DEMOCRACY UNHINGED

More Media Concentration Means Less Public Discourse

A Critique of the FCC Studies on Media Ownership

Dean Baker, Co-Director
Center for Economic and Policy Research

Department for Professional Employees, AFL-CIO

Sponsored by: American Federation of Television and Radio Artists, The Newspaper Guild-Communications Workers of America, and Writers Guild of America-East

Table of Contents

Foreword i

Executive Summary iii

Concentration and Diversity in the Media: What the FCC Studies Show

Introduction 1

Section 1: The Theoretical Impact of Greater Concentration 3
Cunningham and Alexander, 2002 (Study #6) 3

Section 2: Ownership Concentration and the Quality of Television News 4
Pritchard, 2002 (Study #2) 5
Spavins et at., 2002 (Study #7) 7

Section 3: Evidence of Consumer Substitution Across Media 9
Waldfogel, 2002, (Study #3) 9
Nielson Media Research, 2002 (Study #8) 12

Section 4: Trends in Concentration, Advertising Prices and The Diversity of Media Outlets 15
Roberts et al., 2002 (Study #1) 15
Williams and Roberts, 2002 (Study #11) 17
Williams et al., 2002 (Study #9) 18
Brown and Williams, 2002 (Study #4) 19
Levy et al., 2002 (Study #12) 20

Conclusion: Does Concentration in the Media Industry Pose a Problem? 22

References 25

Curriculum Vitae 27

FOREWORD

On September 12 the Federal Communications Commission (FCC) initiated its third Biennial Review of broadcast ownership rules. In so doing, it announced a Notice of Proposed Rulemaking (NPRM) consolidating what had been three separate proceedings into a single regulatory assessment for all of the agency's broadcast ownership rules. This proceeding was recently described by FCC Chairman Michael Powell as "the most comprehensive look at media ownership ever undertaken by the FCC."

The six rules that are now the subject of this massive regulatory review are:

- The Newspaper/Broadcast Cross-Ownership Prohibition
- Local Radio Ownership
- National TV Ownership
- Local TV Multiple Ownership
- Radio/TV Cross-Ownership Restriction
- Dual Television Network Rule

Prior to the commencement in 2001 of earlier separate rule-makings on two of these regulations, Chairman Powell late in the year announced the creation of an internal FCC Media Ownership Working Group to examine the media marketplace for the expressed purpose of broadening the Commission's understanding of this industry. Soon after, the FCC Working Group commissioned a series of studies by internal and external authorities which, according to Powell, represented "an unprecedented data gathering effort to better understand market and consumer issues so that we may develop sound public policy."

On October 1, 2002--less than three weeks after the announcement of the consolidated rule-making-- the Commission released 12 empirical studies which, according to an FCC press release, purported to have "examine[d] the current state of the media marketplace, including how consumers use the media, how advertisers view the different media outlets, and how media ownership affects diversity, localism and competition." In releasing the reports, the FCC reaffirmed its interest in seeking public input about them. The FCC studies can be found at ***http://www.fcc.gov/ownership/studies.html***

The document which follows is an analysis and critique of several of the FCC studies. Written by Mr. Dean Baker, Co-Director of the Washington D.C.-based Center for Economic and Policy Analysis, this evaluation was commissioned by the AFL-CIO Department for Professional Employees (DPE) and three of its affiliated media industry unions—the American Federation of Television and Radio Artists, The Newspaper Guild, CWA and the Writers Guild of America, East. This document will be formally submitted to the FCC along with other commentary on the pending rules by the AFL-CIO as part of the FCC's Public Comments process.

DPE is the largest association of organizations representing professional and other highly skilled American workers in the United States. Twenty four national unions, whose members include some four million professional, technical and administrative employees, are directly affiliated to DPE. These organizations, which are also members of the national AFL-CIO, include nearly a dozen unions in the news and entertainment sectors with over a quarter million combined members.

Paul E. Almeida, President
Department for Professional Employees, AFL-CIO

Executive Summary

The FCC's re-evaluation of a series of rules limiting concentration in the media industry has raised several important policy issues. Specifically, several interested parties have raised the question of whether the relaxation of these rules will:

1) Reduce the variety of opinions presented to the public;
2) Reduce the coverage of news and public affairs;
3) Limit the variety of programming available to the public;
4) Reduce coverage of local issues;
5) Limit the ability of individuals and organizations to use advertising to present their views to a larger audience;

The FCC recently released a series of studies that attempt to address some of these issues. This study examines the evidence in these studies and assesses its implications for this set of questions. This analysis finds that:

1. One of the FCC studies (Waldfogel, 2002, Study #3) shows that there is very little substitution between types of media as sources for news. In fact, it shows that most media appear to be complements, which means that if individuals receive less news from one source, they are likely to receive less news from all other sources.

   This study also noted evidence from an earlier study by the same author, which found that individuals tended to substitute the *New York Times* for their local newspaper. This led individuals to be less informed about local affairs, leading to declining voter participation by college graduates in local elections. This patterns suggests the sort of unintended consequences that may result from substitutions between news sources.

2. One study (Cunningham and Alexander, 2002, Study #6) presents a theoretical model which predicts, that for a wide range of consumer responses, greater media concentration will lead to an increase in the portion of broadcast material devoted to paid advertisements. This model also predicts that consumers will respond to an increase in the portion of broadcast time devoted to ads, by consuming less broadcast media.

3. Another study (Williams et al., 2002, Study #9) found evidence that there has been a decrease in the diversity of songs broadcast on radio stations nationwide since rules on ownership were relaxed in 1996. While the decline found in this study was limited, given the difficulty of measuring diversity, it is striking that it was able to find statistically significant evidence of such a decline.

4. One study (Roberts et al., 2002, Study #1) found evidence that there was a sharp falloff in the rate of growth in media outlets and owners in the period from 1980 to 2000, compared to the prior twenty year period. While the study does not attempt to examine the reasons for the slowdown, it found the growth rate in the number of outlets was slower in nine of the ten media markets examined, and the growth rate in the number of owners was slower in all ten. A second study (Williams and Roberts, 2002, Study #11) presents evidence that the growth in the number of radio outlets was much slower in the period after the relaxation of ownership rules in 1996, than it had been in the prior 16 years.

5. A study of the broadcast television industry (Levy et al., 2002, Study #12) found that the rate of growth in the number of broadcast television stations had fallen off sharply in the last decade. The falloff was especially sharp in the case of educational television stations. From 1995 to 2000 there was no increase whatsoever in the number of broadcast educational television outlets.

6. One of the studies (Brown and Williams, 2002, study # 4) noted that the real (inflation adjusted) price of radio advertising rose by 68 percent in the five years following the elimination of ownership restrictions. While the study attributes this price to surge to economic growth rather than increased concentration, this explanation is inconsistent with a three decade long decline in the price of radio advertising found in prior research. The failure to apply the model in the study to a longer period, limits its usefulness in determining the causes of the sharp rise in price of radio advertising since the removal of ownership restrictions.

This analysis also notes that many of the FCC studies contained serious design flaws which prevent them from providing useful insights in the questions being examined. For example:

1. A study that attempts to find evidence as to whether cross ownership of newspaper and television stations led to a common slant in reporting on the 2000 presidential race (Pritchard, 2002, Study #2), failed to compare the observed slant of specific newspapers and television stations with the slant shown by a reference group of newspapers and television stations. Without comparison to a reference group, it is impossible to determine the extent to which the observed slant represented an idiosyncrasy of the specific newspaper or television station.

   The study also erroneously assumed that the 2000 election presented a situation in which the owners of media outlets reasonably could have hoped to influence the outcome with their reporting. This is not true. While the election was extremely close nationwide, seven of the ten newspaper-television combinations examined are in states where the margin of victory was at least ten percentage points, including California, New York, and Texas. At least in these seven cases, there was little basis for believing that a slant in reporting could have influenced the outcome of the election.

2. A study that examined the quality of local news broadcasts on network owned stations with network affiliates (Spavins et al., 2002, Study #7) neglected to examine trends in news quality through time. While the study found that the news quality of the network owned stations was at least as good as independent affiliates during the time period examined, this is not inconsistent with a situation in which competitive pressures from concentration lead to a general deterioration of news quality through time. The study also did not control for factors, such as the age of a station, which may have been related to the quality of its news coverage, independent of its ownership status.

