

OWNERSHIP DIVERSITY WITHIN THE MEDIA INDUSTRY:
TRENDS AND CURRENT CONDITIONS

by

THOMAS E. VIZCARRONDO
B.S.B.A, University of Tulsa, 1983

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the School of Communication
in the College of Arts and Sciences
at the University of Central Florida
Orlando, Florida

Summer Term
2004

ABSTRACT

This study seeks to determine if media ownership diversity remains at levels widely considered to be competitive and acceptable, despite consolidation within the media industry. The research augments the many studies analyzing programming diversity within the U. S. media industry. Rather than analyzing programming content, this study addresses ownership diversity by examining the diversity of media ownership within the context U. S. model, considered to be more of a decentralized, market-driven media industry when compared to other countries such as the United Kingdom or Canada. To measure diversity, the Herfindahl-Hirschman Index (HHI)—a measure of economic diversity widely used by economists as well as government regulatory agencies—is used. Suggestions are presented for the future of media and regulation to insure a competitive, diverse, and healthy media industry.

This thesis is dedicated to the memory of my father, whose faith in me was so often greater than my own faith in myself. It is also dedicated to my mother, whose love and encouragement has helped me to achieve more than I often thought I could. I hope they are as proud of their son as I am of my parents.

ACKNOWLEDGEMENTS

I realize that this work is the result of many people who have inspired and motivated me throughout my life. Many years ago, a second grade teacher brought a portable black and white television in to her class so that her students could watch the inauguration of the President of the United States. Little did Betty Gingras realize that such a simple act would open my eyes to a world of politics, government, and public policy that has captivated my interest for so many years. I'm grateful to her for such a simple act that has had such a profound effect on my life. Likewise, I'm grateful to Gayle Joseph, a political mentor, confidant, and friend, who has encouraged and supported my interest in these areas for many years. I also owe thanks to Isabel Miller, whose love of the written word has been passed on to me.

This work is the combination of those loves—that of public policy and the written word. I'm indebted to Gene Costain, my thesis advisor, for his patience and encouragement in allowing me to bring those two together. Thanks, Gene, for your guidance, openness, and for your friendship.

My experiences in this thesis process have reminded me the importance of friends for support, ideas, and encouragement. My thanks to many of my U.C.F. friends, including Ronda Stonerook, Keith Jensen, Jaeann Bollinger, Geni Garza, Jaime Marshall, Ken Kincaid, and Jenni Ishman. Thanks for making this past year so memorable. Lastly, thanks to many of my longtime friends who have figured out a way to endure the challenges of calling me a friend for so many years. Thanks to Denise Forrest, Michael Hammond, Melissa Hunt, and Staci Thomas.

TABLE OF CONTENTS

INTRODUCTION	1
LITERATURE REVIEW	3
Diversity Defined.....	4
Historical Perspective	6
Measuring Diversity.....	8
Previous Findings and Conclusions	12
Technology and Diversity.....	16
Gaps in Existing Studies	17
Research Question	18
METHODOLOGY	20
Measurement Instrument	20
Data Collection Procedures.....	23
Data Analysis Procedures	26
RESULTS AND FINDINGS	27
CONCLUSION.....	34
APPENDIX A: COMPANIES INCLUDED IN THE STUDY	38
APPENDIX B: ANNUAL REVENUE OF MEDIA COMPANIES, 1994-2003.....	40
REFERENCES	47

LIST OF TABLES

Table 1. Herfindahl-Hirschman Index, 1994-2003.....	27
---	----

LIST OF FIGURES

Figure 1. Diversity of Media Ownership, 1994-2003.....	28
Figure 2. “New Media” Market Share, 1994-2003.....	31

INTRODUCTION

Current deregulatory proposals by Michael Powell, Chairman of the Federal Communications Commission (FCC), have prompted strong public reaction and renewed the debate of a market-driven media's impact on participatory/citizen democracy in the United States. This debate is longstanding: Fierce debates in the 1920's concerning the role and nature of radio broadcasting resulted in the Radio Act of 1927 and the subsequent passage of The Communications Act of 1934 ("1934 Act"), affirming the for-profit incentives of U. S. broadcasting while at the same time committing the industry and government to the broadcasters' obligation to provide a "greater good" in return for their access to the scarce resources of the broadcasting airwaves (McChesney, 1993). At best, the 1934 Act merely provided a respite to the debate; it certainly did not end it. As new technology would bring new opportunities for communications, the old debates about who controls the media and the control the media has on society would resurface (Herman and Chomsky, 1998).

Most recently, the FCC's attempts to further deregulate media by—among other things—relaxing ownership rules has reignited this 80+ year old debate, generating outcries from consumer activists, a U.S. Senate rejection of the regulations (only the second time in the Senate's history for such a "resolution of disapproval"), and a blocking of the regulations by the U.S. Court of Appeals (Labaton, 2003). In part, the strengths and weaknesses of these regulations have been argued within the context of diversity in the media. Political economists have been emboldened to continue their criticisms of a U.S. media that is increasingly consolidating and, in their view, becoming too concentrated to offer appropriate diversity to the general public.

In light of this renewed debate, it is timely and appropriate to re-examine the current condition of the U.S. media and to determine the impact this industry's consolidation has had on diversity. Specifically, the condition of the U.S. media will be examined from the perspective of ownership concentration or, conversely, ownership diversity. Such an examination is vital to the ongoing debate of the U.S. media, as it helps to properly frame the media within the context of its role in today's society, and the existence or lack of competitive pressures to ensure diverse voices are disseminated throughout the general public.

LITERATURE REVIEW

Existing work has explored diversity in the media and approached the issue in different ways. Part of the reason for these differences may be provided by Judge Richard Posner, as quoted from his decision in *Schurz Communications v. Federal Communications Commission*, 1992, “While the word diversity appears with incantatory frequency in the Commission’s opinion, it is never defined” (Einstein, 2004, p. 3).

Scholars such as Noam Chomsky, Robert McChesney and Edward Herman argue that deregulation results in a media dominated by capitalists. The capitalists’ profit-orientation, therefore, motivates them to maximize their influence over and control of the industry at the expense of diversity in terms of ownership, participants, and messages (Klaehn, 2002). Critics contending that a capitalistic, deregulated media can become too powerful and hence, a detriment to democracy become even louder when they see consolidation of participants in the industry (Bogart, 1998; McChesney, 1999). This indictment comes not just from political economists and academics. Even politicians, including former Vice President Al Gore, sound caution about the media’s power, as reported by Amber McDowell (2003):

Our democracy is suffering in an age when the dominant medium is not accessible to the average person and does not lend itself most readily to the conveyance of complex ideas about self-governance. Instead it pushes toward a lowest common denominator. (p. B-8)

For these critics, the focus of the criticism is on corporate ownership and consolidation. Their argument incorporates the concern that recent consolidation within the media industry has resulted in fewer, more powerful programmers, resulting in less diversity to the viewing public.

