoting economic competition and diversity of voices." In this connection, the FCC argued that "joint ownership may create operating efficiencies or economies of scale that lower the multiple owner's production costs and thus permit it to channel saved resources into other areas such as programming." It is hard to disagree with the Commission's conclusion that the arbitrary nature of its rules might well produce anomalous results. In particular, since the rules failed to take into account the number and nature of other media in the region, or the importance of the stations in a regional group, they were just as likely to prevent combinations of small stations in regions with many outlets as combinations of large stations in regions with few alternatives. Nonetheless, the Commission's decision to impose no limitations on regional concentration could produce other anomalies. Thus, under the new policy, a combination of stations in a region with few media alternatives is just as likely to be permitted as one where the number of alternatives is

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3Id., at para. 17.
4Id., at para. 20.
5Id., at para. 24–25.
6Id., at footnote 36.
7Id., at para. 27.
8Id., at para. 28.
9We would note, however, that the similar anomalies can result from the application of the FCC's duopoly and one-to-one market rules, which the Commission indicates will remain the principal focus of its policy with respect to media concentration.
large. It is in the nature of "fixed" rules that they will produce 
"anomalies."

What the FCC has done is to assure not that anomalous outcomes 
will be avoided, but only that they will be of a type different from 
those that arose under the regional concentration rules. So long as the 
Commission does not consider combinations case by case, such a result 
is assured, since the Commission's new policy, like its old one, does not 
take into account "such factors as the number of competing media 
outlets and the sizes or classes of stations involved," i.e., it is a "fixed" 
rule. Moreover, the considerable growth in the number of broadcasting 
stations and other media outlets upon which the Commission relies 
heavily may not be relevant to a combination in a region where such 
growth has not occurred. What is relevant is the extent of competition 
in the particular region in which a station group operates, not the 
number of media outlets nationwide.

What about the question of whether stations that are not in the 
same locality but are in the same region compete with one another? 
Although it may be true that these stations do not compete in the 
market for programs, they may compete in the advertising market. 
Indeed, as we have pointed out above, all of the statistical evidence of 
the effect of group ownership on advertising rates of which we are 
aware is derived from studies that assume that the market is local. If 
this assumption is incorrect, and to our knowledge it has not been for- 
maUy tested, some combinations that are anticompetitive could occur 
under the Commission's new policy.

With respect to economies of scale that result from the operation of 
groups, the Commission lists a large number of possible sources of 
economies. But it does not refer to any evidence that such economies 
exist, or that they are important. Indeed, although we are cited for the 
proposition that "in particular situations, substantial gains in economic 
efficiency might result if groups were permitted to expand beyond 
current limits" we are also quoted as saying that "the economies to be 
derived from joint operation are not large." 10 We reiterate here our 
basic conclusion that the burden remains on those who would argue 
that scale economies resulting from group ownership are important in a 
particular case.

To be clear about our conclusions, we are not arguing that the 
regional concentration rules should have been retained in their previ- 
sous form. Moreover, even if the rules had not been repealed, station 
groups would probably not have been handicapped seriously, since they 
could have purchased stations in other "regions." Perhaps the most

10 Id., at footnote 41.
serious loss would have been those economic efficiencies that result when stations that are part of the same group operate in the same region. However, no empirical studies shed light on the importance of these economies.

On the other hand, little is likely to be lost as a result of the repeal of the rules, as long as relevant markets are no larger than the markets defined in the FCC's duopoly and one-to-a-market rules. If these market definitions are correct, elimination of the regional concentration rules will have no effect on the ease with which group owned stations can collude or otherwise behave anticompetitively. And, even if the relevant markets are larger, no market power will be created in markets where there are many other stations and competing media.

Nonetheless, there may be situations in which group ownership confined to a particular region leads to anticompetitive behavior.\footnote{There may also be situations in which such concentration adversely affects the diversity of viewpoints available to the public.} We have already suggested the conditions under which such an outcome appears most likely—combinations of stations in geographic proximity to one another with few other media outlets.\footnote{We re-emphasize that even such combinations will not be anticompetitive if the stations are not in the same relevant market. We regard the question of the extent of the relevant advertising market as an open one, although we can imagine situations in which stations that are in different markets, as traditionally defined, would compete with one another.} With the elimination of the regional concentration rule, however, no restrictions remain on such combinations. We would suggest that, rather than simply permit all such combinations, the Commission evaluate them case by case using guidelines similar to those adopted by the Department of Justice for evaluating proposed mergers. Application of this approach, which was discussed in detail in the section on group ownership, is more likely to result in a conclusion that a particular combination should be rejected where the combining stations are in the same region.\footnote{However, many combinations that would have been rejected under the Commission's regional concentration rule are likely to be approved under this approach, because they occur in markets that are unconcentrated.}

The FCC initially adopted its regional concentration rules to avoid the extensive showings and determinations typically involved in its previous case-by-case approach. Nevertheless, we believe that the Commission could employ a case-by-case approach to regional concentration, and to group ownership generally, without the difficulties it faced before the adoption of its rules and, at the same time, avoid the
arbitrariness that is generally recognized to have resulted from the applications of these rules.\textsuperscript{14}

In our view, the choice is not between "fixed" rules applied arbitrarily and \textit{ad hoc} case-by-case adjudication. The best alternative is, we believe, to attempt to evaluate the particular features of each combination and to do so in a consistent and principled fashion.

\textsuperscript{14}It should be recognized that regional concentration would not be treated as a special problem but rather as part of a general Commission concern with media concentration.
IV. RULES REGULATING LOCAL MARKET CONCENTRATION

We concluded in Sec. II that rules regulating group ownership of geographically dispersed broadcast stations have little support either from available empirical evidence or from economic analysis. In Sec. III, we concluded that a case may exist for regulating regional broadcasting combinations if stations operate in markets that are larger than conventionally defined local markets. An even stronger case may exist for regulating common ownership within local markets, where combinations are more likely to involve competitors. However, the present Commission policies that limit such combinations—the duopoly, one-to-a-market, and broadcast-cable cross-ownership rules—may be too stringent in some circumstances. This section examines the available evidence on the effect of local market concentration and the basis for these rules.

THE DUOPOLY AND ONE-TO-A-MARKET RULES

Because Federal Communications Commission rules have limited, but not prevented, the formation of broadcast groups, one can assess the effects of group ownership by comparing the behavior of group owned and singly owned stations, or the behavior of markets in which such stations are represented to differing degrees. However, the FCC has always prohibited joint ownership of television stations in the same market. A similar prohibition applies to FM radio and, since 1941, to AM radio when the FCC adopted its chain broadcasting rules. Thus, one cannot examine the effect of the joint ownership of stations in the same service in a market, because such combinations do not exist.

Nevertheless, a limited basis exists for examining the effects of common ownership of stations in different services within a market. Some combinations of television and AM radio stations, which are now prohibited, were grandfathered when the Commission adopted its one-to-a-market rule. Moreover, the one-to-a-market rule permits AM-FM combinations and allows combinations of UHF television stations and FM radio stations case by case. Thus, routinely permitted and grandfathered combinations are potential sources of information about the effect of ownership combinations within a local market.

1Before the adoption of the Chain Broadcasting rules by the Commission in 1941. NBC owned two AM radio stations in each of four markets. FCC, Vol. II, op. cit., at 35.
In addition, even in markets without such combinations, the relationship between ownership concentration and economic behavior may shed light on the likely effect of common ownership of stations in the same service. By comparing performances in markets that are concentrated and unconcentrated, one may be able to predict the effect of relaxing or abandoning the duopoly rules. Thus, if markets with many AM radio stations perform no differently from those with few, one may conclude that relaxing the prohibition against joint ownership would not substantially lessen competition. In this section, we attempt to infer, from the limited evidence that is available, the effects of radio-television combinations and of market concentration on broadcast market performance.