3. A study that assesses the extent to which individuals substitute between media for news, finds that responses to survey questions suggest a substantial degree of substitution (Nielson Media Research, 2002, Study #8). This study also finds that individuals expect to increase the amount they use nearly all media for news. These answers are inconsistent with recent patterns of declining news usage. Therefore, it is reasonable to treat these survey results with suspicion.

   While individuals may report to a questioner that they intend to exercise more in the future, this does not necessarily mean that they actually will exercise more. Similarly, their responses that they will readily shift to another media for news, if they lose access to their current source, does not mean that this will necessarily be the case. The Waldfogel study of how individuals actually *do* substitute between media for news sources should be seen as a better guide to behavior than this survey's findings on how they *say* they will substitute.

In sum, the FCC's studies provide evidence that last two decades have seen less growth in the number of radio stations and other media outlets. They also provide evidence that the relaxation of ownership rules for radio stations in 1996 led to less diversity in the songs played on the radio nationwide. In addition, they indicate that there is relatively little substitution between media for news. These, and other, findings suggest that further concentration in the media may limit diversity in the new and entertainment carried by the media. The studies also found that there was a rapid run-up in radio advertising prices in the six years since the relaxation of rules restricting concentration, which suggests that greater concentration may lead to still higher rates for advertisers in the future.

Concentration and Diversity in the Media: What the FCC Studies Show

Introduction

The Federal Communication Commission (FCC) is currently considering the relaxation or elimination of a series of restrictions on concentration in the media. These restrictions include:

1) limits on cross-ownership between local television stations and newspapers;
2) limits on cross-ownership between local radio stations and newspapers; and
3) restrictions on mergers or other combinations of television broadcast networks.

These restrictions were originally put in place to try to ensure that the public would be presented with a wide range of programming content, an adequate supply of news and information, and a diverse set of political views that would allow for an informed citizenry. The need for these restrictions stemmed both from concerns over the abuse of market power that can occur in any industry where a small number of firms dominate the industry, and features peculiar to the broadcast industry which can favor concentration.

Specifically, the broadcast industry depends for its existence on the government's grant of exclusive control over a scarce resource – broadcast frequencies. The federal government opted to parcel out the airwaves by granting exclusive control over a broadcast frequency for long periods of time to a single corporation. This method was chosen over other possible alternatives, such as having broadcast stations run as common carriers, with time periods given out through auction or lottery. The method chosen by the government raises the risk of a government supported monopoly, which is not present in other industries. For this reason, Congress has recognized a special responsibility to ensure that the industry served a general public interest, and not just the private interests of media corporations. This has been an explicit concern of the FCC since its inception, and was the motivation for these and other restrictions on the media's conduct.

The FCC has been mandated to review these rules biennially by the 1996 Telecommunications Act and by a few recent court decisions. Also, the development of new technologies, such as the Internet, and the spread of cable and satellite television have increased the available alternatives to broadcast frequencies and thereby give rise to a reevaulation of the continued need for these rules. Given these, and other, developments in the media industry, it is reasonable to question whether current restrictions on concentration still serve the public interest.

In November of 2001, the FCC commissioned a set of studies to provide insight on some of the issues raised by increased concentration in the media industry. These studies have generally been interpreted as supporting the view that the restrictions in question are no longer necessary,

and that the public's interest in ensuring diversity in program output and access to a wide range of information and opinions can be protected without the FCC's intervention. However, these superficial assessments are misleading.

In the executive summaries published in the FCC's press release (10-1-02), the studies were described as concluding that:

1) There is substantial substitution between types of media for both news and overall usage. There is especially strong evidence for substitution between the Internet and television, between daily and weekly newspapers, and between daily newspapers and broadcast TV (Waldfogel, 2002, Study #3, also Nielson Media Research, 2002, Study #8).

2) Half of the cross-owned newspapers and television stations had a similar slant in the 2000 elections, and half had different slants (Pritchard, 2002, Study #2)

3) News shows on network owned-and-operated stations had comparable viewership ratings to network affiliates. They received awards for news coverage at a much higher rate than network affiliates. Newspaper owned affiliates significantly outperformed other affiliates by every measure used (Spavins et al., 2002, Study #7).

4) The number of media outlets in the ten selected markets increased by an average of 195 percent between 1960 and 2000. The number of owners increased by an average of 139 percent (Roberts et al., 2002, Study #1).

5) In the period from 1996-2001 there was a slight increase in a measure of diversity of songs on radio playlists nationwide. There was also an increase of diversity within the same formats within each local market, but there was a decrease in the diversity between markets (Williams et al., 2002, Study #9).

6) Increased concentration in radio led to an increase in advertising costs of just three percent in the years from 1995 to 2000 (Brown and Williams, 2002, Study #4).

The studies commissioned by the FCC, as summarized in this press release, would appear to support the view that restrictions on consolidation are no longer needed. They suggest a wide degree of substitution between types of media, that consolidation to date has had little effect in reducing the number of outlets or the diversity of their offerings in radio, that cross ownership of television and newspapers does not reduce the diversity of viewpoints and may increase news quality, and network owned stations produce news that is at least as good as independent affiliates.

In fact, the evidence in these studies is far more ambiguous than is suggested in these summaries. The evidence in some of these studies reveals little about the effects of further concentration in the media industry. For example, the behavior of cross-owned newspaper and

television stations in a context where such combinations are generally prohibited by the FCC does not necessarily indicate how such combinations would behave in the absence of FCC oversight, just as the fact that drivers don't speed in front of a police car doesn't mean that drivers don't speed. Similarly, comparing the quality of news in network owned stations with the quality of news on affiliates reveals little about the impact of network ownership. The relevant question is whether the competitive pressures created by greater consolidation may lead all stations, both network owned and independently owned affiliates, to devote fewer resources to new coverage.

In some cases, the evidence can be used to show the opposite of what is suggested by the summaries. For example, in nine of the ten selected radio markets reviewed in Roberts et al., 2002 (Study #1), the growth in the number of stations and owners slowed substantially in the last twenty years compared with the period from 1960-1980. The decline in diversity of playlists across radio markets (Williams et al., 2002 (Study #9)), also suggests a reduced demand for new songs, with a smaller number of songs getting broadcast across the nation, as the ownership of radio stations becomes more concentrated. In addition, it is likely that a substantial portion of the 68 percent real increase in radio ad prices between 1996-2001, noted in Brown and Williams, 2002 (Study #4), is attributable to the increased concentration in the industry.

This paper examines the evidence presented in these studies. While there is much valuable data that can provide guidance to the FCC in its assessment of rules limiting concentration, it is important that the FCC commissioners and other interested parties fully appreciate the nature of the evidence presented in these studies.

The first section briefly examines the predicted theoretical impact of greater media concentration. The second section of this paper examines the evidence in these studies on the impact of ownership concentration and cross ownership between newspapers and television stations on the quality and diversity of the news presented on local broadcast stations. The third section examines the evidence that consumers readily substitute across media for news and entertainment. The fourth section examines the evidence on trends in concentration in radio and the impact on the diversity of station content, as well as advertising prices. The fifth section summarizes the prior sections and notes important questions concerning the impact of concentration that have not been adequately addressed by these studies.

Section 1: The Theoretical Impact of Greater Concentration

One of the FCC studies (Cunningham and Alexander, 2002, Study #6) constructs a theoretical model to predict the impact of greater concentration in broadcast media. This model is an advance on earlier theoretical work on this topic since it does not restrict itself to a two firm market and also because it does not include an explicit assumption that advertising provides disutility. The model assumes only that advertising raises the cost of consuming non-

advertising broadcast material, since increased advertising means that a consumer must spend more time to get the same amount of non-advertisement broadcasting. This increased time thereby increases the cost to the consumer of non-advertising broadcast material, since time has an opportunity cost. The implied result is that an increase in the proportion of broadcasting time devoted to advertising will lead to less consumption of broadcast material.

The model then shows that under fairly general assumptions, the proportion of time devoted to paid advertisements will increase as the number of competitors decreases. This is a fairly straightforward result from the fact that less competition reduces the extent to which advertisers can substitute. The model also predicts that greater concentration will lead to an increase in the price of a unit of advertising to advertisers.

The net effect of concentration on the quantity of advertising is ambiguous in this model, since it depends on the response of consumers. If consumers respond to the higher proportion of advertising by sharply reducing their consumption of broadcast material, then it is possible that the total volume of advertising could fall, even though the proportion of broadcast time devoted to advertising increases. This is the "strong switching off" scenario described in the model. The model also allows for a "weak switching off" scenario, in which the consumption of broadcast material falls, but not by enough to offset the increased portion of broadcast time devoted to advertising. In this case, the total amount of advertising increases, even though the consumption of non-advertising broadcast material falls.