Others directly challenge the idea of large media companies working together to the detriment of smaller firms' abilities to compete (Picard, 1996). While there are many strategic alliances existing among the major media and communications firms today, the industry will always be a dynamic one, characterized by changes in ownership and strategies. Additionally, Picard points out that these companies all differ in their specific strategies of whether to grow and how to grow, which creates "differences in behavior and the ability of communication firms to grow or survive, so one cannot view all media empires as similar and behaving in the same manner (p. 24).

Diversity Defined

Perhaps in recognition of Judge Posner's observation that the definition of diversity is elusive, existing work studying media diversity is diverse in and of itself, in part because of the many different ways diversity is defined. In fact, some even challenge the idea of diversity as a realistic objective when regulating the media. FCC Commissioner Harold Wilkes Furchtrott-Roth argues that diversity cannot be measured and offers no meaningful understanding to the ongoing debate (Barron, 2000). He argues that the goal of media diversity conflicts with the First Amendment, because if it is a general objective, it is too broad to have adequate meaning. On the other hand, if it is a specific goal, it becomes a content-based breach of the First Amendment.

While most academics take a less dichotomous approach to the diversity issue, their definitions and approaches are still varied. Many studying media diversity focus on measuring diversity in terms of programming, rather than ownership concentration. This work has chiefly

been measured diversity in terms of the variety of programming (program types) available to the viewing audience.

Napoli (1999) advocates that diversity of the media can actually be studied and measured three different ways. Content diversity reflects the variety of programming, perspectives, and viewpoints that is available to a media consumer. Exposure diversity allows for the fact that content available to an audience may not actually reach the audience, and what the audience actually receives (or accepts) is equally important. Napoli delineates exposure diversity by differentiating between vertical exposure diversity—diversity of content within a particular channel or medium—and horizontal exposure diversity—diversity of content received by an individual audience member. Lastly, Napoli highlights source diversity as both ownership diversity—reflecting diversity in ownership of both content as well as delivery channels for that content—and workforce diversity within specific media entities.

Similarly, FCC studies of media diversity are focused on three types of diversity as well (Bednarski, 2003). The FCC's classifications of diversity include viewpoint, which is similar to content, but focused more on the diversity of ideas and opinions. The other two types represent a further distinction of source diversity: outlet diversity is concerned with a variety of multiple delivery channels and services (e.g., cable, satellite, broadband, etc.), while the FCC's classification of source diversity specifically covers the production and ownership of content and channels.

Studies of media diversity have also acknowledged differences within the industry due to differences in media organizations' integration. For example, Drushel (1998) has identified media organizations engaged in vertical integration, reflecting an organization's desire not to expand not just within one sector of the media industry, but to other sectors as well. A radio or

television broadcasting organization, for example, may seek to expand into production and content ownership segments of the media industry with the hope of achieving corporate synergies and gaining additional leverage in cost-containment, programming, and production issues. Horizontal integration reflects an organization's desire to expand further within one specific segment. A television broadcaster's desire to add more television stations in different markets is an example of horizontal integration. Finally, Doyle (2000) discusses diagonal expansion, which is explained as expanding a business "sideways" into businesses and segments considered to be complementary in nature. A newspaper company's expansion into magazine publication or a television broadcaster's growth through the acquisition of radio stations exemplifies this phenomenon.

All of these approaches to studying diversity are a crucial part of understanding the complete picture of the overall diversity within the media. The body of existing research is exhaustive and spans many years. However, as will be seen, some aspects of diversity have been explored much more deeply than others.

Historical Perspective

One of the earliest contributors to the study of media diversity was Peter Steiner (1952). Steiner took an economic-oriented approach to the issue of diversity in broadcasting, and his findings were somewhat surprising and profound. His economic theory—the Steiner Model—concluded that the more likely two broadcasters could equally share an audience, the greater the likelihood would be for duplication in programming. Conversely, diversity in programming would be most probable when there were significant disparities in audience share. His last

point—probably the most controversial—was more of an inference from these two conclusions: Given the likelihood for program duplication in a competitive market scenario, a “monopoly controlling all stations would produce a socially more beneficial program pattern” (p. 206).

At first glance it would appear that Steiner was not in favor of market-driven competition, and more supportive of a “one-provider” model, regardless as to whether or not that provider was publicly or privately funded. This is not the case, however, as Steiner was more interested in determining the ideal competitive situation:

Although such a remedy (a discriminating monopoly) is politically not feasible in America, it does focus attention upon the central problem of workable competition: Is the kind of competition that is being encouraged producing the most desirable ends? (p. 207)

The Steiner Model is actually the basis of support for today’s advocates of a deregulated, highly competitive environment, particularly when addressing the question of diversity in programming. As will be seen, contemporary scholars have built upon this model to provide further insight into and support for the idea of free market forces creating the optimal mix of programming diversity.

Steiner’s study focused exclusively on radio broadcasting since television was not a mainstream communication medium in 1952. Subsequent studies by other researchers have built upon the Steiner Model and incorporated television practices and patterns into it. Jack Beebe (1977) recognized the importance of incorporating additional variables into the Steiner Model in his study of diversity and television choices. Beebe identified two key determinants of diversity in media programming: program costs and channel capacity. Beebe found that when viewing media programming, program costs are a factor, and could in fact create excess channel capacity. In a scenario of excess channel capacity, Steiner’s problem of duplicate programming was less of an issue, as the duplicate programming would not replace minority programming, but would

appear in addition to it. Beebe's notion of channel capacity as a catalyst for minority programming is significant, and somewhat prescient, since this was advanced in 1977, prior to the advent of cable television (and its virtually unlimited channel capacity) as a major role in the discussion of media programming.

More recently, Yoo (2000) brings into the discussion the idea of niches in programming due to the channel capacity predicted by Beebe. Yoo contends that the diversity of programming could be viewed as a spectrum, with programming going from low pitch (or low culture) to high pitch (high culture). Further, a station's programming decision (or location on the spectrum) will be based in part on its desire to distance itself from other stations' "pitch," or their place on the spectrum. As a result, Yoo provides further support to the idea that competition in a multi channel environment such as cable leads to diversity in programming.

Measuring Diversity

While Steiner, Beebe, and Yoo all provide theoretical insight into the idea of diversity within the media (and contributing forces to its existence or demise), other researchers have attempted to specifically measure and quantify diversity within the media. Generally, researchers have focused on a specific medium within the industry. Often the measurement is done for a specific period of time, such as immediately before and after the implementation of regulatory changes to the media industry. For example, Einstein (2002) studied the effect of a specific regulatory change; namely, the introduction of financial interest and syndication rules ("fin-syn rules") on content diversity. The fin-syn rules were originally enacted with the intent of limiting the broadcast networks' ability to participate in and profit from syndication of

programming. The rationale was that limiting the role of the three major broadcasters would open the industry to a more diverse group of smaller entities, resulting in corresponding levels of diversity in the programming created (Napoli, 1999). Using the HHI, Einstein showed programming diversity decreased with the implementation of these regulations, and noticed an improvement in diversity after their repeal. She concluded that level diversity of prime time television programming has varied through the years, but it is not significantly different today than it was almost four decades ago. Moreover, her analysis showed no support for the idea that the fin-syn rules resulted in more diverse programming, one of the objectives of the regulation.