Advertising Rates

The Effect of Radio-Television Combinations. Peterman analyzes whether joint ownership of radio and television in a market raises advertising rates. For each market, he assumes that "the proportion of the total number of radio stations jointly owned by TV firms... represents the degree of control over radio by TV stations." He relates the average discounted advertising rates summed over all TV stations for each of 204 markets to the number of homes in the market, family income, and the percentage of radio stations owned by TV stations. His analysis shows that, as expected, homes and income are both positively and significantly related to advertising rates. However, he finds no significant effect of cross ownership between radio and television stations. That is, advertising rates do not rise as the number of radio-television combinations increases in a market. Peterman obtains essentially the same result when he limits the analysis to markets with exactly three television stations and to the 51 markets containing only a single station, where cross ownership is measured by a dummy variable equal to one when the lone TV station also operates a radio station.

Unfortunately, Peterman's price data are from station rate cards, and thus do not necessarily reflect transaction prices. Moreover, his model considers only a limited number of factors besides radio-television cross ownership. For example, the analysis involving all 204 markets does not control for the number of television stations in each market. Finally, the variable used to measure joint ownership counts only the number of stations that are involved in combinations and not their importance in the market.

\(^{2}\)Peterman, op. cit., at 78.
Although Wirth and Allen are concerned primarily with the effects of newspaper-television station cross ownership, they also report findings relevant to the effect of joint ownership of radio and television stations.\(^3\) Using 1973 data for 534 commercial stations, they regress separately television list-price advertising rates and total television station advertising revenues, both per-thousand viewers, against a number of explanatory variables, including whether the station is owned by a newspaper in the same market, the number of households in the station's market, and whether the television station owns a radio station in the same market.

Wirth and Allen find generally positive and occasionally significant relationships between a television station's advertising rate and its joint ownership with a radio station in the market. They interpret this finding as evidence that radio-television combinations create market power. However, their finding is also consistent with the hypothesis that group ownership generates economies that produce larger audiences, and that the relationship between rates and audiences is nonlinear. A test of the market power hypothesis would require examination of whether rates are higher for stations that compete with radio-television combinations because, if such combinations raise advertising rates, all stations in the market should benefit. Unfortunately, Wirth and Allen do not carry out this test.\(^4\)

*The Effect of Market Concentration.* Fournier and Martin, using transactions price data, examine the effect of market concentration on the price of 30-second television spot advertisements.\(^5\) Controlling for a number of other variables, they employ a number of alternative measures of concentration including entropy—the sum over all stations of market share times the logarithm of (1/market share); the Herfindahl index—the sum of the squared market shares of all stations; and the two-firm concentration ratio.

The coefficients of these measures are either not significant or suggest that rates fall with an increase in concentration. The only significant measure is entropy, indicating that advertising rates are higher the less concentrated is the market. The two-firm concentration ratio, which approaches statistical significance, similarly indicates that the more concentrated is the market the lower are advertising rates.


\(^4\) In examining the effect of combinations of newspapers and television stations, Wirth and Allen do include a variable indicating whether a television station competes with such combinations; id., at 31.

\(^5\) Fournier and Martin, op. cit.
However, when the equations were re-estimated treating the two-firm concentration ratio, the Herfindahl index, and the entropy measure as endogenous, none was significantly related to advertising rates. These findings suggest that, at least for the observed levels of market concentration, little or no adverse effect on advertising rates would occur if combinations of television stations were permitted in the same market.

Wirth and Bloch present statistical evidence relating the highest 30-second spot rate for a sample of CBS affiliates to, among other variables, the number of households in the station’s market, the station’s audience share when it carries MASH, and a Herfindahl index for the market based on average daily viewing. They find that market concentration, as measured by the Herfindahl index, is significantly and positively related to advertising rates and conclude, as a result, that television markets are oligopolistic.

Wirth and Bloch also find that audience share is not significantly related to advertising rates, a result that is very surprising. A possible explanation of this result, and of the correlation between rates and market concentration, is that a station will have a larger share the more concentrated is its market, i.e., share and the Herfindahl index are correlated. We conjecture that this multicollinearity is affecting their results and, therefore, we are skeptical about their conclusion linking market concentration and advertising rates. However, the Fournier and Martin results could also be affected by multicollinearity, so that their finding that concentration does not affect advertising rates may also be a statistical artifact.

Wildman relates the spot television advertising rates of network affiliates and network owned stations to a number of variables including those that measure whether there are more than three VHF stations or more than three stations of any type in the markets of the stations he analyzes. The purpose of including these variables was “to provide a measure of the effect of competition from independent stations on the price of spot time sold by affiliated stations.”

Rather than finding the expected negative coefficients for these variables, they are generally positive, although rarely significant, in the different equations Wildman estimates. He interprets these results as evidence that, in markets with more than three stations, the networks are able to get their affiliates to behave like network owned stations because the stations fear the loss of their affiliations. Thus, for the same reason that he argues that spot advertising rates will be higher

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7Wildman, op. cit., at 339.
for network owned stations than for similarly situated affiliates, he contends that rates will be higher for affiliates faced with the possibility that they will be displaced on the network. This reasoning suggests that advertising rates would decline if the number of stations in a market is reduced.

Levin also finds that rates are higher if there are four or more stations in a market, even after controlling for station audience. One possible explanation is that this variable, as well as network ownership, is picking up the effect of a misspecified audience variable. If advertising revenues are nonlinearly related to audiences, with rates rising faster than audience, a linear equation will impart a spurious positive coefficient to variables that are present only in the larger markets. This possibility applies to the Wildman study as well.

In their analysis of the determination of television advertising rates, Wirth and Allen include a variable measuring the number of AM radio stations in a market, expecting that “an increase in the number of [radio] competitors in a market leads to lower prices.” They find, however, that advertising rates are always positively and usually significantly related to the number of radio stations in the market. They attribute this result to the fact that “competitor count variables are seldom exogenous and may reflect market prosperity or market size more than the degree of competition.”

In an earlier study, Wirth and Allen analyze market data to determine the effect of local market concentration on advertising rates. They divide FCC advertising revenue data for each of 124 markets by the market’s prime time audience to obtain a measure of the “price” of advertising. Among their explanatory variables are the number of television stations and the number of AM radio stations in the market. They conduct separate analyses for different sources of revenues—network, national-regional, and local—and for the top 50 and all other markets, as well as for all 124 markets combined.

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8Levin (1980), op. cit., Table at 153.
9Wirth and Allen, op. cit., at 32. Their estimating equation also includes consumer spendable income and the number of households in the market, the station’s audience, variables indicating whether the station is part of a television-newspaper combination, operates in the VHF band, is a network affiliate, or competes with a crossmedia combination, the number of newspapers in the market, and a number of dummy variables measuring the market rank.
10They do not include the number of television stations, presumably because that variable has already been employed to estimate the share of total market advertising revenues captured by a particular station. Therefore, they do not test the hypothesis that an increase in the number of competing television stations lowers advertising rates.
11Wirth and Allen, op. cit., at 35
Although the number of television stations usually has the expected (negative) sign, the coefficient is only occasionally significant. The variable for the number of radio stations is negative in only slightly more than half the regressions and significant only when it is positive. The results do not, therefore, indicate any strong relationship between market concentration and advertising rates.

Moreover, Wirth and Allen do not really examine advertising rates but rather advertising revenues per thousand viewers. In so doing, they fail to note that these revenues are sensitive to the numbers and types of stations in the market, quite apart from any effect of market structure on competition. Thus, markets with independent television stations will generate different spot advertising revenues than ones with only network affiliates, because much of the time of affiliates is occupied by network programming for which the networks bear all of the costs and keep a portion of the revenues. The measured revenue per thousand viewers will thus be affected by the types of stations that are present in a market. This suggests that Wirth and Allen's findings should be regarded with skepticism.