In both of the scenarios described in this model, the public welfare declines as a result of increased concentration in broadcasting. The main factor driving this result is that increased concentration leads broadcasters to increase the portion of broadcast time devoted to advertising. The size of the negative impact of this change on consumer welfare depends on the consumer response to an increase in the portion of broadcast time devoted to advertising, but the direction of change in unambiguous. In short, the study implies that the consumption of broadcast material will fall as concentration increases, and that advertisers will pay higher rates.

Section 2: Ownership Concentration and the Quality of Television News

Two of the twelve studies commissioned by the FCC sought to provide evidence on the effect of ownership consolidation on viewpoint diversity. One study (Pritchard 2002, Study #2) analyzed the coverage of the 2000 presidential race in newspapers and television stations in ten metropolitan areas where there was cross-ownership. A second study (Spavins et al., 2002, Study #7) used a variety of objective measures to compare the quality of news coverage on network owned stations with independently owned network affiliated stations. These studies are examined in turn below.

Pritchard 2002 (Study #2)

Pritchard (2002) uses coverage of the 2000 election to test whether cross-ownership of newspapers and television stations is likely to lead to a homogenization of viewpoints, i.e. that a single owner imposes a common slant to the news presented in both news outlets. Pritchard argues that the 2000 election provides an especially good test of this question, since it was an extremely close race and it was reasonable to believe that a slant in reporting could influence the outcome: "if ever media corporations wished to slant news about a national political campaign, the 2000 presidential campaign – and especially the increasingly suspenseful final few weeks before November 7, Election Day – offered an excellent set of conditions for such influence" (p. 4).

The method used in the study is to examine the news coverage in the last fifteen days of the election in ten cross owned newspapers and television stations. The slant of each item on the election that appeared on the television news or in the newspaper, including editorials, cartoons, and letters to the editor, was assessed independently by two research assistants. In the vast majority of cases they agreed on the slant (whether it portrayed a candidate in positive or negative light). In the cases where there was a disagreement, the author evaluated the items together with the research assistants and attempted to assign a slant. According to the paper, this process led to unanimous agreement on the slant of all the items where there had originally been some dispute.

The study then summarizes the net slant of news items for each news outlet. It found that in five of the ten cross ownership combinations, there was a significantly differently slant between the coverage in the two outlets. In the other five, there was no statistically significant difference. The article also shows the newspaper endorsement, where available, and notes that in several cases the slant of the television coverage contradicted the newspaper's endorsement. While noting the limits of the sample size, the article concludes that cross-ownership did not appear to affect coverage of the campaign: "cross-owned newspapers and broadcast stations covered the campaign in the way that mainstream American news organizations typically cover political campaigns" (p. 14).

While this study provides an interesting, if limited, assessment of news coverage of the 2000 presidential race, it would be dangerous to infer much from this study about the impact of the elimination of cross ownership restrictions by the FCC. The study suffers from some very basic problems in design, as well as some more narrow methodological problems, which seriously limit its usefulness in assessing this question.

Design Flaws of Pritchard 2002 (Study #2)

At a basic methodological level, the study is seriously flawed because it does not compare the coverage with a reference group of newspapers and television stations that are not part of combinations. As the study correctly notes (p. 9), a pro-Gore or a pro-Bush slant in reporting

does not necessarily indicate a bias in that direction. The news events may objectively lead one or the other candidate to be portrayed in a favorable or unfavorable light. To take an extreme example, unfavorable reporting on Saddam Hussein would not necessarily indicate a bias against Saddam Hussein.

In order to determine whether the newspapers and television stations had a bias, and then to assess whether there was a difference in this bias between newspapers and television stations that are part of the same combination, it would have been necessary to compare the slants of the newspapers in the sample against the slants of a group of newspapers not part of combinations. The same should have been done with television stations. These averages, which could potentially be quite different for newspapers and television stations, would then provide a baseline which could be treated as objective, or at least an industry standard slant.

The study should have then calculated the difference between the slant for each newspaper and the average slant for all the newspapers in the study. [i.e. It would calculate a number that represented the difference between newspaper's slant and the average slant for all newspapers.] It should have performed the same exercise for television stations. The study should have then tested whether there was a statistically significant difference between these adjusted slant calculations (the differences between the overall averages) for each television newspaper combination.

It is also worth noting that two of the television stations in the survey that are identified as having a Gore slant actually slant more towards Bush than the average station included in the survey (NY-News Corp and Dallas). (The average slant among the ten television stations is -5.66. The slant for these two stations is -3.70 and -0.03, respectively.) This means that these stations should be considered as having a pro-Bush slant. Since the cross-owned newspapers in these markets also are identified as having a pro-Bush slant, this means that seven of the ten combinations had a common slant, and only three had a different slant in their coverage.

As noted below, other basic design problems of this study indicate that this exercise would have provided little information that is relevant to the rules being assessed by the FCC even if the correct methodology was used. However, this methodological error means that very little can be inferred from the findings in this study.

The second fundamental design problem stems from the news issue examined. The presidential race is actually not an especially likely place for the owner of a news outlet to exert heavy handed control, especially one as close as the 2000 race. The fact that the outcome of the race was essentially an even bet going into the election meant that the outlet owners had to be largely reconciled to the possibility that their favored candidate might lose. The owners of the outlets had to be prepared to operate profitably regardless of which candidate won the election. Heavy-handed coverage on behalf of the losing candidate would not obviously advance this goal.

Moreover, it is inaccurate to report, as this study does, that these media combinations could have reasonably hoped to influence the outcome of the presidential race with their reporting. Seven of the ten combinations examined were in states in which the winner had a margin of more than 10 percentage points (California, Connecticut, Illinois, New York [2], North Dakota, and Texas). Only two of the combinations were in states where the margin was less than 5 percentage points (Florida and Wisconsin).

It may have been more interesting to look for differences in the coverage of issues that were more directly linked to the profitability of the station owners. The coverage of the FCC rules currently being debated would be an excellent example. Also, the study could have looked for differences in the coverage of issues that could have a significant impact on the profitability of major advertisers. For example, it would be interesting to see if coverage of the proposed changes in personal bankruptcy laws by newspaper television combinations may have been affected by the fact that credit card companies are major advertisers on broadcast television. The coverage of minimum wage laws may provide another interesting example, since fast food franchises (which are significantly affected by minimum wage laws) are major advertisers on television.

The list of topics where it would have been interesting to look for statistically significant differences in reporting is obviously quite long. But it clearly would be a better test to take an issue that more directly affected the financial interests of the media companies in question, than the outcome of the 2000 presidential race.

At the most basic level, this study is suspect because it is examining the conduct of cross-ownership combinations in a context where the FCC has granted special exemptions to a general rule. In principle, these exemptions could be re-examined, possibly leading to the breakup of the combinations. In other words, it is reasonable to assume that the companies involved are aware that their behavior is being monitored. It is also reasonable to assume that they would view the elimination of independence of the news operations of the television station and newspaper as a move that could lead to serious scrutiny of their combination by the FCC.

In short, it is problematic to infer much about the behavior of newspaper-broadcast combinations in general, based on their behavior in a period where they are operating under the scrutiny of the FCC. This would be comparable to concluding that drivers do not speed, based on the fact that they stay within the limit when a police car is setting the pace on the highway.

Spavins et al., 2002 (Study #7)

The second study that examined the impact of ownership concentration on news quality (Spavins et al., 2002, Study #7) also suffers from basic design problems. This study compared the quality of local news shows on network owned stations and network affiliates by a series of objective measures, including viewership ratings, news awards and weekly hours of news. It

also separately evaluated the performance of affiliates that were owned by companies that also owned newspapers, with the performance of other affiliates.

The study finds that there was almost no difference in the viewership ratings of the news broadcasts for the network owned stations and the network affiliates. It finds that the network owned stations devoted considerably more time to news broadcasts on average (23.2 percent), and that they were far more likely to win industry awards for excellence in coverage. Similarly, the study finds that the affiliates owned by newspaper companies had higher viewership ratings, more news coverage, and were more likely to win awards than other affiliates.

Design Flaws of Spavins et al., 2002 (Study #7)

While the results of this study can be seen as implying that greater concentration and/or cross-ownership of television stations and newspapers will lead to higher quality news, it actually does not provide a basis for assessing this issue. This study is comparing the quality of network owned stations and affiliates at a point in time. The more relevant question is how the quality of news coverage on both network owned stations and affiliates have changed through time, as the industry has become more concentrated.