Howard's (1998) study of television diversity focused on diversity of ownership (source) of television stations. In particular, he sought to determine if implementation of the Telecommunications Act of 1996 ("1996 Act")—providing for deregulation and a relaxing of ownership restrictions throughout all media—affected the diversity of television station ownership. (While the 1996 Act had its most profound impact on the radio industry, there was a relaxation of television ownership rules as well.) His finding was that, while ownership consolidation has been evident for over two decades within the television industry, passage of the 1996 Act brought a noticeable and marked increase in consolidation of ownership. Despite this increased consolidation, Howard concluded that ownership diversity was still quite apparent within the television industry, reflected by over 184 group owners and the continuation of many local owners.

Lin (1995) studied program diversity in the 1980's to see if technological—not regulatory—changes affected program diversity and observed that the introduction of alternative video methods—namely, cable and satellite—did not result in any increase in overall network programming diversity. She did not, however, conclude that overall TV programming diversity

decreased. Her conclusion was that networks “will cede highly formatted fare to cable and pursue remnants of the mass audience” (p. 24). Accordingly, Lin acknowledged overall diversity could increase due to the specialization of programming offered by cable stations, a concept now known as narrowcasting.

This possibility of cable (or other media) impacting programming diversity was also raised by Napoli (1997) in his study, which delineated between exposure diversity and program type diversity. Napoli acknowledged that much research had focused on diversity of content—what Napoli termed “the supply side of media diversity”—while ignoring diversity of audience exposure, or “the consumption side” (p. 60). Using Nielsen ratings data and the HHI to analyze broadcast networks’ prime time programming during the 1995 television season, Napoli concluded there was greater programming diversity (vs. exposure diversity). Like Lin, however, Napoli speculated that including other media into such a study (cable, pay per view, syndication, etc.) would increase exposure diversity as well. Both researchers identified the influence technology could have on diversity. While the focus of both researchers was towards programming, the fact that technology could promote diverse programming could also result in diverse ownership, as individuals and small businesses could capitalize on the different technologies to gain entry into the media industry.

The diversity of cable television was examined by De Jong and Bates (1991), who studied a random sample of cable systems at three different points in time—1976, 1981, and 1986. The years were chosen to reflect different levels of regulation on the cable television industry. The researchers found that significant increases in diversity coincided with *decreases* in regulation. However, this increased diversity was not consistent with the increase in the number of cable channels during that time period. Lastly, they concluded that greater diversity

within the cable television industry would be related to cable's increased acceptance as a feasible medium by the general audience and further deregulation.

Similar attempts to measure and analyze trends in diversity within the radio industry have produced a variety of findings and conclusions. Bednarski (2003) notes a decrease of 25% in the number of radio station owners nationwide in the first five years since the implementation of the 1996 Act. Using the HHI to measure concentration of radio ownership, Drushel (1998) calculated a 100% increase in concentration levels between the years 1992-1997, providing a comparison of "pre-1996 Act" and "post-1996 Act" environments. The composition of significance of the HHI will be explored in great detail further, but it is important to note that the FCC itself uses the HHI when studying diversity. FCC guidelines indicate that HHI levels below 1000 are considered to be unconcentrated, while HHI measurements between 1000 and 1800 are said to moderately concentrated and measurements over 1800 are said to be highly concentrated (Bates, 1993). Drushel's identified increase in the level of concentration (1992 HHI=717.23, 1997 HHI=1423.65) would signify a change in the FCC's classification of the radio industry in terms of ownership diversity (i.e., from "unconcentrated" to "moderately concentrated").

Drushel's study, however, also found an *increase* in the diversity of programming (content), which he defined by the format of each radio station studied. This trend runs contradictory to the trends he found with respect to ownership diversity, but provides further support for Steiner's theory that increased monopolization (i.e., concentration) within the media would result in increased programming diversity. Drushel's study does not go so far as to support Steiner's correlation, instead arguing that the radio industry had (pre-1996 Act) been moving towards niche programming prior to passage of the 1996 Act and prior to the resulting

consolidation. He advocates further testing of this apparent inverse relationship between ownership diversity and content diversity.

While Drushel's study relied on the largest 50 radio markets as a sample population, Chambers (2001) studied the smaller radio markets, using a sample of 52 radio markets with populations of less than 125,000. He, too, found that passage of the 1996 Act resulted in decreased ownership diversity—in this case within the smaller radio market—but he found no effect on content diversity as a result of the 1996 Act. Combined, the works of Drushel and Chambers point to a marked decrease in ownership diversity throughout the entire radio industry.

Greco's (2000) study of the U.S. consumer book industry for 1995 and 1996 found the industry to be moderately concentrated (1995 HHI—1200.77, 1996 HHI—1182.58). Of particular significance was the fact that, despite an increase in merger activity within the industry during that time, ownership diversity actually increased as reflected by a slight drop in the HHI. Greco explains this by the fact that many smaller publishers increased their market share during that time through internally generated growth instead of acquisitions.

Previous Findings and Conclusions

These studies designed to quantify diversity within a specific medium illustrate the extensive research that has been done, and enable us to make broad generalizations with respect to media diversity. None of these studies reached a conclusion that any specific medium could be described as highly concentrated or lacking diversity. However, some have identified trends towards less diversity either in terms of programming (Einstein, 2002; Lin, 1995; Napoli, 1997;

De Jong & Bates, 1991) or in terms of ownership (Howard, 1998; Drushel, 1998; Chambers, 2001).

Despite the fact that most researchers describe the media industry—or segments of it—as no worse than moderately diverse, many scholars continue to criticize the industry, describing it as highly concentrated with control and power resting in the hands of too few organizations and too few individuals (Bagdikian, 2004; Herman & Chomsky, 1999; McChesney, 1999).

Bagdikian, for example, compares the actions of the five largest media conglomerates to that of a worldwide cartel. He compares the media industry of 2004 to that of 1983, when he first began studying media ownership and its associated power, and concludes that power has consolidated from fifty companies to the Big Five. McChesney echoes this characterization, and advocates that this consolidation in ownership results in fewer gatekeepers setting the agenda of debate, thereby reducing the diversity of ideas being presented in the public sphere. Moreover, the cartel nature results in interlocking relationships between management and owners that strengthen their efforts to protect and expand their interests. (Klaehn, 2002).