**Syndicated Program Prices**

The Network Inquiry Special Staff analyzed the effect of the structure of local broadcast markets on the prices paid by stations for off-network syndicated programming.\(^{13}\) One set of equations measured competition for syndicated program by the presence or absence of an independent station in a market and whether the independent was "comparable" to the weakest affiliate, i.e., whether it was a VHF station if there were three VHF affiliates or a UHF station if at least one of the affiliates operated on UHF. The study found that "the price paid per viewer is significantly lower [where there is not a 'technically comparable' independent] than where at least one independent is technically comparable."\(^{14}\) In another set of equations, which also took into account the numbers of various types of independents, "the results clearly indicate that the larger is the number of independent VHF stations in a market, the higher is the price paid per viewer for syndicated programs. The effect of the number of independent UHF stations is mixed, however. In three of the equations, the number of UHF stations in a market is positively and significantly related to the price per viewer. In the other equation, the measured effect is positive but not


\(^{14}\)Id., at 647
significant.15 These results show clearly that the smaller the number of stations competing for syndicated programming the lower the price per viewer obtained for these programs. The effect on the price of the program of the number of competing stations is, however, ambiguous. While a larger number of stations may raise the price per viewer, it may also reduce the number of viewers a program attracts.

Diversity

The previous discussion indicates that, in many cases, the economic effects of joint media ownership within a local market may not be very great. The results of previous empirical studies suggest that, if preventing anticompetitive behavior were the sole objective of the FCC's ownership restrictions, these rules could often be waived. However, the rules are also intended to prevent concentrated control in the "market for ideas." In this view, important noneconomic objectives may be served by limiting the number of stations in the hands of a single owner. It is argued, for example, that unconcentrated media ownership may lead to more diverse programming, including the provision of more news and public affairs, or to the expression of a wider range of political viewpoints.

Unfortunately, the evidence to support these contentions is virtually nonexistent.16 We know of no studies that attempt to assess the link between ownership concentration and the diversity of viewpoints expressed. Nor do there appear to be studies that examine the effect of media combinations on the variety of programs available in a market. Indeed, theory suggests that such combinations may actually increase variety.17 Without such evidence, claims that the rules limiting local market ownership combinations will lead to increased diversity are simply unsupported assertions.

15Id., at 650.
16An amusing exchange occurred at the conference at which this paper was discussed. Advocates of the view that diversity of ownership leads to diversity of programming or viewpoints could provide no support for their view, but those who argued that ownership combinations create operating efficiencies similarly could point to no evidence for that view. Both positions remain largely articles of faith.
Conclusions

As in the case of multiple station ownership, the empirical studies do not provide convincing evidence of adverse effects of local market concentration. The only evidence that joint ownership creates market power is Wirth and Allen’s finding that television stations jointly owned with radio stations in the same market have higher advertising rates than do stations not under common ownership. However, this result, which contrasts with Peterman’s finding that the presence of radio-televisiion combinations in a market does not affect rates, is consistent with other hypotheses. For example, it may reflect economies of joint operation that produce larger audiences, combined with a willingness on the part of advertisers to pay more per viewer for larger audiences. Moreover, because the effect of these combinations on the rates of other stations was not examined, the market power hypothesis has not been fully tested. The various studies of the effect of concentrated television station ownership on advertising rates indicate that there is no effect—or that rates are higher the less concentrated is the market. Finally, none of the studies demonstrates the existence of significant economies of joint operation nor is there any evidence of the effects of concentrated ownership on diversity.

Nonetheless, we would be reluctant to urge abandonment of the duopoly and one-to-a-market rules with nothing to take their place, because the analytic case for these rules is far stronger than that for the group ownership rule. This does not mean, however, that present restrictions are ideal. Rather, we believe that, as a substitute, the case-by-case approach we discussed with respect to group ownership would be appropriate here as well. The major difference is that more group acquisitions in different cities or metropolitan areas would likely be approved than would new combinations in the same city.

Here, establishing that proposed station combinations are in the same market should be straightforward, although it might be argued in some cases that particular radio and television stations are in different markets. Consequently, no combinations of local stations would be approved on the grounds that they are in different markets. The effect of the combination on concentration would, therefore, have to be confronted in every case. Many local markets are sufficiently concentrated that proposed combinations in them would be denied. But some markets are presently quite unconcentrated, so that even combinations of stations in the same service in these markets would probably not create market power. For example, the FCC might well approve a combination of two AM radio stations in the Los Angeles market, where
there are presently more than three dozen radio stations, under the case-by-case approach we suggest.

**THE BROADCAST TELEVISION-CABLE CROSS OWNERSHIP RULE**¹⁸

When the Federal Communications Commission banned combinations of television stations and cable systems in the same market in 1970, it did so out of fear that common ownership would be used by station owners to inhibit the growth of cable. Reduced cable signal quality, relatively high monthly rates to subscribers, and carriage of fewer or less popular distant signals were among the possible strategies thought to be available to a station owner. Conversely, if the owner believed the opportunities for additional profits in cable to be greater than those in broadcasting, over-the-air service might be permitted to deteriorate to favor cable growth. As Barnett expresses it,

> Either way, existence of the television-cable duopoly would tend to impair the television service available to the public. The public would be better served with two outlets striving competitively to maximize their respective audiences.²⁰

With the ban on broadcast television-cable cross ownership having been in effect for more than a decade, and with few combinations grandfathered, only limited data are available for empirical analysis. Consequently, we draw on an a priori analysis, supplemented by assessment of two relevant empirical studies.

**The Benefits of Joint Ownership**

There appear to be only very limited benefits to relaxing or abolishing the rule. Local broadcasters have no particular expertise in coping with many facets of cable operation—negotiating with telephone companies for pole attachments; designing, building, and maintaining trunk and drop lines; marketing cable services; handling customer complaints; and dealing with local franchise authorities. Similarly, cable operators are not experienced in building and maintaining over-the-air transmitters or complying with FCC broadcasting regulations.

¹⁸ Much of the analysis in this section can be applied to combinations of broadcast stations and multipoint distribution systems (MDS). The principal difference between MDS and cable is that, because of the latter's much larger channel capacity, subscribers are likely to obtain all of their television service over the cable, whereas households taking MDS will continue to view over-the-air signals.

However in two areas—program origination and advertising—the same functions are carried out by both broadcast stations and cable systems. Economies might, therefore, result from sharing studio space and equipment for broadcasting and cable program origination, as well as from the use of personnel to acquire programs and sell advertising for both the cable system and the broadcast station. However, to our knowledge, no studies have addressed the magnitude of the possible savings from combining these operations. It would be useful to analyze the costs that cable systems incur in program origination; the extent to which these costs would be reduced by sharing broadcast station facilities; the additional costs that the station would incur in providing these services; and the costs of linking the broadcast station and the cable headend.

For three reasons, we conjecture that the net savings of shared use would be low. First, cable program origination facilities, consisting largely of character generators, automated services, and relatively cheap cameras and other studio equipment, generally do not involve large costs. Second, a broadcast station would have to incur at least some of these costs if it took over these functions. Third, if potential cost savings were substantial, one would have expected to see instances where separately owned cable systems and broadcasting stations entered into shared-use or rental agreements to their mutual benefit. However, such arrangements apparently are rare.20

With the growing sales of advertising by cable operators, one might expect that economies would also flow from joint ownership.21 However, the strategy of selling advertising for the small audiences that view advertiser-supported cable channels varies from that of selling for the entire audience within the service area of a broadcasting station. Moreover, media conglomerates, with holdings in both cable and broadcasting, may be able to exploit at least some economies, even though they cannot hold more than one such property in a single market.22

20 The research department of the National Cable Television Association reports that, to its knowledge, only two or three instances have arisen of cooperative arrangements. No formal survey of such practices has ever been undertaken. One reason for the absence of these arrangements may be that cable systems are required, as a condition of obtaining a franchise, to make extensive studio facilities available for public access, and cannot satisfy that condition by leasing facilities from others. If a cable system that is jointly owned with a local broadcast station can fulfill this obligation by providing access to the station's studio facilities, costs can be reduced.

21 The fact that most advertising sales on cable are made at the network level, i.e., by the providers of program services, limits these economies. The economies of joint marketing activities would be increased if there were a strong national spot market for advertising on cable.