It is entirely possible that at any point in time, network owned stations (and newspaper owned affiliates) may provide better news coverage than independently owned affiliates. However, it may also be the case that the greater concentration in the market creates pressures on all stations to reduce their expenditures on news coverage. It would have been possible to assess this issue if this study had looked at how these measures of quality changed through time.

For example, this study could have examined how local news viewership has changed through time as one measure of trends in quality. It could also have examined whether these trends differed in markets where there had been greater concentration of ownership over the last twenty or thirty years. (This issue is complicated by both changing demographics and changes in the availability of other media.) Since awards are inherently a relative measure at a point in time, this number would provide no basis for assessing changes in quality through time. However, hours devoted to news coverage is a measure that could be easily tracked through time. If this study had examined changes through time, rather than measures of quality at a point in time, it would have produced data that is more relevant to the rules being considered by the FCC.

Also, the study is flawed because simple comparisons of averages for network owned stations and network affiliates (or newspaper owned affiliates) provide very little information about what happens to stations when they are taken over by a network or a newspaper. It is possible that the stations bought by networks or newspapers always had better news coverage than other affiliates. Such stations may have always had better news coverage because they were older or more established. Regression analysis could have shed light on such variables.

These factors could have been tested by running a regression using the same variables in this analysis, covering a period of twenty or thirty years, that included dummy variables for stations in the years after they had been purchased by a network or a newspaper company. The coefficients of these dummy variables would reveal whether there was a statistically significant change in the quality of news coverage after the station had been purchased by a network or newspaper company.

Regression analysis would also explain whether other factors could explain the apparent superiority of news coverage on network owned stations or newspaper owned affiliates. For example, it is possible that these are simply older more established stations, and older stations tend to have better news coverage. A regression that included an age variable would make it possible to determine whether the superiority of news coverage, on network owned stations and newspaper owned affiliates still held true when the age of the station was taken into account.

In conclusion, both of the studies that seek to directly address the impact on news coverage of ownership concentration and cross-ownership of newspapers and television stations suffer from serious flaws in design and methodology. They provide very little evidence which can be useful to the FCC in assessing the rules in these areas.

Section 3:Evidence of Consumer Substitution Across Media

The FCC commissioned two studies which sought to examine the extent to which consumers substitute across different media for news and general entertainment. Waldfogel (2002, Study #3) used a series of measures of usage of different media to determine the extent to which the increased availability and/or usage of one type of media led to changes in the usage of other media. Nielsen Media Research (2002, Study #8) presents the results of an extensive consumer survey on attitudes towards media and the extent to which consumers view them as substitutes.

The issue of substitution across media is directly relevant to the FCC's assessment of current rules, since concentration in one type of medium is of less concern if consumers can readily move to another medium. In other words, it would be of little concern if there was heavy concentration in television ownership, if consumers viewed the Internet as an equally good source of news and entertainment. Therefore, it is important for the FCC to have some idea of the extent to which consumers can switch between media, when it makes its decision on the rules limiting concentration in specific media.

Waldfogel, 2002 (Study #3)

The evidence presented in Waldfogel 2002 (Study #3) is that there clearly is some substitution between media, but it is far from complete. As the study points out in the executive summary: "If substitution were complete, then the decline of local daily newspapers would be offset by the increased use of other media. The civic behaviors affected by media consumption

would also be unaffected by the changes in the availability or use of any particular medium. Yet, existing research on media consumption and voting – reviewed in this study – suggests that, even if substitution operates, it is not complete in this sense" (pp. 3-4). In short, the study explicitly finds that substitution between mediums is far from perfect. This means that the FCC must be concerned about the concentration of ownership in specific media.

Waldfogel uses two separate methodologies to examine the degree of substitution between different media. The first relies on aggregate data to determine whether changes in the availability of some type of media, for example an increase in the number of broadcast television stations available, lead to changes in the use of other media, for example a decline in newspaper circulation. The second methodology relies on micro level data on media usage to determine whether an individual's increased use of one-type of media (e.g. the Internet) is associated with more or less usage of other types of media. The use of micro level data allows for controls on factors such as income and age. For example, it is possible that people with higher incomes will consume more of all forms of media. The micro data used in this study allows the study to evaluate the extent of substitution between media, given the extent of usage of each medium that is predicted given the person's individual characteristics (e.g. age, income, education etc.).

The evidence uncovered by these methodologies shows very limited substitution between media. In the case of the first methodology the only substitutions that are significant at even the 10 percent confidence level are the substitutions between access to radio outlets and cable use, access to radio news and internet use, access to daily papers and cable use, and the circulation of daily papers and cable use. This methodology finds no evidence of substitution between cable television usage and broadcast television usage, between Internet usage and broadcast television usage, between newspaper usage and Internet usage, or any of the other types of substitution that have frequently been suggested (Table 12, Part I).

Using a very weak standard of statistical significance (a t-statistic exceeding 1 in absolute value), the study finds evidence of other types of substitution between media (p. 23). But, this sort of statistical support can at best be viewed as suggesting a basis for further research. Economists are usually hesitant to attribute very much importance to a result that is statistically significant at just a 10 percent level. The standard of a t-statistic greater than 1 is extremely weak – economists usually just dismiss such a finding as "statistically insignificant." This sort of statistical evidence is far too weak to provide a basis for policy.

The second methodology finds even less evidence of substitution between media. In regressions that control for age, education, race, and gender, the study only finds evidence of substitutions between Internet usage and television usage (Table 12, Part II). The coefficients for all the variables showing the interaction of increased use of one medium on other mediums are either positive or insignificant. A second regression examines the extent to which consumers substitute between different medium for news. In this regression also, the only coefficient that is negative and significant is the one measuring the substitution between the Internet and television as a news source, all of the other coefficients are positive and significant

(Table 13, Part II). The relationships found in this table are reproduced in Table 1 below, with a negative sign indicating that the two mediums are substitutes, and a positive sign indicating a significant positive relationship between the two media.

Table 1
The Relationship Between News Usage From Different Media

	TV-News	Radio News	Internet News	Daily Paper	Cable News
TV News	--	+	-	+	+
Radio News	+	--	+	+	+
Internet News	-	+	--	+	+
Daily Paper	+	+	+	--	+
Cable News	+	+	+	+	--

Source: Waldfogel, 2002, Table 13, Part II, signs indicate significance 10 percent confidence level (some are significant at a 5 percent level).

The significant positive coefficients in this table suggest that people who get more news from one source such as television, are also likely to get more news from a second source, such as a daily newspaper. It is important to remember that this regression controls for obvious determinants of news use, such as income and education. These positive coefficients raise an interesting issue. It may be the case that people who follow news from a variety of sources are simply news junkies for reasons that have little to do with their access to news. Alternatively, it may be the case that exposure to news in one medium tends to increase individuals' interest in news generally, leading them to use more news from all form of media. In the latter case, reduced access to news in any medium could lead consumers to get significantly less news generally, as they would be less likely to seek out news from other media. This possibility, suggested by the evidence in this study, certainly deserves further investigation.

Table 18 of the study provides a useful summary of the results of the various tests. The table lists all the cases in which there is statistical evidence of substitution between different media. The vast majority of the boxes are empty, indicating that none of the 11 different tests found any evidence of substitution. (All forms of substitution were not measured in each test.) Furthermore, the table would show considerably less support for substitution if it only showed instances in which the test results meet standard levels of statistical proof. In 8 of the 34 cases where the table indicates evidence of substitution, the standard was that the t-statistic was greater than 1.

There is one other point worth noting about even the limited evidence for substitution between media found in this study. It may be the case that some sub-groups of the population (e.g. more educated and higher income people), can more easily substitute between television and the Internet than other groups (e.g. older and less educated people). Before assuming that the Internet can in general provide a substitute for diminished diversity or news in television broadcasts, it would be helpful to know the extent to which this relationship holds for different

groups within society. The data used in this study should allow for a test of the extent to which this sort of substitution takes place among various sub-groups of the population. It would have been useful if this additional set of tests had been included in the study. Although, given the limited degree of substitution found in the aggregate data, it is possible the author did not consider it worthwhile to investigate the level of substitution among more narrow sub-groups.