At first glance it may seem that the dire characterizations of Bagdikian and others are in direct contradiction to the academic researchers' findings of media diversity, both ownership and programming. How can political economists claim the media industry to be heavily consolidated, while academic researchers provide quantifiable studies to support the conclusion of a diverse or—at worst—moderately concentrated media? Part of the answer may lie in the fact that political economists more often approach their analysis of the media by considering the vertical and diagonal integration within the industry. Whereas a specific medium may appear to be diverse (e.g., Howard's conclusion of television), many of the owners within a specific medium are also major owners of other media outlets (e.g., radio, publishing). The studies of a

specific medium's diversity would not reflect this, but conditions resulting from this vertical and diagonal integration are at the heart of Bagdikian's argument against the growing concentration of power and control within the media industry.

One of the few attempts to analyze media diversity within the context of the consolidation and related merger activity found results that seem contrary to Bagdikian's concerns of high concentration throughout the entire industry, but also contradictory to many researcher's claims of low concentration within individual segments (Albarran & Dimmick, 1996). Part of the reason for this discrepancy may be due to limitations in the research methods used by Albarran and Dimmick: The researchers acknowledge including only the largest eight publicly traded companies within each of 14 segments within the media industry. As a result, private companies and smaller, growing companies were not adequately factored into the analysis.

Notwithstanding these limitations, Albarran & Dimmick's findings of one, highly diversified, media industry lends support to those arguing for more deregulation and greater reliance on free market pressures and controls to insure media diversity (1996). Many even challenge the generally accepted notion of increasing concentration in the industry at all (Higgins, 2003; Thierer and Crews, 2003). Others question the idea of decreased competition, citing the rise in the number of national broadcast networks as well as the rise of cable television options (Gattuso, Compaine, Okun, & Core 2003).

Others such as Beebe (1977), building upon Steiner's original work, predicted (pre-cable) that an environment with an unlimited capacity would encourage competitive media and diversity. Today's media demonstrates this, and evidence abounds, as O'Neill (1993) observes:

(Because of technology) for the first time in history, the rich and poor, literate and illiterate, city worker and peasant farmer are linked together by shared images of global life, from local neighborhood to faraway city. They (share) the same. . .new ideas and sensations (p. 30).

A comparison of today's media landscape to that of 30 or 40 years ago shows more options than ever before in terms of channels and programming choices thanks to more networks, the growth of cable and satellite technologies, and the Internet (Gattuso, et al., 2003; "Owning the Airwaves," 2003; Thierer and Crews, 2003). Equally important, ownership of these channels is more diverse as well. FCC Chairman Michael Powell contends today's number of independent station owners is 139% greater than 40 years ago (2003). Further, Compaine directly challenges Bagdikian's assertion of increasing concentration among fewer media companies (Gattuso, et al., 2003):

Who are the media? There are a lot of. . .different companies. In 1980. . .we had a list of the 50 largest media companies, and that number is not shrinking. In fact, the percentage of revenue accounted for by the 50 largest first. . .(is) not very much greater than it was 15 years earlier—a little bit, but nothing that is worth of all this dramatic stuff about concentration. The bottom line is that the amount of concentration. . .taken as a whole is very much the way it was in 1978.

<http://www.heritage.org/research/Internetandtechnology/hl798.cfm>

News and public affairs—vital to a healthy democracy—offer more options as well, whether measured by the number of channels, the number of hours of programming, or the specialization (diversity) of that programming (Thierer and Crews, 2003; Powell, 2003). Gattuso

acknowledges this diversity within the context of the September 11 attacks in New York City and Washington, D.C.:

I think there were seven or eight different sources of news, many of them independent from each, that I was able to view at a push of a button. . .If that's not media diversity, I don't know what is. . .Since then, I have been struck by the diversity of media coverage as we progress from Afghanistan to the Iraq War and in. . .events that followed.

(<http://www.heritage.org/research/Internetandtechnology/hl798.cfm>)

The expansion of channels due to cable and satellite makes Beebe's revised Steiner Model now a reality. The increase in channel capacity has enabled media companies to offer more diverse programming to specialized audiences (Noll and Price, 1998).

Technology and Diversity

The idea of increased capacity due to technological advancements is not only evident with cable and satellite. The explosion of the Internet into a mainstream, widely-accepted communications medium has also contributed to the increased capacity of media channels. At the same time, the Internet has been a catalyst for power shifts within the media industry as the interactive nature threatens the power inherently given to a medium or media owners (Bellour, 1996). Moreover, this power shift is not just reflecting an individual's ability to determine what they see or when, how, and how often they see it; this power shift also reflects the individual's opportunity to create and disseminate his own content, effectively allowing anyone to become a media source (or "owner") (Chester & Larson, 2002; Thierer and Crews, 2003) The empowerment of these new media "owners" obviously creates expansionist, *not* constricting or

concentration, pressures on media diversity. Further, it provides somewhat of a checks and balances system on larger organizations, as it enables smaller, competing, and diverse voices to challenge what is reported by larger media outlets. Matt Drudge's The Drudge Report (i.e., www.drudgereport.com) and Annenberg's FactCheck.org (i.e., www.factcheck.org) are examples.

Even McChesney inadvertently acknowledges the fact that technology can be much more influential in exposing citizens to more diverse opinions and viewpoints and in giving them the opportunity to express their own viewpoints. Quoting from the British Guardian, McChesney (1999) observes, "From Mexico to China the Internet is proving an invaluable tool for acts of political defiance, large and small, as governments wedded to traditional media find it hard to quell political dissent channeled through cyberspace" (p. 176). This "defiance" and "dissent" that McChesney acknowledges, is—put another way—diversity. This diversity flourishes not because of governmental and bureaucratic regulation. In fact, McChesney's citation admits it is government that would seek to stifle the diverse idea. Rather, this diversity flourishes, and new ideas are freely exchanged, because of the creative and entrepreneurial spirit that leads to technological capabilities creating the setting—be it physical or virtual--for the exchange of diverse ideas.

Gaps in Existing Studies

As this review shows, existing studies of ownership diversity within the media continue to advance our knowledge and understanding further, but there still remain significant gaps. Specifically, little analysis on media diversity has been done by viewing the media as one large

industry, instead of individual segments (e.g., radio, television, cable TV). The research of team of Albarran and Dimmick is one of the very few to attempt to study media ownership diversity from a macro perspective, but their study's limitations still leave room for further examination and closer scrutiny.

Research Question

The segment diversity studies are indeed valuable and add to our understanding as well. However, because one of the criticisms regarding media consolidation is the lack of diversity that results from vertical and diagonal integration, it is necessary to precisely define and measure ownership diversity of the media industry as a whole. To not do so only encourages the continuation of an existing debate without appropriate and quantifiable measures to adequately support either side's argument. The outcome, then, would be a debate of distortions, assumptions, and emotions, not of critical and analytical thinking, and the result is the inability of society to ever make reasoned conclusions regarding the current condition of the media or adequately debate its future direction.