22 Some economies in local advertising sales might be possible without joint ownership if, for example, a broadcaster contracted to sell advertising on behalf of a cable system in the same market. Instances of such behavior are rare or nonexistent, however.
The Losses from Joint Ownership

Nonetheless, we see little to be lost by relaxing or eliminating the rule, at least in large markets. It is unlikely that a broadcaster will choose to inhibit the growth of his cable system (or for a cable owner to behave similarly toward his broadcast station). To pursue this strategy the broadcaster would have to forgo the benefits that result when cable extends his signal to additional audiences. More important, the gains from weakening the service provided by the cable system would be shared with competing broadcasters.

In theory, the owner of a cable system that is owned jointly with a local broadcast station will have different incentives than would a cable system owner with no such link. Thus, for example, in determining whether or not to offer an additional service on the cable system, the owner of a television-cable combination will take into account any diversion of revenues from its broadcast station. However, the larger is the number of broadcast stations, or other competing media, in the market the less important will be this diversion, since most of the audience for the new service will come from other stations. Thus, we would expect that in markets with many stations there will be little difference between the behavior of cable systems that are jointly owned with television stations and those that are not.

But what about diversity? Would not common ownership reduce the number of “voices” in the market, contrary to the Federal Communication Commission’s often stated goal? We think that this danger is exaggerated. With its multiple channels, cable surely brings many voices into the market. But, to what extent does cable ownership itself make a difference? Unless ownership by a broadcaster would lead to a more restricted menu—and our preceding argument suggests that it would not—there is little to fear.

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23 However, Thorpe finds a small but statistically significant effect of the presence of an STV station on the market power of a cable system. See K. Thorpe, “The Impact of Competing Technologies on Cable Television,” presented to Columbia University’s Conference on “Rivalry Among Video Transmission Media: Assessment and Implications,” April 1984.

24 This assumes that cable carriage of all local signals will continue to be mandated by the FCC. Hence a broadcast-owned cable system could not discriminate against other local broadcasters. Robert Pepper points out, however, that the elimination of the must-carry rule would be made more difficult if the ban on cross ownership were removed.

25 It is a separate question whether requiring cable operators to carry programming provided by others will improve the fare available to viewers. We consider this question in detail in S. M. Besen and L. L. Johnson, An Economic Analysis of Mandatory Leased Channel Access to Cable Television, The Rand Corporation, R-2989-MF, December 1982, and conclude that the effects of mandatory leased channel access on viewers are ambiguous.
One would have more reason for concern if cable owners were editorializing and in other ways expressing their own views to any notable degree. In this case, common ownership with a broadcast station might mute this voice (or mute the voice of the station). But one is hard pressed to identify cases where cable operators are doing this, as against carrying the voices of others.

Of course, one might argue that as cable further develops, their owners will increasingly perform this function. But competing media will also develop so that, in any event, diversity will likely continue to expand.

The Empirical Evidence

Consistent with the above reasoning, two empirical studies of the cross ownership ban suggest no striking differences between the behavior of combinations and independently owned outlets. The first study, by Miller, uses regression analysis to compare the behavior of 47 cross-owned cable systems with a random sample of 106 systems from the approximately 4000 independently owned systems. Miller considers separately two dependent variables—total television broadcast signals carried and total optional broadcast television signals carried—regressed on four independent variables—the number of subscribers, whether the system was cross-owned, whether the system was owned in combination with other cable systems, and the age of the system.

In both large and small markets, Miller shows that cross-owned systems carry fewer television broadcast signals than do independently owned systems. However, only in markets below the 100 largest is the relationship statistically significant. Moreover, the number of signals subject to the FCC's mandatory carriage requirement is higher for Miller's sample of independently owned systems than is the case for the 47 cross-owned systems (5.09 signals vs. 4.50 signals). He notes that the effects of mandatory carriage account for at least some difference in the regression results.

The pattern with respect to optional signals carried from television stations is less consistent. Cross-owned systems in the largest 50 markets carry fewer such signals than do independently owned systems, but the reverse is true in the second 50 markets. In smaller markets, cross-owned systems carry fewer optional signals, but the

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26 James C. Miller III, affidavit, Appendix A, in Petition for Deletion of Section 76.501, Kirkland and Ellis, Washington, D.C., filed with the FCC, November 24, 1980.
27 The t-statistic for these "smaller" markets is −2.51, in comparison with a statistic of −1.60 and −0.21 for the top 50 and the second 50 markets, respectively.
relationships are not statistically significant. In other regressions, Miller considers four other dependent variables—number of pay cable channels, number of automated channels, number of public access channels, and number of “other origination” channels. Cross-owned stations carry 0.204 fewer pay channels but 0.518 more automated channels, while the relationships involving public access and other origination channels are statistically insignificant.

Finally, Miller tests the Commission’s hypothesis that cross-ownership leads to especially undesirable behavior in “egregious” cases where the number of independently owned media outlets is small. There, cross-owned cable systems carry fewer total television signals, but more optional signals, from television broadcasting stations. However, neither result is statistically significant.

On balance, Miller’s study suggests that undesirable behavior of cross-owned systems is most likely to occur in smaller markets, as evidenced by the statistically significant negative relationship between cross-ownership and total television broadcast signals carried and the negative, though statistically insignificant, relationship between cross-ownership and the total number of television signals carried.

Unfortunately, Miller does not include in his regression analysis two potentially important independent variables—the number of homes passed per mile of cable, and whether the cross-owned cable system operates in combination with either a VHF or a UHF station. Controlling for subscriber density, which affects the per-subscriber cost of cable services, might help to clarify relationships between ownership status and behavior in the regression analysis. Moreover, cable systems co-owned with UHF stations may behave differently from those co-owned with VHF stations. Miller argues that while the Commission assumes a competitive relationship between broadcast and cable television, it “is arguably just as plausible, however, to assume that on the whole the two services are complements.” A complementary relationship, where cable benefits the broadcast station by enhancing the quality and extending the range of its signal, is more likely to arise for a UHF station than for a VHF station. But we cannot determine whether this is the case from Miller’s analysis.

A second study of cross ownership was submitted to the FCC in 1981 by the Chronicle Publishing Company. It compares the behavior of 48 cross-owned cable systems with 81 divested systems and with the “universe” of all cable systems in the nation. The study is

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28Id., at 7. Emphasis in the original.
limited to cross-tabulations, rather than using regression analysis that permits one to control for other factors in examining the relationship in question.

The tabulations show that the average basic subscriber rates are about the same across the three categories. But the monthly charge for pay channels is higher for cross-owned systems ($9.56 on average compared to $8.73 for divested systems and $8.44 for the others). The average level of pay penetration (the number of pay subscribers as a percentage of total subscribers) is also lower for cross-owned systems—36 percent compared to 41 percent for both of the other groups. When the data are categorized by size of cable systems, the study shows that "some slight changes occur in their relationships, but nothing very substantive arises."\(^{30}\)

From other tabulations, the authors conclude that "cross-owned cable systems offer, on the average, a comparable or greater number of non-broadcast programming services than do the average divested cable systems,"\(^{31}\) and that "there is no significant difference" in the total number of broadcast signals carried by the two groups.\(^{32}\) They also conclude that "there seems to be no significant difference, on the average, in the degree to which cross-owners and divested system owners have developed their respective cable systems in terms of access to studio and local origination facilities or in local services offered."\(^{33}\)

The methodology of this study is too weak to be useful. It does not test for statistical significance for the differences it asserts to be "significant" or "insignificant." And, like Miller's study, it fails to account for the potentially important factors of subscriber density, and co-ownership with either a VHF or UHF station.

**Conclusions**

The problem posed by cross ownership, if it exists, is most likely to occur in small markets. Here, the owner might reduce the quality of his broadcast signal, especially if he has the only station in the market. By transmitting a weaker signal than allowed by the FCC, and by carrying less attractive programming than would a separately owned station, he may gain more from increased cable penetration than would be lost from the smaller over-the-air audience. Moreover, the jointly owned system might be able to exercise market power against advertisers and program suppliers.