Significantly in this study, Waldfogel cites his findings in a separate study (George and Waldfogel, 2002) which reveals an important additional piece of evidence on substitution between media.[1] This study examined the impact of *New York Times* readership on voting in local elections among college educated people. It found a statistically significant negative relationship between *New York Times* readership and voting in local elections for college educated people. The study also found a statistically significant negative relationship between *New York Times* readership and readership of local newspapers. It hypothesized that *New York Times* readers substitute national news for local news, and thereby become disengaged from local affairs.

Whether or not this explanation of the relationship found in this study is correct, it suggests that there could be very significant unintended consequences from changes in the availability of different types of media. First and foremost, the decline in voting among college educated people seems to provide a clear example in which different media (local and national newspapers) are far from perfect substitutes. It also suggests an interesting avenue for further investigation – the extent to which usage of different types of media affect voting and other forms of civic behavior.

Nielson Media Research, 2002 (Study #8)

While Waldfogel finds little evidence of substitution between media, the other study that addresses this topic (Nielson Media Research, 2002) appears at first to provide greater evidence for such substitution. This study is a survey of consumer attitudes towards the media. It includes a long list of questions concerning consumers' usage of different types of media and their willingness to substitute between media.

The direct questions on willingness to substitute between media appear to suggest a high degree of substitutability. For example, among respondents who identified local daily newspapers as their main source of news were asked what they would do if their local daily newspaper was no longer available. Of this group, 65.5 percent said that they would very likely increase their use of broadcast TV as a source of news, 53.8 percent said they would increase usage of cable news, 40.0 percent said they would increase their use of radio, and 36.4 percent said they would increase their use of a local weekly newspaper (Tables 045-051).

[1] George, L. and J. Waldfogel. 2002. "Does the New York Times Spread Ignorance and Apathy?" The Wharton School. http://rider.wharton.upenn.edu/~waldfogj/workpap.html .

However, there is basic problem with inferring substitution behavior based on these survey results. The respondents are reporting how they think they would behave, not necessarily how they actually would behave. This runs into a problem in that people may think they will behave in a manner that is different from how they will actually behave, given the circumstances described.

Fortunately, the survey includes a set of questions that sheds light on this issue, suggesting that respondents are in fact answering how they hope they will behave, rather than indicating how they actually would behave. For each of type of media covered in the survey respondents were asked the question "in the future, for local or national news and information about current affairs, would you say you expect to use [medium listed below] more often, less often or about the same as you do today?

Table 2 below shows the response to this question for each form of media, along with the percentage of respondents who said that they had used each one as a news source in the last seven days.[2]

Table 2
Expected Changes in Usage for News

	More Often	Less Often	Same	Current Usage
TV-broadcast	18.2	5.7	75.2	59.8
TV-cable	21.8	8.5	68.2	52.2
Daily newspaper	15.8	9.4	74	56.4
Radio	15.2	9.5	74.8	35.3
Weekly newspaper	10.1	15.7	72.5	24.2
Internet	24.7	16.4	54.5	18.8
Magazines	5.3	24.4	67.6	6.4

Source: Nielson Media Research, 2002, Tables 001, 007, 008, 070-076.

As can be seen from the table, respondents expect on net to substantially increase their news usage from five of the seven forms of media about which they were asked. This includes the four types of media that are most widely used as news sources at present. They only expect to decrease usage of weekly newspapers and magazines, which is already by far the least used news source in the group. In short, if these answers are taken at face value, it implies that news consumption is increasing rapidly and will continue to increase for the foreseeable future.

[2] The percentage of daily and weekly newspaper readers was determined by taking the percentage of people that had answered they had read a newspaper in the past seven days in Table 001, and multiplying this by the percent of this group that identified themselves as either reading a daily or weekly newspaper, or both in Table 007. This same process was used to divide television usage between broadcast and cable, using the data in Table 001 and Table 008.

In spite of the responses shown in the table, it is unlikely that news usage will substantially increase in the near future. This would imply a substantial turn around from the past for most forms of media. More likely, the individuals who are answering these questions are probably basing their answers on what they would like to imagine themselves as doing, as opposed to what they actually will do. This can be seen as analogous to a survey that asked whether people intend to do more or less of a variety of exercises in the future (e.g. running, walking, bicycling). While the respondents may honestly expect that they will exercise more in the future than in the past, unless there is currently an upward trend in exercising, it is reasonable to assume that this is simply wishful thinking. In this case, people may hope that they will follow news more closely in the future, but recent trends in news use indicate that this is not likely to be the case.

This point is important in the context of the set of questions that asked respondents about their willingness to substitute between mediums for news (Tables 021-069). The answers shown in these tables indicate how respondents hope that they will behave. The data shown in Waldfogel (2002) probably gives a more accurate picture of how they actually will behave. As noted above, substitutions between media for news appear to be very limited when observed in practice. These observations of actual behavior provide a more reliable guide for policy than surveys in which respondents indicate how they think they would behave.

In conclusion, the two studies that address the issues of substitution between media as a source of news indicate that there is relatively limited substitution between different types of media. The Waldfogel study, which examined actual behavior, only found statistically significant evidence of substitution in the case of Internet and television usage. In the case of other types of media, the study found that, if anything, greater usage of one form of media for news was associated with greater usage of other forms, implying that a reduction in access to news in any medium could lead to a reduction in news usage. The survey conducted by Nielson Media Research (NMR) indicates that people say that they will substitute relatively easily between different media for news sources, but it also indicates that people say they will follow news much more closely in the future than they have in the past. Since most forms of news usage are decreasing rather than increasing, it would be dangerous to infer much about people's willingness to substitute between media for news sources based on their answers in this survey.

To put the difference between these studies somewhat crudely, the Waldfogel study looks at what people do, the NMR study looks at what people say they will do. Economists usually prefer looking at what people do. This prejudice is supported in this particular case by the fact that people are clearly not doing what they say they will do in the NMR survey – increasing news usage. Therefore, it is reasonable to conclude that the findings of the Waldfogel study – that there is relatively little substitution between media as a news source – is probably the more accurate view of media usage.

Section 4: Trends in Concentration, Advertising Prices and the Diversity of Media Outlets

Three of the studies commissioned by the FCC examined changes in the number of media outlets and owners (Roberts et al., 2002, Study #1; Williams and Roberts, 2002, Study #11; Levy et al., 2002, Study #12). These studies present a very mixed picture of the media industry. There is certainly evidence in these studies that increasing concentration may be restricting the diversity of offerings to the public. This view is also supported by a fourth study (Williams et al., 2002, Study # 9), which examined the diversity of the music aired on radio stations in ten major media markets. In addition, two studies (Brown and Williams, 2002, Study #4; and Williams and Roberts, 2002, Study #11) provide evidence that concentration in the ownership of radio stations may be driving up advertising prices.

Roberts et al., 2002 (Study #1)

Roberts et al., examined the number of media outlets and owners in ten selected media markets over the period from 1960 to 2000. It concludes that:

> "*the number of media outlets and owners increased tremendously over the 40-year period from 1960 to 2000. The percent increase in the number of outlets averaged almost 200 percent across all ten markets. The percent increase in owner count, somewhat less dramatic due to consolidation, averaged 140 percent*" (Roberts et al., 2002, p. 3).

In fact the data in the study present a considerably more complicated picture. The data indicate that the number of outlets did increase rapidly from 1960 to 1980, however, the rate of increase in the number of outlets slowed substantially in nine of the ten markets in the period from 1980 to 2000. The rate of increase in the number of owners slowed in all ten markets, with one market actually showing no increase in owners in the second twenty year period.

Table 3 shows the rate of increase in the number of media outlets and owners for each of the ten markets examined in Roberts et al. As can be seen the rate of growth in the number of outlets slowed in all of the markets examined in the period from 1980 to 2000, with the exception of Charlottesville. The rate of growth in the number of owners slowed in every market in the last twenty years. One of the markets, Kansas City, experienced no growth at all in the number of owners over the last two decades, and New York actually experienced a small decline. It would have been useful if this study presented data for years that coincided with the changes in FCC ownership rules, so that it would have been possible to determine the extent to which these changes contributed to the slower growth in media outlets. While this data does not provide a basis for determining the reason for the slower growth, or the precise timing of the slowdown, it is clear from the table above that the rate of growth of media outlets has slowed substantially in the last two decades.