Accordingly, this research effort seeks to address some of the gaps in the existing body of research done on diversity by more closely examining the aspect of ownership diversity.

Q1: To what degree does ownership diversity—as measured by HHI—exist within the media industry?

Some definitions relative to the this specific study are warranted. *Ownership diversity* describes the degree to which there is a variety of organizations operating and competing within the United States media industry. It closely parallels the FCC's definition of both outlet diversity

(e.g., delivery channels) and source diversity (e.g., content production and content ownership).

Drushel (1998) viewed media outlets under the same management as jointly owned, even though the outlets may actually have had different beneficiaries or owners. For this study, an actual, controlling, financial interest will be the basis for defining ownership.

For purposes of this study, *media industry* will include publicly and privately held corporations, including companies chartered in the U.S. as well as abroad. A detailed explanation of the selection method and the calculation of appropriate revenues is addressed in the methodology section.

METHODOLOGY

Measurement Instrument

To answer the research question, statistical analysis and interpretation of the results will be utilized. The Herfindahl-Hirschman Index (HHI) will be determined and used as a measure of diversity.

The HHI is one of the most widely accepted tools for measuring the level of concentration (or conversely) the diversity of a particular market or industry (McAuliffe, 1997). The HHI is a statistical measure of concentration widely used by regulatory bodies including the U.S. Department of Commerce, the U. S. Department of Justice, and the Federal Reserve Bank when examining market concentration. It is one of many critical factors used when regulators study the potential impact of a merger to the competitive landscape of a particular industry (Rhoades, 2001). As Rhoades explains,

The HHI accounts for the number of firms in a market, as well as concentration, by incorporating the market share of all firms in a market. It is calculated by squaring the market shares of all firms in a market and then summing the squares as follows:

$$HHI = \sum_{i=1}^n (MS_i)^2 ,$$

Where MS_i represents the market share of firm i and there are n firms in the market (p. 188-189).

The resulting numerical value—the actual measurement—can be as high as 10,000 (indicating a high concentration and little diversity) or as low as <1.0 (for a highly diversified industry). For example, a true monopolistic industry, with one firm having 100% of the market

share would have an HHI of 10,000 ($100^2 = \underline{10,000}$). Conversely, an industry with 100 firms each holding 1% of the market would have an extremely low HHI measure of 100:

$$\left(\sum_{n=100} (1)^2 = (1 * 1)_1 + (1 * 1)_2 \dots + (1 * 1)_{100} = \underline{100} \right).$$

FCC guidelines consider an industry (or segment) with an HHI score of less than 1000 to be unconcentrated. Those segments with an HHI score between 1000 and 1800 are considered to be moderately concentrated, while segments over 1800 are viewed as highly concentrated (Bates, 1993).

The strength of the HHI is its ability to include a large number of companies within an industry while allowing for the impact of each individual company's market share on the calculation. In other words, an industry of four companies with equal market share—"Industry A" (25%-25%-25%-25%)—is more diversified than an industry of four companies with vastly different market shares—"Industry B" (80%-10%-5%-5%). Using the HHI would result in different diversity measures (e.g., Industry A = 2500; Industry B = 6550) accurately reflecting not only the number of companies within an industry but the discrepancies between their respective market shares.

These strengths make it a better tool of measurement than other tools, including the Concentration Ratios (CR4, CR8) used in Albarran and Dimmick's (1996) study of 14 segments within the media industry. Using the CR4 and CR8 approach allows for the inclusion of only the top four (CR4) or top eight (CR8) companies, based on revenues, within a segment. As a result, it is more difficult to measure a complete picture of an industry or segment. Theoretically, any two industries with similar market share distributions among the top eight firms would have

similar CR8 scores, even if one of the industries had 50 more small-sized companies than the other.

Albarran and Dimmick even acknowledge the HHI as, “the best measure of concentration” (p. 44), but do not use it because of their inability to include every company within the industry, including private firms that do not release sales information to the general public. These perceived limitations are unwarranted. First, Department of Justice guidelines, as quoted by Greco (2000), explain that, “although it is desirable to include all firms in the calculation, lack of information about small firms. . . is not critical because such firms do not affect the HHI significantly” (p. 326). Secondly, it is possible to obtain revenue figures for privately held companies, as will be described in detail in the next section. With these two perceived limitations addressed, the HHI does, indeed, become the best tool for measuring ownership diversity, and will be used in this study.

At times, the HHI has come under criticism. Most recently, the FCC was criticized by the Third Circuit Court of Appeals for its application of the HHI when developing its recent deregulatory proposals (*Prometheus Radio Project v. Federal Communications Commission*, 2004). In this case, however, the FCC made many modifications to the formula. For example, the FCC only selected certain media to include in its study (e.g., including the Internet but not cable television, including daily and weekly newspapers but no magazines), assigned relative—not actual—weights to each media, and gave the same market share to all outlets. In its ruling against the FCC, the courts were critical of these and other modifications, not the HHI itself.

It is interesting to note that the HHI was originally developed as a tool for use in economic studies. Over the years, however, social scientists have adapted the formula to use in their studies (Napoli, 1997). Many of the studies on program diversity cited in this article have

used the HHI to measure a specific aspect of media diversity (Drushel, 1998; Einstein, 2002; Napoli, 1997; Greco, 2000). Ironically, this study merely applies the HHI to the media industry in a way consistent with its original intention; namely, to measure and study economic (ownership) diversity within an industry.

Data Collection Procedures

A sample of 73 media firms was included in an attempt to include as comprehensive of a list of media companies as possible. Companies were identified from Value Line's Investment Survey (ValueLine.com, 2004) for all appropriate industries. The studied industries included advertising, cable TV, entertainment, entertainment technology, newspaper, and publishing.

Additions to the list came from multiple sources, including personal knowledge, colleague recommendations, and companies listed in articles that were used as part of this research. Additionally, researching a media organization's history often revealed the acquisition of a major company that is no longer in existence. In these instances, the acquired company was added to the list, and their revenues were analyzed separately only for the years prior to the acquisition. For example, Gannett's acquisition of Multimedia in 1995 added Multimedia to the list of companies to be studied, and revenues for Multimedia prior to 1995 were listed as Multimedia revenues, not included in Gannett's. For this reason, restated and proforma revenue figures were avoided: the annual report of 10-K filing for the actual year studied was used whenever possible.

A list of all companies included in the study is presented in Appendix A. Consistent with the Department of Justice's explanation regarding the omission of small firms in the calculation

of the HHI cited earlier, it is believed that any company not included in this study would have a minimal effect on the results. Further, the result would only serve to reduce the HHI and show greater diversity. Accordingly, it can be assumed that the results from this study will show a “worst case basis” with respect to current levels of media diversity, since adding more companies will create a “better” (i.e., more diverse) situation.