\(^{30}\)Id., at 13.
\(^{31}\)Id., at 22.
\(^{32}\)Id., at 20.
\(^{33}\)Id., at 23.
Thus, while the FCC would be unwise to abandon the broadcast-cable cross ownership rule in one-station markets, situations exist in which joint ownership may produce operating economies without creating market power. Thus, a modified rule might stipulate that joint ownership would be permitted (a) if the market contains no fewer than a specified number of stations, or (b) if the jointly owned station has a market share no greater than a specified maximum, or (c) if the station is a UHF in a mixed market.

Even better, we believe, would be the case-by-case approach discussed earlier. This more flexible approach would facilitate accounting for the growing competition from other media and the additional diversity of viewpoints that they provide.
V. TELEPHONE-CABLE TELEVISION CROSS OWNERSHIP

Except in rural areas with low population density, the FCC generally prohibits telephone companies from owning and operating cable television systems in their service areas. The ban, adopted in 1970, was triggered largely by the Commission's view that "the public interest . . . will best be served, at this time, by preserving . . . a competitive environment for the development and use of broadband cable facilities and services . . . [and] that preservation of such competition will best be assured by the exclusion of telephone companies in their service areas from engaging in the sale of CATV service to the public except where no practical alternative exists. . . ." Among the Commission's concerns was that telephone companies would use revenues from their other services to subsidize the construction and operation of cable systems as a tactic to exclude potential competitors for cable franchises.2

The ban on telephone-cable television cross ownership is currently attracting interest because technological advances, especially in fiber optics, are blurring the distinction between the switched narrowband services of telephone companies and the unswitched broadband services of cable systems.3 Consequently, whether continuation of the ban promotes the public interest in terms of economic efficiency and competition remains an open question.

As in the case of the FCC's duopoly and television broadcast station-cable cross ownership rules, no studies of the comparative behavior of separately owned and jointly owned telephone and cable systems are available, because few jointly owned systems exist. Moreover, the experience with such systems, concentrated in rural areas where independent cable systems would likely not develop, sheds little light on the effects of the ban in metropolitan areas where policy attention is now focused. Consequently, we must rely on theoretical

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1 21 FCC 2d 307 (1970), at 325.
2 The Commission was also concerned that telephone companies could discriminate against independent cable companies in providing access to telephone poles and conduits. However, legislative action has given the FCC authority to regulate pole attachments where the states do not do so. The severity of this problem is therefore reduced. See FCC, Staff Report on Cable TV Crossownership Policies (November 1981), at 141-2, 154, 162.
3 The United States Independent Telephone Association petitioned the FCC in November 1982 to repeal the cross-ownership ban. At this writing, the Commission has not acted.
analysis, supplemented by other scattered evidence drawn from the evolving nature of the two industries.

Our purpose here is to assess the merits of retaining or abolishing the cross-ownership rule in light of ways in which the industries may be expected to develop. To do so, we outline briefly the evolution of the cable industry and treat the key aspects of the ban. Second, we assess the merits of changing the rule in light of ways that the industries may be affected by technological change. Third, we assess possibilities for relaxing the ban, depending on the characteristics of individual markets.

THE EVOLUTION OF THE CABLE INDUSTRY

Telephone companies rely on switched networks to provide voice and data communications. Telephone networks are configured as “stars,” with each user being connected to every other user, so that two-way switched services can be provided. Broadband video services provided by telephone companies consist primarily of nonswitched links to television broadcasting studios, remote television feeds, and videoconferencing facilities.

By contrast, dating from the early days of “community antenna television” in the late 1940s, cable companies have used “tree-and-branch” networks of coaxial cable to provide unswitched one-way distribution of broadband services from a “headend” to dispersed residential and business locations. Some systems now have a two-way capability, with upstream channels for voice and data. These systems can collect information from subscribers for transmission to the headend, to permit services such as “pay per view” and consumer polling. However, systems that permit subscribers to communicate directly with one another are virtually nonexistent at present.

Telephone and cable companies share conduits and street poles for carrying their wires. However, the technical requirements for full two-way narrowband communications and for basically one-way broadband service to residences, combined with very high reliability demanded for telephone service, have reduced the economic attractiveness of combining the two services into a single system.

Nevertheless, in some cases, especially in rural areas, the use of common maintenance crews and the simultaneous construction of narrowband and broadband facilities can reduce costs. For this reason, the Federal Communications Commission permits cross ownership in rural areas with low population density (generally with fewer than 30
homes per cable-line mile) to encourage the growth of cable television in places where it otherwise might not exist.  

Moreover, the Commission permits telephone companies to build cable systems in more densely populated areas if they are leased to independent cable operators who operate the systems. However, such leaseback arrangements are not common. One study reports that in 1981 only a dozen telephone companies posted leaseback tariffs.  

Even without cross ownership, one would expect cooperative arrangements between telephone and cable companies for maintenance crews and construction, as well as numerous leaseback systems, if substantial economies were achievable. The fact that such activities are rare suggests that the potential economies have been small.

KEY ASPECTS OF THE BAN

Of course, the merits of the cross-ownership ban hinge critically on what it does and does not prohibit. A key provision of the ban stipulates that "No telephone common carrier, subject in whole or in part to the Communications Act of 1934, shall engage in the furnishing of cable television service to the viewing public in its telephone service area, either directly, or indirectly. . . ."  

However, the ban covers only systems that retransmit the signals of broadcast stations, because "cable television" is defined as "A non-broadcast facility consisting of a set of transmission paths and associated signal generation, reception, and control equipment, under common ownership and control, that distributes or is designed to distribute to subscribers the signals of one or more television broadcast stations. . . ." As one analyst observes:

No present FCC rule, therefore, restricts telephone companies from providing the nonretransmission video or nonvideo portions of cable television service, such as pay TV, videotext, home shopping, electronic mail and banking, energy management and security systems.  

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5FCC, Staff Report, op. cit., at 143. However, leaseback arrangements may becoming more popular. One study reports several cases of leaseback arrangements, including one for the City of Palo Alto, California, which we discuss below. See W. S. Baer, "Telephone and Cable Companies: Rivals or Partners in Video Distribution?" presented to the Columbia University Conference on "Rivalry Among Video Transmission Media," April 1984.
647 CFR Sec. 63.54(a) (1982)
747 U.S.C. Sec. 76.5(a).
Thus, a telephone company would be free to build a cable system and, so long as it did not retransmit broadcast signals, it could offer other services that cable television firms offer today.\(^9\)

However, limitations on these other services are imposed on the divested Bell Operating Companies (BOCs)\(^{10}\) by the Modification of Final Judgment (MFJ) in the settlement of the Department of Justice's antitrust suit against AT&T.\(^{11}\) The MFJ "restricts Bell Operating Companies to the provision of common carrier local exchange services and specifically prohibits them from offering electronic information services."\(^{12}\) However, so long as they are offered on a tariffed common carrier basis, other services (such as pay TV) could, presumably, be offered by the BOCs.\(^{13}\)

Telephone companies have expressed little interest in directly providing pay television and other broadband services to residential subscribers because (a) the switched networks they employ are not suited to this task, and (b) the market for such services might not be attractive if retransmitted broadcast signals are not included. These considerations raise questions of "economies of scope" and "economies of scale," to which we now turn.

**ECONOMIES OF SCOPE AND ECONOMIES OF SCALE**

The virtually complete separation in the past of telephone and cable system construction and operation suggests that the "economies of scope" are small. That is, the total cost incurred by a firm to offer

\(^{9}\)It should be noted that, for purposes of the rule, "cable television" includes non-cable systems such as MDS, if they are used to retransmit broadcast station signals.

\(^{10}\)The BOCs serve about 48 percent of the geographical area, but about 81 percent of the telephones, of the United States.


\(^{13}\)Moreover, entry into other markets is permitted "upon a showing by the petitioning BOC that there is no substantial possibility that it could use its monopoly power to impede competition in the market it seeks to enter," *United States v. AT&T*, op. cit., p. 231.
together given quantities of telephone and television services is little different from, or may be greater than, the total of the individual costs incurred by two firms, one supplying only telephone service and the other supplying only noninteractive television service.