Table 3
Growth Rate in Outlets and Owners in Ten Selected Media Outlets

	Media Outlets		Owners	
	1960-1980	1980-2000	1960-1980	1980-2000
Altoona	72.7%	21.1%	33.3%	25.0%
Birmingham	57.1	34.1	70.0	11.8
Burlington	146.7	43.2	115.4	21.4
Charlottesville	62.5	76.9	100.0	40.0
Kansas City	100.0	20.5	106.3	0.0
Lancaster	50.0	19.0	60.0	25.0
Little Rock	105.9	71.4	114.3	10.0
Myrtle Beach	266.7	43.2	115.4	43.8
New York	73.0	19.5	93.3	-1.7
Terre Haute	116.7	26.9	137.5	15.8

Source: Roberts et al., 2002, Table 1.

Table 4 shows the number of outlets and owners actually present in each market in 2000, and the number that would have been present, if the growth rate from the 1960 to 1980 period had been maintained for the period 1980-2000. (i.e. The first column in the "media outlets section shows the actual number of outlets in each market in the year 2000 the second column in the section shows the number that would have been present in the market if the 1960-80 growth rate had been maintained for two more decades.)

Table 4
Numbers of Media Owners and Outlets in 2000

	Media Outlets		Owners	
	2000 Actual	2000 (60-80 growth)	2000 Actual	2000 (60-80 growth)
Altoona	23	33	15	16
Birmingham	44	69	38	58
Burlington	53	84	34	60
Charlottesville	23	21	14	20
Kansas City	53	88	33	68
Lancaster	25	32	20	32
Little Rock	60	72	33	64
Myrtle Beach	38	81	23	43
New York	184	266	114	224
Terre Haute	33	56	22	45

Source: Roberts et al., 2002, Table 1.

As the table shows, each market would have had considerably more outlets and owners if the 1960-80 growth had been maintained for the last twenty years (except in the case of outlets in Charlottesville). For example, Burlington would have had 84 outlets in 2000 if the prior

growth rate had been maintained, instead of the 53 media outlets it actually had in 2000. The 1960-80 growth rate would have given Myrtle Beach 81 outlets and 43 owners in 2000, instead of the 38 outlets and 23 owners that it actually had as of 2000.

This study provides solid evidence that the growth rate in both the number of media outlets and owners has slowed sharply over the last two decades. As noted above, the failure of the study to include the years in which there were major changes in ownership rules makes it impossible use its data to determine the extent to which the slower growth may have been attributable to the change in these rules. However, it is clear that the growth slowdown has coincided with these changes.

It also would have been useful if this study included data on market shares. The number of outlets may provide little information about the range of choices available to consumers. If a small number of outlets are able to dominate the market, the availability of a large number of very small outlets could mean little to either consumers or advertisers. Unfortunately, this study provides no information on market shares. It also does not provide break-out the trends in radio and television stations, instead lumping them together under the category of broadcast outlets.

Williams and Roberts, 2002 (Study #11)

Williams and Roberts (WR) is somewhat more helpful on the link between concentration and regulatory policy, since it examines changes in the radio industry in the six years since the weakening of restrictions on the number of radio stations that could be owned by a single company. The study finds a sharp increase in the concentration over this period. For example, the study finds the four firm concentration ratio (as measured by shares of ad revenue) went from less than 65 percent in 1996 to more than 85 percent in 2002 (WR chart 2). WR also find that the number of distinct owners has fallen by 34 percent since the change in ownership rules (Williams and Roberts, 2002, Study #11, p. 3).

This decline in owners has been associated with a small decline in the number of distinct formats in large radio markets, while the number of formats has continued to grow in smaller markets (Williams and Roberts, Chart 4). The study also finds evidence that the growth rate in stations has slowed since the 1996 change in rules. Table 5 compares the growth rate in commercial radio stations before and after the rule change in 1996.

Table 5
Annual Growth Rates of Commercial Radio Stations

1996- 2002	0.9 percent (nationwide)
1980-2000	1.0 percent (ten selected markets)
1980-2000	1.3 percent (nine markets – excludes New York)

Source: Williams and Roberts, 2002; Roberts et al., 2002, Table 3.

According to WR, the number of commercial radio stations nationwide has increased by just 5.4 percent between 1996 and 2002, or less than 0.9 percent a year (WR p. 3). By comparison, in the ten media markets examined in Roberts et al., 2002 (Study #1), the number of stations grew at an annual rate of approximately 1.0 percent over the period 1980-2000 (from 262 in 1980 to 318 in 2000). If the New York market is excluded from the sample, which may be appropriate since it airwaves are approaching saturation, then the growth rate of the number of stations in the remaining nine markets was even faster. It is also important to note that the period 1980-2000 includes four years after the change in rules. This means that if the rules change slowed the growth in the number of commercial radio stations, then the growth rate would have been even more rapid than indicated in Table 5 for the period from 1980 to 1996.

WR also found that the increased concentration in radio markets was associated with a decline of approximately 1.0 percent in listeners annually (WR p. 19). As the study notes, this decline may be attributable to other factors, such as increased use of other media, but unless these other factors can be clearly identified, it is reasonable to view this decline in listeners as prima facie evidence of reduced satisfaction with the quality of radio broadcasts. The fact that increased concentration would be associated with a reduction in listeners is also consistent with the prediction of the theoretical model developed in Cunningham and Alexander (2002).

Finally, consistent with the increased concentration in the radio industry, there has also been a sharp rise in advertising fees since the change of rules. Adjusted for inflation, the cost of radio advertising has risen by more than 60 percent since 1996 (WR chart XIII).

Williams et al., 2002 (Study #9)

The study by Williams et al. also suggests that the increased concentration in the radio industry may have led to some decrease in diversity. The study finds that since 1996, there has been some increase in the diversity of songs offered within radio formats within radio markets, but some decrease in diversity in songs across markets (Williams et al., p. 11). The latter may be viewed as a cause for concern, because it suggests that there will be fewer distinct songs, across the nation, broadcast on the radio. Since it is a national policy to promote the production of a diversity of songs, as evidenced by government support for the production of music and the education and training of musicians, the fact that fewer songs might find an outlet on radio broadcasts should be seen as grounds for concern.

It is striking that Williams et al. found a statistically significant reduction in the diversity of songs, since its methodology probably biased it against finding this result. The study only used radio stations top ten play lists in their measure of diversity. This means that if a station had a large reduction in the range of songs that it played more broadly, but it did not change its top ten play list, this would have no impact on the measure of diversity used in this analysis. (For example, a station that constantly replayed its top ten list would appear the same in this analysis as a station that played the songs on its top ten list only slightly more than hundreds of other songs over the course of a month.)

The study also does not look at comparisons over time. In order to determine the impact of the 1996 rules change, the study should have examined the industry trends prior to 1996 to determine how they were altered by the weakening of rules on concentration. The failure to isolate trends may lead to an understatement or overstatement of the impact of concentration depending on whether radio broadcasts were becoming more or less diverse at the time the new rules were put in place. For example, if the trend had been towards growing diversity prior to 1996, then the impact of concentration on diversity was even larger than the data in Williams et al. indicate, since concentration could then be viewed as responsible for reversing a trend toward increasing diversity.[3]

Brown and Williams, 2002 (Study #4)

Brown and Williams (2002) examines the relationship between radio advertising prices and market concentration. While it finds that the real (inflation adjusted) cost of radio advertising rose by 68 percent after the 1996 repeal of limits on station ownership, it concludes that just 3-4 percentage points of this increase can be attributed to growing concentration in the industry. It attributes the rest of the increase in advertising rates to economic growth.

The basis for this assessment is a pair of regressions in which the log of radio ad prices, over the years from 1995 to 2000, was regressed against a series of independent variables including the population of the radio market, per capita income in the radio market, GDP, and several measures of concentration in the local and national radio market. The regressions found that the variables measuring concentration had a very small, albeit positive, effect on ad prices. The regressions find that the main factor explaining the rapid rise in the price of radio ads over this period was the rise in income over the period (Brown and Williams, p. 1).

The finding that income growth was the main factor behind the sharp surge in ad prices following the relaxation of ownership rules seems implausible on its face. Prior research had found that radio prices had been falling in real terms over the entire period from 1961 to 1994 (Silk, Klein and Berndt, 2001, Figure 3).[4] This study found that network radio ad prices had fallen an average of 1.27 percent annually over this period, while spot radio ad prices had fallen an average of 0.8 percent annually. The economy grew by 202.1 percent over this period. If growth explains the increase in ad prices in the years since restrictions on concentration of ownership were removed, then it should have also led to sharp increases in ad prices in the three decades prior to the removal of these rules. The fact that growth was instead associated with falling ad prices over this period indicates that economic growth is probably not the explanation for the rise in ad prices since ownership rules were relaxed.