Once the list of companies was developed, annual revenues of each company were compiled for fiscal years 1994-2003. This ten-year time frame was chosen for several reasons. First, given the wide range of time frames used by prior researchers as evidenced by the sample presented here, a ten year period seemed consistent and not out of line with prior research methods. Secondly, the time frame includes financial information for the most recent year available, offering the best possible assessment of the media industry’s current condition. Expanding the analysis beyond the most current year to include ten years also allows for identifying any possible trends, which could be appropriate avenues for future investigation.

In addition, during this ten-year time frame, a wide variety of events occurred that could have impacted the media industry and the composition of its ownership structure. These events include regulatory actions such as the implementation of the Telecommunications Act of 1996 as well as the repeal of the financial interest and syndication rules in 1995. These events also include significant merger activity, including two of the largest media mergers in the industry’s history—AOL and Time Warner in 2001, and Viacom and CBS in 2000. Finally, the last ten years of media history incorporate the rapid acceptance of an entirely new medium—the Internet. Accordingly, any impact to diversity that the introduction of a new medium might have can also be explored.

When compiling revenue figures for fiscal years, it should be noted that the end of a fiscal year varied from corporation to corporation. Most ended December 31 of the year, although some ended in June or August. For consistency purposes, there was no attempt to extrapolate fiscal years that did not end in December into that time frame. Annual revenue figures were derived from different sources, depending on the company being studied. For U.S. publicly traded companies, this information was obtained through corporate 10-K reports filed annually with the Securities and Exchange Commission, and available to the general public from the S.E.C website (<http://www.sec.gov/cgi-bin/srch-edgar>). For foreign companies, S.E.C. filings of form 20-F or 6-F were retrieved from the same website. Privately held corporations that do not provide the general public with financial data were also studied. In these cases, revenue figures provided by Hoover's, an online, independent financial reporting agency, were used (<http://hoovers.com/free/>).

Reported revenue figures for the years studied were used. Revenues are the best measure of diversity, as it allows for the ability to determine market share, which reflects a company's strength and indicates its influence within the market. When necessary, the corporation's revenue figures were adjusted to eliminate non-media operations. For example, General Electric revenues only included those revenues reported as part of the company's NBC subsidiary, and not non-media businesses they operate. Additionally, revenue figures were adjusted to remove media operations that are not U.S. related at all, either through ownership or market share. For example, Vivendi's ownership in a French cable television company was not included in the revenue calculation. In some cases, adjustment of revenues required adding, rather than subtracting, from the total published in the financial reports. An example of this is Liberty Media, which was a fully owned subsidiary during the years 1995-2000, but nevertheless

reported financial results independent of their parent company. Adding the figures into the parent ultimately resulted in a higher HHI score for that year, indicating higher concentration within the media industry.

The results of this research—all media companies studied and their annual media-related revenues for the years 1994-2003—are presented in Appendix B.

Data Analysis Procedures

Once these revenues were determined, each firm's market share for each year was calculated (Market share = Firm's revenue/revenue of all firms). Using the HHI model, the market share (multiplied by 100 to be represented as a number, not a fraction) was then squared, and the squares of all companies for a given year were added to determine the HHI for that year.

RESULTS AND FINDINGS

The media industry's level of ownership concentration during the years 1994-2003, as measured by the HHI, is presented in Table 1.

Table 1. Herfindahl-Hirschman Index, 1994-2003

1994	470.59
1995	513.25
1996	533.34
1997	515.45
1998	493.33
1999	539.57
2000	527.07
2001	659.47
2002	650.15
2003	678.51

Remembering that a lower HHI score indicates greater diversity, it is clear that the media industry's level of ownership diversity is lower in 2003 than it was in 1994. However, to conclude that the industry is engaged in a linear, upward trend would be a bit misleading.

Examining the graph in Figure 1 shows that the change from 1994 to 2003 has not occurred in a gradual, linear method. Rather, the industry's diversity of the past decade is more reflective of a "two-tiered" phenomenon. Prior to 2001, the industry's concentration was relatively stable, with the HHI falling within a narrow range (484.38 in 1994 to 545.31 in 1999). Major mergers during the year 2001 such as AOL and Time Warner, Vivendi's acquisition of Seagram's, and Tribune Company's acquisition of

Times Mirror all contributed to a significant increase that year. However, the subsequent three years have again shown a stable measure of the industry's concentration.

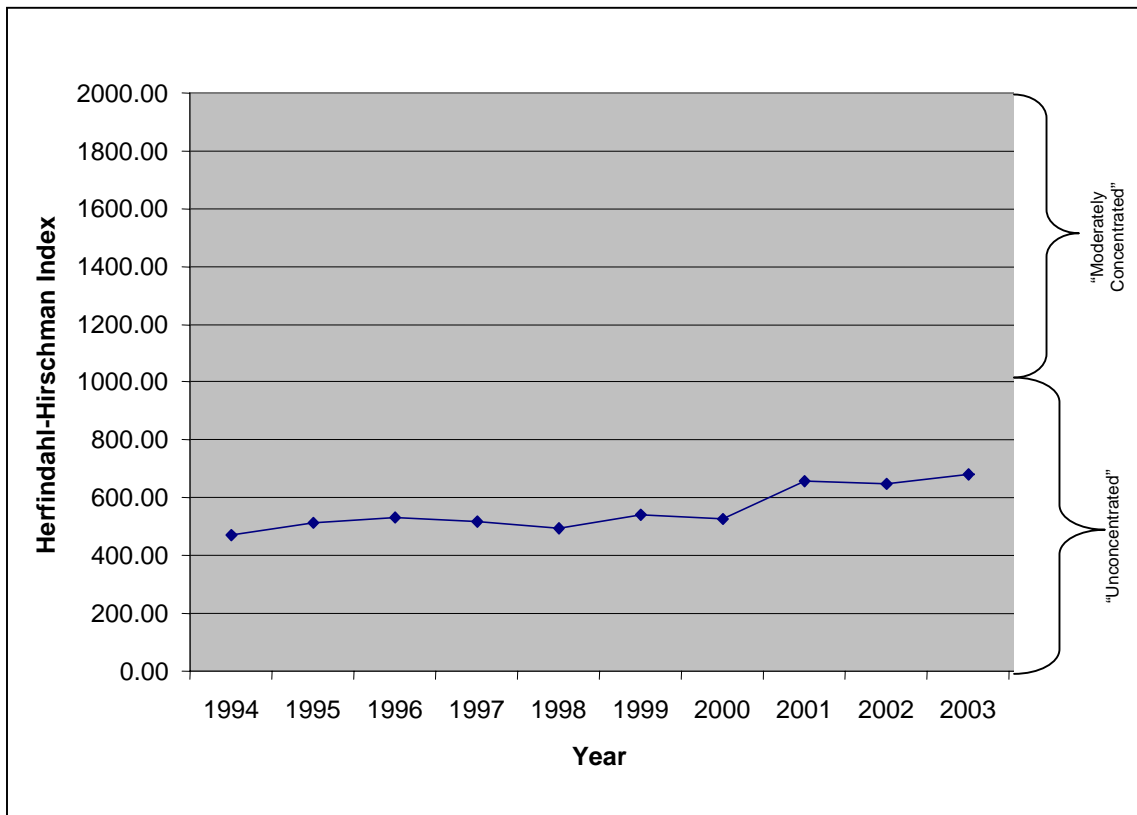


Figure 1. Diversity of Media Ownership, 1994-2003.