For expository convenience, we shall define "telephone" service as encompassing residential narrowband and business narrowband and broadband communications, and "television" as encompassing one-way residential broadband communications. Thus, we consider as telephone services the interactive services (such as burglar and fire alarms) that some cable systems offer to residential subscribers because they are close substitutes for conventional telephone system offerings.

For the subsequent analysis, it is important to distinguish between economies of scope and economies of scale. Economies of scale arise from "transmission economies" or from the spreading of "fixed" costs elsewhere in the system. Transmission economies arise when the average per-subscriber cost falls as additional subscribers are connected to a transmission line—such as coaxial or fiber optic. The extent to which this cost falls depends on the cost of the line relative to other costs of connecting additional subscribers to it.

To illustrate, consider two extreme cases. In the first, the line cost is positive whereas the cost of adding subscribers to it is zero. In this case, per-subscriber cost falls as additional subscribers are added, because the transmission cost is spread over a larger subscriber base. In the second case, the transmission line cost is zero whereas the cost of connecting each subscriber is positive because, for example, electronic equipment is required at each subscriber's premises. Here, transmission economies are zero, since average cost—equal to the cost of the equipment on the customer's premises—is constant.

In addition to transmission economies, economies of scale may arise, for example, when cable headend costs or telephone central office overhead costs are spread over a larger subscriber base, which causes per-subscriber cost to fall. Such scale economies affect the optimal size of the telephone or cable system. For example, if cable headend costs are high, the optimal size of cable systems, measured by number of subscribers served, would be relatively large.

The common belief that it is wasteful for two or more firms to run parallel lines down city streets is predicated on the notion that transmission economies are positive. The weak economies of scope in combining telephone and television services, noted above, combined with strong scale economies, provide the basis for the common belief that telephone companies and cable systems can operate efficiently side by side as natural monopolies. But other combinations are possible. If both scope economies and scale economies were strong, a single firm
could offer both services as a natural monopoly. If both scope economies and scale economies were weak, multiple firms would compete in separately providing telephone and television services. If scope economies were strong and scale economies were weak, multiple firms could compete in supplying combinations of telephone and television service.

These various combinations are important to keep in mind, because technological advances may affect both scope and transmission economies, and hence the optimal market structure for telephone and television service. In particular, opportunities are increasing for cable systems to offer narrowband and broadband services in competition with local telephone companies.

Among the many examples, GTE has announced a pilot program linking facilities in New York with Viacom's cable system in San Francisco, with the long distance portion to be handled by GTE Sprint. MCI has tested its "Cablephone" service with Cox Cable Communications in Omaha, and has announced plans for residential use, linked to MCI's long distance service. In Prince George's County, Maryland, bidders for a cable franchise have been required to offer a switched network for telephone, teleconferencing, facsimile, and data services for public institutions and government agencies in the county.

In addition to cable, other technologies are being used to bypass local telephone networks. Terrestrial microwave facilities, satellite links, and cellular radio systems are notable examples.

One cannot predict the extent to which bypass of local telephone networks will continue to grow. However, the issue of bypass by cable and other means is currently a subject of heated debate in Congress and elsewhere because of its implications for restructuring local telephone rates, especially with respect to access charges that the FCC plans to impose on business and residential subscribers. Such developments raise many issues about the wisdom of maintaining the cross-ownership ban—a topic to which we now turn.

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14The information in this section on competitive services offered by cable systems is drawn from "Response of American Telephone and Telegraph Company to the Commission's Request for Bypass Information," May 21, 1984, at 18–19. See also Pepper, op. cit.

15For accounts of the controversy about the FCC's moves to impose end-user charges for access to the telephone system, see Telecommunication Reports, December 26, 1983, at 1-4, and February 13, 1984, at 1-2.
SHOULD THE BAN BE LIFTED?

We see two dangers in lifting the ban: cost shifting as a way to evade rate of return regulation, and an increase in market power. With respect to the first, a regulated telephone company may have an incentive to acquire an unregulated cable system as a way to increase its profits. If it could shift costs from its unregulated services to its regulated services, costs could be recovered by increases in telephone rates, while profits in the unregulated market would rise because of the reduction in costs attributed to that market. With respect to the second danger, elimination of the ban might increase the market power of the firm owning two systems that would otherwise compete with each other, depending on the extent to which potential customers could use microwave radio, satellite links, cellular radio, and other technologies to bypass both telephone and cable facilities.

How easily could a telephone company engage in cost shifting and increase its market power if the ban were lifted? To answer this question, we consider four cases with varying combinations of scale and scope economies.

Case 1: Weak Economies of Scope; Strong Economies of Scale. This is the situation that has characterized the two industries until recent years. Telephone and cable systems have developed side by side with few shared facilities and noncompeting services. In this case, neither the benefits nor the costs of the cross-ownership ban are large. Whether the ban is retained or abolished would have little affect on society. Facilities for telephone and television services could remain separately owned without economic loss, with sharing limited to poles and conduits. Thus, retention of the ban would not reduce economic efficiency.

At the same time, repeal of the ban need not raise serious dangers of cost shifting or of increased market power. The telephone system would be treated as a common carrier, with its accounts kept in conformity with state public utility and FCC requirements. As with any regulated carrier, the system would be permitted to set rates with the objective of earning a “fair return” on its investment. The cable system, presumably, would be operated by a separate subsidiary operating under local or state franchise agreements, or possibly regulated also as a common carrier. Separate cost and revenue accounts for each

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16 The possibility of cost shifting is explored in greater detail in FCC, Staff Report, op. cit., at 164–57.

17 A major current issue is whether cable companies that offer services competitive with those of telephone companies should be treated as common carriers. See, for example, Lloyd, op. cit., who argues against common-carrier regulation of cable.
system would suffice to prevent the telephone company from shifting costs from cable to telephone operations.  

We must emphasize that the separation of facilities is the key to using an accounting approach successfully to protect against the danger of cost shifting. The inadequacies of the accounting approach when multiple services are offered on common facilities are well illustrated by the long history of the FCC's attempts to determine whether AT&T's rates have been just and reasonable for a variety of message toll, WATS, and private line services, all of which employ the interstate long distance network. If, however, there are no economies of scope between cable and telephone services, the problem of separating costs should not arise.  

Under the assumptions of this case, moreover, there would be little danger of increased market power. With weak economies of scope between telephone and television service, i.e., few economies afforded by combining residential broadband service with either residential narrowband or business broadband and narrowband services, telephone companies and cable systems would continue to offer noncompeting services.  

To be sure, cable systems would continue to compete with alternative television delivery systems such as MDS, STV, and DBS. Is it not possible that the telephone company could use profits from its monopoly services to subsidize its cable television service as a way to drive out or discourage entry by firms with alternative television delivery systems? This danger would not arise so long as cost shifting does not occur, since it is only by that means that cross-subsidization could be accomplished. If telephone and television services are offered on separate facilities, it might be possible to protect against such behavior.  

Case 2: Moderate Economies of Scope; Strong Economies of Scale. A variant of Case 1 involves economies of scope sufficient to encourage limited competition between telephone and cable companies. In contrast to Case 1, where weak scope economies exist between telephone and television service, here cable companies can economically combine television with interactive nonswitched services. As a result, they are able to compete with telephone companies in offering services such as data transmission and security systems. However, economies of scope do not extend to combining television service and conventional residential telephone service. Hence, no economies arise from combining all services to the home on one facility. This case resembles the way that

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18 The sharing of poles and conduits would pose problems of allocating costs between telephone and cable systems. But these allocations, being a small part of total cost, raise less severe problems than would be the case with shared use of transmission links, amplifiers, and other electronic equipment.
industry appears to be evolving. In this situation, continuation of the cross-ownership ban is merited insofar as it encourages continued competition between the two entities.

Case 3: Strong Economies of Scope; Strong Economies of Scale. Here, a single firm could offer both television and telephone services over integrated facilities at a lower cost than the combined cost incurred by two separate firms, each offering only one form of service. Moreover, with strong economies of scale the firm would operate as a natural monopoly. The "single wire" into the home and business, combining the whole range of broadband and narrowband services, is an illustration of this case.