[3] The study also fails to test directly the extent to which concentration and song diversity coincided. It could have done such a test by using data on market concentration, for example the data on the concentration of advertising revenue in WR, as an independent variable in the regression whose results are shown in Table 4.

[4] Silk, A., L. Klein and E. Berndt. 2001. "Intermedia Substitutability and Market Demand by National Advertisers." NBER Working Paper No. W8624.

The study could have properly tested for the impact of growth on advertising prices by simply including the years prior to the relaxation of ownership rules in its regressions. It could have then included a dummy variable (possibly one interacted with growth) for the years after the relaxation of the rules. Given the difficulty of properly measuring concentration, it is not surprising that the concentration variables do not show much effect in the two regressions whose results are published in the paper. The process of concentration over this period was likely highly correlated with the measures of economic growth used in the regression (e.g. the economy grew rapidly in the late nineties at precisely the time that industry was becoming more concentrated). Therefore, it is reasonable to expect that much of the impact of concentration would show up in the growth variables. In this regard, it is worth noting that most of the explanation of the rise in ad prices in the second regression, which excludes a GDP variable, shows up not in the regional income variable, but rather in the year dummies. (With the national GDP variable removed, the regional incomes variables should be expected to pick up most of the impact that had been explained by national GDP growth in the previous regression.) This fact suggests that the regressions are poorly specified and are not giving an adequate explanation of the surge in radio ad prices since the relaxation of ownership restrictions.

Levy et al., 2002 (Study #12)

The study by Levy et al. is a broad ranging assessment of the prospects for broadcast television over the long-term. It presents evidence of diminished growth in the number of broadcast television stations that is comparable to the evidence for slower growth in the number of radio outlets found in WR. Table 6 reproduces a table showing the growth in the number of television stations over the last 25 years, at five year intervals. As can be seen, there is a sharp slowdown in the rate of growth in the number of broadcast television stations over the last ten years included in this sample. While the total number of stations had grown by 18.4 percent

Table 6
Growth in the Number of Television Stations

	75-80	80-85	85-90	90-95	95-100
Total	6.1%	18.4%	20.5%	6.2%	5.7%
VHF	2.6	2.6	4.8	2.4	0.0
Commercial	0.4	0.8	5.2	2.7	0.4
Educational	14.7	11.0	3.3	0.8	-1.6
UHF	12.2	44.0	38.5	9.6	10.3
Commercial	13.5	66.5	50.1	9.9	14.2
Educational	10.5	14.9	16.6	8.9	0.8
Total Commercial	4.0	20.3	23.7	6.3	7.5
Total Educational	12.1	13.4	11.5	6.0	0.0

Source: Levy et al., 2002, Table 7.

from 1980 to 1985 and by 20.5 percent from 1985 to 1990, the growth rate fell to 6.2 percent in the first half of the nineties and to 5.7 percent in the second half. While there is slower growth in the number of broadcast television stations in every category, the falloff is most notable in the case of educational stations. The number of educational television stations grew by 13.4 percent from 1980-85 and by 11.5 percent from 1985 to 1990, it grew by just 6.0 percent in the next five years, and did not grow at all in the years from 1995 to 2000. The drop off in the growth rate, and recent stagnation, in the number of educational stations is the most striking feature of this table. Clearly education has become a less important function of broadcast television in the last decade. Levy et al. does not attempt to provide an explanation for the slower growth in the number of educational television stations, although relaxed regulation presumably played a role.

The studies discussed in this section examined the growth in the number of outlets, the diversity of offerings on radio outlets, and the link between concentration in the ownership of radio outlets and ad prices. Three studies provide clear evidence that the growth in the number of media outlets and owners has slowed sharply in the last two decades. One of the studies (WR) shows a clear link between the relaxation of regulations on ownership and a rapid increase in concentration in the industry. This increase in concentration has also been associated with a decline in listeners, a result that is consistent with the theoretical model developed in Cunningham and Alexander.

The other two studies (Roberts et al., 2002 and Levy et al., 2002) were not designed to directly examine the link between changes in regulation and the growth of outlets, but both find evidence that the growth in outlets has slowed sharply in the years when the FCC has weakened regulation. In particular, Levy et al. finds that the slower rate of growth in broadcast television stations was seen most clearly in the case of educational outlets, the number of which actually stopped growing in the most recent period covered in the study.

A fourth study examined in this section (Williams et al., 2002) finds some evidence of an increase in the diversity of songs offered within radio markets in the six years since the relaxation of rules on concentration of ownership, but it also found evidence of a decline in the diversity of songs offered nationwide. This suggests that concentration in radio broadcasting may lead to fewer songs being played on the radio. Unfortunately, it does not examine the trends prior to 1996, so it is impossible to determine the extent to which this change marks a break with prior trends.

The fifth study reviewed in this section (Brown and Williams, 2002) examined changes in the price of radio advertisements since 1996. It found that ad prices rose by 68 percentage points more than the overall rate of inflation over this six year period. While the study attributes most of this increase to economic growth rather than concentration, this result is implausible. Other research (Silk, Klein and Berndt, 2001) found that radio ad prices had actually fallen in real terms in the years from 1961 to 1994, even though the economy had enjoyed rapid growth over much of this period. It is not plausible that economic growth suddenly began to push up radio ad prices at the exact moment that the industry became more concentrated.

Conclusion: Does Concentration in the Media Industry Pose a Problem?

The FCC studies provide considerable basis for concern about the ongoing process of concentration in the media industry. One of the studies (Cunningham and Alexander, 2002) provides a theoretical argument that greater concentration will lead to less consumption of broadcast material, a loss of consumer welfare, and higher advertising rates. As noted in the prior sections, the studies provide evidence that the last two decades have seen slower growth in the number of radio and television outlets, and especially educational outlets in the case of television. They have also found evidence that concentration of ownership in radio has been associated with a decrease in the diversity of radio offerings nationwide. Given the inherent difficulty of measuring diversity, the fact that one of the studies (Williams et al., 2002) found statistically significant evidence of such a link is quite striking. One of the studies also found evidence that the concentration of radio station ownership after the FCC relaxed restrictions in 1996 may have been associated with a surge in advertising costs in second half of the nineties. As noted above, a better designed test may have provided more insight into this relationship. In addition, one of the studies (Waldfogel, 2002) found little evidence that individuals substitute between different media. In fact, it found most media are complements for news usage, which implies that if individuals get less news through one medium, they will be less likely to get news from other types of media as well. This suggests that concentration in each medium should be a cause for concern.

All of these facts suggest that concentration in the media industry does pose a problem in maintaining a diverse flow of entertainment and information for individuals, as well as reasonably priced advertising options for businesses. However, there is also a further dimension to this issue which is largely neglected by these studies. None of the studies attempts to directly examine the way in which the commercial interests of the media outlets or their advertisers may affect the content of their news and entertainment.

For example, it is reasonable to believe that media outlets would be reluctant to air news or entertainment that reflected badly on either the media company itself or a major advertiser. This reluctance could take the form of ignoring or misrepresenting certain issues in news coverage or neglecting topics in the entertainment it presents. For example, news shows may be anxious to provide show accounts of bungling by government agencies rather than corporate wrongdoing. Entertainment shows may shy away from topics that put major advertisers in a bad light, for example low wage employers that arbitrarily change workers' shifts without notice. (It is worth noting that one of studies observes that appeal to advertisers is an explicit consideration in the production of television programs [Einstein, 2002, Study #5, Part II, p.15].) It would have been helpful if the FCC had commissioned studies that sought to directly examine these issues.

While it is not simple to find good tests for evidence of this sort of influence, many of the FCC studies make ambitious (and not entirely successful) efforts, to measure phenomena

such as diversity, which are inherently difficult to measure. If some of the studies had attempted to measure the extent to which the commercial interests of the media companies and their advertisers affected the content of their news and entertainment, it could make a better informed decision on the rules in question.

In a similar vein, the FCC studies also neglected to consider the extent to which ownership concentration may affect the ability of various interest or political groups to reach a wider public with their views.[5] Specifically, media outlets are likely to reject a single or small package of ads that antagonizes a major advertiser. For example, a fast food chain may threaten to pull advertising from a media outlet that broadcasts an ad from an organization seeking to increase the minimum wage. This is an extremely important issue in a democracy, since the media is the primary means available for any organization to reach a large audience with their views.[6] It is not necessarily the case that greater concentration in the media will increase the ability of large advertisers to use their economic power to prevent opposing voices from being heard. However, it is at least reasonable possibility that the FCC should examine carefully before deciding on these rules.