Accordingly, a more accurate description of the ten-year period studied would be a period of relative stability, but with one significant increase. This distinction is important when viewed within the context of major merger activity during the decade studied. Certainly political economists would point to the mergers in 2001 not just as contributors to but causes of the decrease in ownership diversity, and advocate regulatory policies to discourage—if not outright prevent—such consolidation. However, examining the years prior to 2001 show significant

merger and consolidation activity within the media industry as well, but with little impact to the industry's overall ownership diversity.

As an example, in 2000—the year prior to the jump in the HHI—the largest merger within the media industry was completed. Indeed, Viacom's acquisition of CBS, effective in fiscal year 2000, brought protests and concerns from many different disciplines. Shortly after the announcement of the merger, the late Sen. Paul Wellstone (2000) challenged the proposed acquisition saying, "These media mergers. . . (may) require Congress to. . . address the growing problem of media concentration. Common ownership and control is not conducive to a diversity of viewpoints and perspectives." (p. 551-552). However, ownership diversity for the year following Viacom's acquisition of CBS was not significantly different than the prior six years. In fact, diversity actually increased (i.e., decrease in HHI), albeit slightly from the year immediately prior to the merger. This is similar to the results Greco (2000) identified when he found a decrease in the HHI within the consumer book industry in 1996, despite significant merger and consolidation activity that year.

Likewise, Disney's 1996 acquisition of Capital Cities/ABC brought protests of consolidation and prediction of too few companies with too little diversity within the media industry. Once again, these predictions proved unfounded as the HHI stayed relatively consistent in the years subsequent to the merger.

It is also interesting to observe that the years immediately following the Telecommunications Act of 1996—which allowed for more consolidation and merger activity—diversity was positively impacted. The HHI score for the two years after passage of the 1996 Act actually decreased, indicating increased diversity. Certainly it is not possible to reach any correlation or cause and effect conclusions. Rather, it is a point of interest that could warrant

further examination. It could, for example, be argued that the chart merely shows a delayed reaction to the 1996 Act; the decreased diversity in 2001 may have been the result of the 1996 Act. Reaching any sound and defensible conclusions requires further investigation, but it is a study that could be insightful and beneficial to the ongoing debate about regulation and its impact on diversity.

The empirical data indicates little support for a correlation between merger activity and ownership diversity. However, can the supporting data presented in Appendix B provide any further insight into why mergers don't automatically reduce ownership diversity? Examination of the revenue performance by all companies during the ten-year period (Appendix B) provides some insight pertinent to answering this question. It shows that other, smaller companies in the industry experienced significant growth during the same time frame—admittedly, sometimes through mergers as well—thereby minimizing the effect of a larger merger. For example, Disney's 275% increase in revenues during the ten year time frame dwarfs in comparison to the growth of Univision, a much smaller company. Univision focused primarily on servicing a Spanish-speaking, Hispanic culture market and grew over 800% during the same time period. Howard (1998) found similar trends and influences in his analysis of television ownership: smaller companies often grow at rates even higher than larger conglomerates actively engaged in merger and consolidation activity. The continued success and growth of smaller companies contributes to the continued competitive and diversified nature of the industry, as reflected in the stable nature of the HHI from year to year.

One of the key reasons for a stable HHI over most of the ten-year period—even during years of major acquisitions such as 1996 and 2000—could be that the media industry is expanding not just by well-established, powerful companies increasing their revenues. Rather,

the industry is attracting new, start-up ventures that are quickly growing into sizable, competitive companies that then, themselves, become ‘key players’ and contribute to the diverse landscape of media ownership. The growth of such companies as Google, Yahoo, and Echostar are prime examples. Additionally, the growth of AOL prior to its merger with Time Warner is a testament to the ability of “new media” companies to emerge and thrive within the media industry.

Closer examination of these “new media” companies— particularly those that have formed in the last ten years—reveal that many of them are companies seeking to capitalize on new, innovative technologies offering new means of program development (creation) or distribution. Internet technologies as well as satellite communications are two primary examples. Indeed, examining the market share enjoyed by “new media” companies (i.e., Internet and/or satellite) reveals a notable increase in the impact on and acceptance by the general population. Figure 2 shows a comparison of the market share realized by “new media” companies in 2003 vs. 1994.

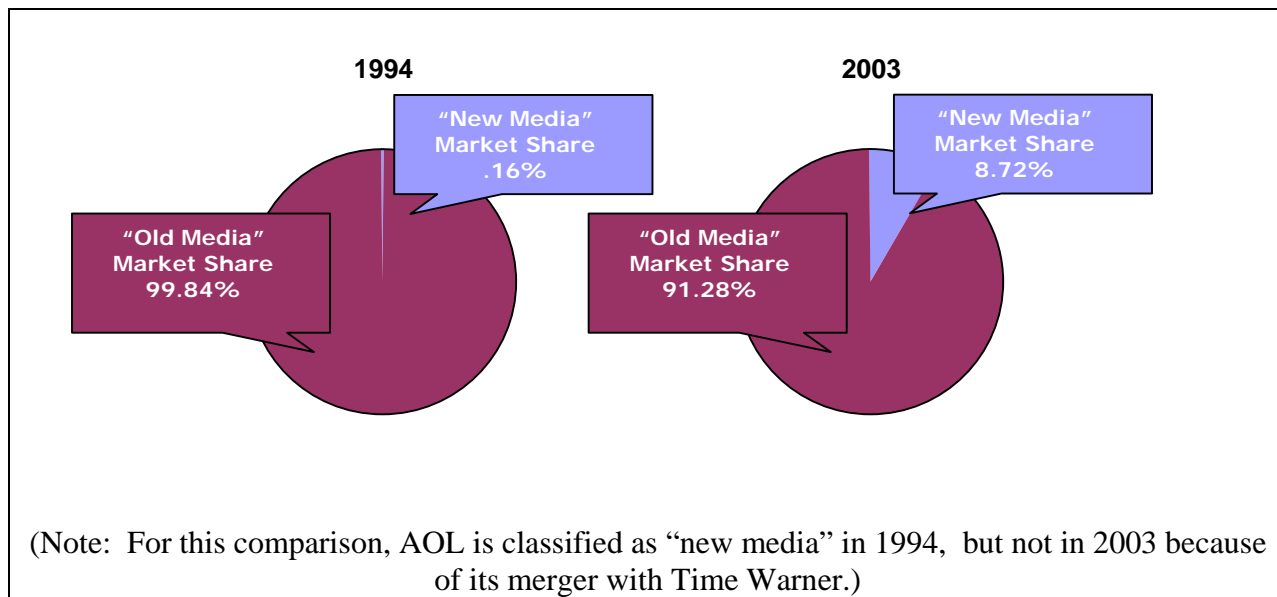


Figure 2. “New Media” Market Share, 1994-2003.