The possibility of this outcome is attracting increasing attention because of the development and commercialization of fiber optics. Not only does a fiber optic strand have sufficient capacity to accommodate both narrowband and broadband communications, but its small cross section and its immunity to electrical interference facilitates installation, particularly in crowded underground ducts. For these reasons, both telephone and cable companies are beginning to install fiber optics for trunking.

Moreover, experiments are underway, especially outside the United States, in which fiber optics are substituted for conventional "local loop" telephone wires and for coaxial cable television "drop lines" to the subscribers' premises. Successful applications would permit a range of narrowband and broadband services to be carried on one or a few glass strands.

Thus, telephone companies could offer a more extensive range of broadband services to business customers and, perhaps, television to residential customers along with traditional telephone service. Existing cable operators would also have greater opportunities to offer both broadband and narrowband services, initially on an unswitched basis. Later, switched services could be added to the extent that cable systems find it economically feasible to reconfigure their networks and to install switching equipment.

Such developments, presumably, are what former FCC Commissioner Fogarty has in mind in arguing that:

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19 Of course, the extent to which the firm would have market power would depend on the degree to which other systems such as MDS and DBS offer competitive services.

20 Examples of these activities and references to the literature are included in FCC, Staff, op. cit., at 152, and in Commissioner Fogarty's comments on the report, at 4. For a survey of current and prospective technological developments, see Baer, op. cit.
The Commission must... confront the possibility that the prospect of merging fiber optic technology with the local loop of the telephone exchange may offer "natural monopoly" economies in the provision of broadband facilities and services which a sound and rational policy analysis cannot ignore. If these economies emerge in significant magnitude, then telephone company competition in the cable television marketplace may be "unfair" only in the sense that it may be inherently unbeatable. If this should prove to be the case, the hard but necessary answer may have to be that the public interest is better served by such unfairness.21

Following this point of view, consider the possible effects of lifting the ban. The telephone company would be free to offer retransmission of broadcast signals, along with other television services (presumably on a common carrier basis) in competition with one or more cable companies operating within its service area. With strong enough scope and scale economies, one firm, either the telephone company or a cable system, would eventually survive in each local service area. However, if the cross-ownership ban were lifted immediately, the possibility that the telephone companies will cross-subsidize those services in which they compete with cable could distort the resulting outcome.

In dealing with the ownership rules in the preceding sections, we concluded that cross-subsidization was an unlikely strategy for firms whose profits are unregulated. However, a firm facing a binding constraint on its rate of return may not experience a reduction in its profits if it sets prices below its incremental cost in markets in which it faces competition, if it can increase rates in its regulated markets through cost shifting as discussed earlier. A telephone company may find this strategy attractive as a way to discourage competition from both independently owned cable systems and from firms offering television using MDS, DBS, and other means. Thus, a telephone company may have an advantage over competing applicants in bidding for a franchise, with the additional costs of doing so compensated by higher rates for telephone service. Similarly, it may be able to outbid others in purchasing existing cable systems.

Moreover, regulation of the cable television portion as a common carrier would not eliminate this problem. The telephone company might still have incentives to set relatively low television rates to drive out (or to acquire) existing cable systems and to compete with MDS and other forms of delivering television, with the cost burden shifted to its telephone services.22

21 82 FCC 2d 266, 273.
22 As discussed earlier, concerns about possible predation by AT&T in long-distance markets during the 1960s and 1970s arose despite the fact that all its services were subject to common-carrier regulation.
A second concern is raised by the fact that telephone companies are regulated common carriers, whereas cable systems operate as largely unregulated, non-common carriers. As such, the cable system has greater freedom to choose the voice and data markets in which it competes and the prices it establishes. It need not participate in costly and time-consuming regulatory proceedings to justify whatever services and prices it proposes. Instead, these matters are settled through individual negotiations. This process is described by one cable operator as follows:

Commline does not deal with the general public. It either selects its customers or responds to individualized requests for proposals which are based on individual customer needs that are then matched with the capacity and characteristics of the institutional cable system. Once a customer is identified or has requested Commline service proposals, negotiations are undertaken.\textsuperscript{23}

With this freedom, the cable operator may be able to establish prices below those of the telephone company, even if its costs are higher. Thus, the cost savings that some users enjoy by bypassing the local telephone network may reflect not underlying cost savings but rather the regulated telephone company's inability to meet competition in particular markets. While telephone companies could be given greater flexibility in their pricing and service offerings, to do so would trigger concerns that telephone companies will compete by pricing competitive services below cost and compensate by increasing prices to their monopoly rate payers.

This disparate treatment presumably would disappear as competition increases between the two companies. As the cable system offers progressively more "telephone-like" services, pressure would mount for requiring them to be offered on a common-carrier basis—all the more so if the survival of the telephone company were threatened. The importance of the lack of regulatory parity today lies in giving cable companies an initial advantage in offering a limited range of competitive services—an advantage offset to some degree by the possibility that telephone companies will engage in cross-subsidization of these services.

The most serious drawback to lifting the cross-ownership ban is that mergers between telephone and cable companies would retard the competition now growing between the two industries. It is likely, therefore, that even if the Commission were to eliminate the ban, such combinations would be examined closely by the Department of Justice.

\textsuperscript{23} Cox Cable Communications, Inc., et. al. Petition for Declaratory Ruling (before the FCC), April 22, 1983, at 23.
At the same time, one might argue that retention of the ban would reduce research and development activities that would lead to the integrated facilities that, by the assumptions of Case 3, would be more efficient than separate facilities. However, telephone companies are free today to offer television and other broadband services, so long as they do not involve the retransmission of broadcast signals. Such offerings could become economically attractive in areas with good over-the-air service and, hence, where the prohibition against retransmission would not be a serious handicap. The cross-ownership ban would, therefore, not necessarily foreclose the research and development needed to provide integrated services. If, at some later time, it becomes clearer that a single firm offering integrated services would be the most economically efficient solution, the ban could be lifted.

Case 4: Strong Economies of Scope; Weak Economies of Scale. Suppose that fiber optic transmission systems (or other transmission systems) become so inexpensive that two or more systems can operate economically side by side. Although each system may have a good deal of excess capacity, the cost of the excess capacity may be so small that it is outweighed by the benefits of competition. Sustained competition could exist without a single integrated firm emerging as a natural monopoly.

In this situation, the ban should be abolished. Weak economies of scale would help to ensure that other firms would enter the market if combinations of telephone and cable systems threaten to exercise market power, while firms would have full freedom to exploit economies of scope. The danger of predatory pricing would be lessened because of the ease of market entry. As in previous cases, the lack of regulatory parity would pose a problem, with competitors to telephone companies still free to pick and choose their customers at negotiated prices.

Summary. To recapitulate, in Case 1, whether or not the ban on telephone-cable cross ownership is retained would make little difference, since competition is not possible in any event and problems of cost shifting can be contained. In Case 2, the ban promotes competition without offsetting efficiency losses. In Case 3, lifting the ban would permit cost savings through integrating facilities. However, at least initially, the ground rules for competition would differ between telephone and cable companies. Moreover, the assumptions underlying this case may not be realistic in the foreseeable future. In Case 4, a

\[24\] The divested Bell operating companies would, however, continue to be subject to the terms of the Modified Final Judgment.
stronger basis exists for lifting the ban, because market entry would constrain attempts to exercise market power, whereas firms would be able to fully exploit the economies of integrated operations.

**BASING DECISIONS ON LOCAL MARKET CONDITIONS**

Using the preceding analytic framework, we examine here the possibilities of continuing or abolishing the ban in light of circumstances found in particular local markets. These include abolition of the ban in markets where cable is well established, and use of a case-by-case approach with a variety of criteria for decisionmaking.