In conclusion, the FCC studies raise serious questions about the impact of concentration to date on diversity of news and entertainment. They indicate that there is little basis for believing that substitution between types of media will offset any negative effects from concentration in specific medium. They also present evidence that concentration, at least in the case of radio, has been associated with a sharp increase in ad prices. These facts should be weighed carefully by the FCC in its decision of further relaxing rules that restrict concentration.

[5] This issue is explicitly raised in Yudken and Owens, 2002. Yudken, J. and C. Owens. 2002. "Reply Comments of the American Federation of Labor and Congress of Industrial Organizations, before the Federal Communications Commission, in the Matter of Cross Ownership of Broadcast Stations and Newspapers and Newspaper/Radio Cross-Ownership Waiver Policy." Washington, D.C.: American Federation of Labor and Congress of Industrial Organizations.

[6] It is worth noting that one of the studies (Bush 2002, Study #10) found very little evidence of substitution in advertising between different types of media. This means that if an ad is excluded from television, the possibility of having it presented on radio or in newspapers is not a reasonable alternative.

References:

Brown, K. and G. Williams. 2002. "Consolidation and Advertising Prices in Local Radio Markets." Washington D.C.: Federal Communications Commission.

Bush, C.A. 2002. "On the Substitutability of Local Newspaper, Radio, and Television Advertising in Local Business Sales." Washington D.C.: Federal Communications Commission. Washington D.C.: Federal Communications Commission.

Cunningham, B. and P. Alexander. 2002. "A Theory of Broadcast Media Concentration and Commercial Advertising."

Einstein, M. 2002. "Program Diversity and the Program Selection Process on Broadcast Network Television." Washington D.C.: Federal Communications Commission.

George, L. and J. Waldfogel. 2002. "Does the New York Times Spread Ignorance and Apathy?" The Wharton School. http://rider.wharton.upenn.edu/~waldfogj/workpap.html

Levy, J. M. Ford-Livene, and A. Levine. 2002. "Broadcast Television: Survivor In a Sea of Competition." Washington D.C.: Federal Communications Commission.

Nielson Media Research Group. 2002. "Consumer Survey on Media Usage." Washington D.C.: Federal Communications Commission.

Pritchard, D. 2002. "Viewpoint Diversity in Cross-Owned Newspaper and Television Stations: A Study of News Coverage of the 2000 Presidential Campaign." Washington D.C.: Federal Communications Commission.

Roberts, S., J. Frenette, and D. Stearns. 2002. "A Comparison of Media Outlets and Owners for Ten Selected Markets: 1960, 1980, 2000." Washington D.C.: Federal Communications Commission.

Silk, A., L. Klein, and E. Berndt. 2001. "Intermedia Substitutability and Market Demand by National Advertisers." NBER Working Paper No. W8624.

Spavins, T, L. Denison, S. Roberts, and J. Frenette. 2002. "The Measurement of Local Television News and Public Affairs Programs." Washington D.C.: Federal Communications Commission.

Waldfogel, J. 2002. "Consumer Substitution Among the Media." Washington D.C.: Federal Communications Commission.

Williams, G., K. Brown, and P. Alexander. 2002. "Radio Market Structure and Music Diversity." Washington D.C.: Federal Communications Commission.

Williams, G. and S. Roberts. 2002. "Radio Industry Review 2002: Trends in Ownership, Format, and Finance." Washington D.C.: Federal Communications Commission.

Yudken, J. and C. Owens. 2002. "Reply Comments of the American Federation of Labor and Congress of Industrial Organizations, before the Federal Communications Commission, in the Matter of Cross Ownership of Broadcast Stations and Newspapers and Newspaper/Radio Cross-Ownership Waiver Policy." Washington, D.C.: American Federation of Labor and Congress of Industrial Organizations.

Dean Baker

Curriculum Vitae

August 2002

Center for Economic and Policy Research
1621 Connecticut Ave., NW
Washington, DC 20009
202-332-5218
202-588-1356 (Fax)
dean.baker@worldnet.att.net

Education

1981 B.A., Swarthmore College, History-Major, Economics-Philosophy-Minors
1983 M.A., University of Denver, Economics
1988 PhD, University of Michigan, Economics
Dissertation: "The Logic of Neo-Classical Consumption Theory." W.H. Locke Anderson, Chair

Employment

1983-88 Teaching Assistant-Instructor, University of Michigan
1988-89 Lecturer, University of Michigan
1989-92 Assistant Professor, Bucknell University
1992-97 Economist, Economic Policy Institute
1997-98 Senior Economist, Economic Policy Institute
January - December 1999, Senior Research Fellow, Preamble Center
1999- Co-Director Center for Economic and Policy Research

Books

Social Security: The Phony Crisis (with Mark Weisbrot). 1999, University of Chicago Press.
Globalization and Progressive Economic Policy. Edited with Jerry Epstein, and Bob Pollin, Cambridge University Press, 1998.
Getting Prices Right: The Battle Over the Consumer Price Index. M.E. Sharpe Press, 1997. (Selected for 1998 Choice Outstanding Academic Book List).
The Benefits of Full Employment. with Jared Bernstein, Economic Policy Institute, 2002, forthcoming.

Web Site Features

Economic Reporting Review, author, weekly, August 2000 - present (www.TomPaine.com)
Economic Reporting Review, author, weekly, January 1999 – July, 2000 (www.fair.org)
Reading *Between the Lines*, primary author, weekly, April 1996 –December 1998 (www.epinet.org)
Commentaries on Major Economic Data reports, January1995 - present (www.cepr.net – since January 2000)
Beige Book Analysis and Review, January 1999 – present (fmcenter.org)

Other Recent Publications 2001-2002

Mr. Baker has written dozens of articles, essays and studies for numerous publications and organizations including The Century Foundation, the Economic Policy Institute, The Journal of Economics, The American Prospect, Challenge and Dollars and Sense. His most recent work includes:

"Macro Policy-Making in the New Economy," in the *New Economy Handbook*, edited by Derek Jones, Academic Press, Forthcoming, 2003.

"Labor Market Institutions and Unemployment," with Andrew Glyn, David Howell, and John Schmidt, in *Questioning Liberalization: Unemployment, Labor Markets, and the Welfare State*, Oxford University Press, Forthcoming, 2003.

"The Run-Up in Home Prices: Is It Real or Is It Another Bubble?" Center for Economic and Policy Research.

"The Relative Impact of Trade Liberalization on Developing Countries," with Mark Weisbrot, Center for Economic and Policy Research.

"Business Week Restates the Nineties," *Challenge*, July-August.

"The Role of Social Security Privatization in Argentina's Economic Crisis," with Mark Weisbrot, Center for Economic and Policy Research.

"Is the New Economy Wearing Out? The Growing Importance of Depreciation in GDP," *Challenge*, November-December.

"Security Transactions Taxes for U.S. Financial Markets," with Robert Pollin and Marc Schaberg, Political Economy Research Institute, University of Massachusetts.

"Money for Nothing: The Increasing Cost of Foreign Reserve Holdings to Developing Nations," with Karl Walentin, Center for Economic and Policy Research.

"Hot Air Over the Arctic: An Assessment of the WEFA Study of the Economic Impact of Oil Drilling in the Arctic National Wildlife Refuge," Center for Economic and Policy Research.

"Defaulting on the Social Security Trust Fund: Winners and Losers." Center for Economic and Policy Research.

"The New Economy Goes Bust: What the Record Shows," Center for Economic and Policy Research.

"Effective Currency Transactions Taxes: The Need to Tax Derivatives," Center for Economic and Policy Research.

"The Scorecard on Globalization 1980-2000: Twenty Years of Diminished Progress," with Mark Weisbrot, Egor Kraev, and Judy Chen. Center for Economic and Policy Research.

"Vaccine Buying Pools: Is More Protectionism the Best Route?" Center for Economic and Policy Research.

"Projections of Income for the 21st Century," *International Journal of Health Services*, Summer, 2001.

Department for Professional Employees, AFL-CIO
1025 Vermont Avenue, NW – Suite 1030
Washington, D.C. 20005

(202) 638-0320 ♦ FAX: (202) 628-4379 ♦ www.dpeaflcio.org

December 2002

Publication # 02-5