**The Well-Established Carrier Approach**

Noam proposes that telephone companies be permitted to provide, on a regulated common carrier basis, television services to the public on integrated facilities, "*provided* that a well-established cable company is already operating in that area." This approach is intended to discourage the telephone company from subsidizing or otherwise favoring its television services as a tactic to stifle the development and growth of a competing system.

In assessing Noam's approach, there are two situations to consider: In the first, one or more cable systems are already well established (however the term is defined) so that a telephone company would be permitted immediately to compete; in the second, this condition is not met.

*Competition Permitted Immediately.* The results of Noam's approach would be the same as those described above, except that here the cable system would be in a stronger position by virtue of already being well established. In Case 1, his approach would have no effect on society, since competition would not develop in any event. In Case 2, the danger arises that telephone and cable companies would merge if permitted to do so by the antitrust authorities. In Case 3, we would expect one firm to survive, but again with no assurance that it would be the least-cost provider of integrated services. Noam's approach would discourage a predatory strategy, since the prospects of driving out the cable system, already "well established," would be reduced. But his approach does not address the lack of regulatory parity. As before, cable systems may profitably be able to offer competitive services even

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if their costs are higher than those incurred by telephone companies. In Case 4, his approach would not apply because whether or not a cable system is yet well established, the lack of barriers to entry would make predation by telephone companies unattractive.

*Competition Not Permitted Immediately.* In markets where cable is not yet well established, the telephone company would not be permitted to offer television services involving retransmission of broadcast station signals. But these markets are likely to be those where there is good over-the-air reception from a number of broadcasting stations. In such situations, the ban would not prevent telephone companies from offering a variety of television services, as noted earlier. The principal constraint would lie not with the ban but with technology not yet well enough developed to offer economically attractive possibilities of combining television and telephone services to residential subscribers. If technological advances continue, making such combinations attractive, telephone companies presumably will take advantage of them. By offering television service in a market already well covered by over-the-air broadcast stations, the telephone company could preclude cable companies from *ever* becoming fully established in that market, if strong scope and scale economies exist, as in Case 3. If so, the public would be denied the opportunity of receiving retransmitted over-the-air signals unless the ban were abolished.

**A Broader Case-by-Case Approach**

Noam recommends a single criterion—the existence of a well-established cable system—to decide whether the cross-ownership ban should be relaxed. However, other criteria could be used, similar to those we have discussed in previous sections, with perhaps superior outcomes to an approach that focuses on only one. This broader approach is consistent with the present provisions that the cross-ownership ban may be waived "upon showing of good cause."26 For example, a telephone company could be granted a waiver of the ban if it could show that the local telephone market is becoming increasingly competitive from sources other than cable television,27 or if it demonstrates that strong economies of scope exist.

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26 2 C.F.R. sec. 63.56(a).

27 For example, AT&T, op. cit., at 18–19, cites developments in addition to cable television that are increasing competitive pressures. It notes that private microwave is widely used to bypass local telephone networks. Of the 107 million private circuit miles that existed at the beginning of 1983, 20 percent were in the hands of state and local governments that provide services to themselves as substitutes for telephone service. One commercial application of microwave, digital termination service, is being used in New York City to connect subscribers for data and other services. On the basis of appli-
This approach is usefully illustrated by the leaseback of a portion of a 112-channel system proposed by Pacific Telephone for Palo Alto and adjacent communities in California.28 Pacific's proposal involves leasing to the local participating governments an interactive 80-channel coaxial cable system that would serve more than 50,000 homes. A fiber optic superstunk from a headend on the Stanford University campus to two hubs (located at Pacific's central telephone offices) would be used to distribute signals to the subscriber network. The local governments, operating under a joint powers agreement, would seek competitive bids for an organization to manage the system. That organization, in turn, "can seek public input for the mix of programs and services the communities want, then sublease the channels to competing service providers."29

In addition, the proposal includes an institutional network, "wholly owned, operated, and maintained by Pacific, which will consist of a separate all fiber optic digital network capable of providing a full range of computer, high speed data, and full motion video services to concentrated business areas, government offices, and educational institutions in the mid-peninsula area."30 Both the television and institutional networks would be connected to Pacific's telephone system covering the Bay area.

This proposal differs from a standard leaseback in that the subscriber network would not be fully separated (except for shared poles and conduits) from the telephone company's other facilities. Pacific would retain control of the remaining 32 channels of the subscriber network beyond the 80 channels leased to city governments and it would have full control of the institutional network to be interconnected with the subscriber network.

Construction of Pacific's subscriber network would probably foreclose the emergence in the franchise area of independent cable systems that might offer services competitive with Pacific's offerings. Thus, the proposal raises questions about (a) the degree to which competition is likely to be reduced by Pacific's ownership and partial leaseback of the system, (b) the extent to which Pacific's market power will likely be limited by competition from other sources, such as from DTS and private networks, (c) the extent of economies of scope, given that some facilities will be shared (Pacific's central offices), while residential

29 Id., at 3.
30 Id., at 1.
subscribers would continue to have separate facilities—conventional telephone wires for voice and data, and coaxial cable for television, and (d) the problems likely to arise in allocating common costs to ensure against cross-subsidization.

Responding to such concerns, the Palo Alto City Council rejected the Pacific Telephone proposal in June 1984. However, Pacific Telephone has not withdrawn its construction application previously filed with the FCC, and that application is being contested by the California Cable Television Association.\(^{31}\)

A contrasting case involves the C&\(P\) Telephone Company. In mid-1984, the City Council of the District of Columbia designated District Cablevision, Inc. (DCI) to negotiate a cable television franchise with the district. In its franchise application DCI proposed to lease facilities from C&\(P\). Unlike the Pacific’s Palo Alto proposal, however, C&\(P\) does not plan to reserve for its own use a portion of the residential cable system. Moreover, DCI would be free to offer competitive services. As C&\(P\) states in its application before the FCC:

C&\(P\)’s role as the provider of the broadband transport facilities will not preclude the Customer [DCI or its successor] from using the facilities to provide any telecommunications service in competition with C&\(P\). C&\(P\) reserves the right to oppose its Customer’s provision of any service which, in C&\(P\)’s view, may not lawfully be provided by the Customer. However, C&\(P\) shall not discontinue provision of facilities and service to the Customer by reason of such opposition, except pursuant to an order of an appropriate governmental authority.\(^{32}\)

Issues similar to those above will arise as other telephone companies propose leasing arrangements that reflect new technological opportunities. A flexible case-by-case approach may usefully accommodate these situations, albeit with greater administrative burdens on the FCC.

CONCLUSIONS

No compelling basis exists for lifting the telephone-cable crossownership ban, in light of today’s technological and marketing environment. Of key importance is that, under the ban, telephone companies are free to develop and use integrated communications systems as long

\(^{31}\)Petition to Deny or Dismiss of the California Cable Television Association, W-P-C-5384, July 2, 1984.

as they do not retransmit broadcast station signals. Such systems may eventually become attractive in geographical areas where over-the-air reception is good, similar to the competition emerging between MDS systems (which also are not now used to retransmit broadcast station signals) and cable.\footnote{Although telephone companies are not prohibited under the ban from offering broadband services to residential subscribers, any attempt to do so would surely be opposed by the cable industry. As an outcome of litigation, telephone companies might be unable to proceed despite the freedom they have under the ban.} At the same time, elimination of the ban could trigger mergers and acquisitions between telephone and cable systems, with an undesirable increase in market power.

Evidence of developments that would trigger reconsideration of the ban include proposals by telephone companies for integrated telephone and television facilities for residential subscribers in geographical areas with good over-the-air service, accompanied by strong telephone company interest in moving into other areas where the present ban would pose a serious handicap.

Today, a better approach would be to grant waivers of the ban selectively. Evidence of strong economies of scope or the lack of anticompetitive effects would be among the criteria for judgment. Initially, this approach may prove useful in judging the wisdom of leaseback arrangements, under which a portion of the capacity of the system is retained for use by the telephone company.

Perhaps of greater policy importance than the ban in the near term are the problems associated with the lack of regulatory parity between telephone and cable service—a problem that will persist regardless of whether the cross-ownership ban is lifted.