The implication of this comparison is clear: Technological advancements (e.g., Internet, satellite, etc.) have a major effect on the competitive landscape of the media industry, and—for at least the last ten years—have contributed to maintaining high degree of ownership diversity within the industry.

Beyond the results highlighting trends over the last ten years, results specifically for the most current year—2003—provide insight into the current condition of ownership diversity. Most importantly, the HHI score for 2003 of 678.40 shows that ownership within the media industry is still highly diversified. Certainly, analyzing a media industry made up solely of Bagdikian’s Big 5 (Time Warner, Bertlesmann, Disney, Viacom, and NewsCorp) would result in a HHI score indicating a highly concentrated, minimally diversified industry. However, the media industry *does* include considerably more companies than Bagdikian’s Big 5; it includes the “new media” companies such as Google and Yahoo, and it includes smaller companies targeting specific markets such as Univision. Here then, is one of the major fallacies of the political economists’ criticisms with respect to ownership diversity: their criticisms rely on the inclusion of only a select few companies that paints a picture of the media that is unrepresentative and inaccurate.

Indeed, it could be argued that the vertical integration motives of conglomerates such as Viacom and AOL actually have resulted in a more diverse and competitive industry: it is now more difficult (if not impossible) to accurately measure ownership diversity within a specific medium (e.g., television, radio). Vertical integration involves a company expanding to new segments of an industry, resulting in additional competitors previously not challenging that company for market share, revenue dollars, and influence. Whereas analysis of the radio industry may include a small number of companies and a high HHI score (Drushel, 1998;

Chambers, 2001), the vertical integration of media companies means expanding the roster of competitors.

In other words, if Viacom expands into a new segment of the media industry, then determining Viacom's market share must include the companies in that "new" segment of the industry. The result of this implication is that—while one particular medium may be viewed as highly concentrated, assessing diversity--specifically ownership diversity—within the media industry must include all aspects of media to reflect the ongoing vertical and diagonal integration of media companies.

CONCLUSION

Using a well-established and widely accepted tool of measurement, this study concludes that the overall media industry enjoys a healthy and competitive level of ownership diversity; protestations to the contrary—while dramatic and attention-grabbing—are unsupported and unfounded. At the same time, the study shows a downward trend in ownership diversity (i.e., increasing HHI score) and media scholars, analysts, and regulators should closely monitor this for future developments and consideration of future policy implications.

The finding of a diverse and unconcentrated media industry is consistent with the majority of work previously done showing ownership diversity within specific segments of the media industry. The finding is also complementary to these works, in that this research effort builds upon the prior studies of individual segments by presenting a macro or comprehensive view of the media industry.

May critics have rightly attempted to frame the discussion of a diverse media within the context of a consolidating and integrated media industry, rather than individual segments operation independently of one another. This study has operated within that framework, and adds insight by providing some measures of diversity with the perspective of an integrated media.

While not an original objective of the study, results also point to evidence supporting the idea of new technologies as a major contributor to the sustained competitive nature of the media. Maintaining this competitive nature also contributes to maintaining acceptable levels of diversity with the introduction of new entrants to the industry that seek to capitalize on those opportunities created from the new technologies. This should be explored further, and should be addressed in

any future study or in consideration of any new regulatory actions. While not conclusive, the evidence raises the issues that technology could actually have a greater influence on maintaining and improving media diversity than regulatory actions. This possibility should be explored further, both from a historical perspective but also within the realm of today's dynamic environment. Should future studies confirm this hypothesis of technology as a major influencer of ownership diversity, it seems that media policy debates should be less centered around ownership limitations, and more on providing an environment conducive to research and development initiatives that generate future technological advances.

Conversely, some of the information presented here has shown unexpected results in diversity after changes in specific regulatory policies such as the removal of fin-syn rules (Einstein, 2002), and the 1996 Telecommunications Act (Howard, 1998; Drushel, 1998; Chambers, 2001). These results raise doubt as to the effectiveness of public policy to adequately and appropriately influence the direction of ownership diversity trends.

Limitations of this study make it impossible to conclude the presence or degree of any correlation between regulatory changes and ownership diversity, or between technological advances and ownership diversity. The information presented here, however, suggests the possibility of such relationships, and perhaps even in unexpected and surprising ways. Applying extensive, objective analytical procedures to identify the existence and extent of such relationships is a natural extension of this study, and it is the researcher's hope that such work is developed.

Additionally, while some argue the idea of a correlation between ownership diversity and viewpoint diversity, previous studies reviewed here—combined with this study's results on ownership diversity—indicate this idea may be flawed. Evidence presented here at least

suggests that a gradual decrease in the media industry's level of ownership diversity has come at the same time that programming diversity has been increasing. As has been recommended by others, the existence and nature of a relationship between ownership diversity and viewpoint diversity should also be examined further (Kwerel, Levy, Pepper, & Sappington, 2002).

The ongoing debate related to U.S. media policy, including ownership and regulatory issues, is healthy and necessary. The implications of such policy are tremendous when considering the impact of such policy on democratic principles, diversity of ideas, and development of new technologies that offer more opportunities for more people to express and promote their ideas in what Jürgen Habermas termed "the public sphere" (Sturken and Cartwright, 2001, p. 178).

The critical nature of this issue, however, demands that the debate be framed in terms of sound, objective arguments reflecting accurate and complete assessments of where we have been, where we are, and where we are going in terms of the media industry and society. In an attempt to sort through some of the hyperbole on both sides of this argument, this study has attempted to provide an objective, analytical approach to one important element of this debate; namely, diversity of ownership within the U.S. media industry.

There is no doubt that changes in media policy and media ownership provoke visceral, emotional responses by the general public. Public responses to the FCC's most recent deregulatory policy in 2003 is ample evidence of the amount and intensity of reactions that can be generated. The threat of "losing my local newspaper" or "the community being sold out to a conglomerate" provokes passionate, real concerns which should not be ignored. However, media policy deserves measured, objective analysis that will lead to fair and accurate

assessments of the current landscape within the media industry. Only then can reasoned, well-informed decisions be made in the best interests of the public.

APPENDIX A
COMPANIES INCLUDED IN THE STUDY

ACME Communications	Lin TV Corp.
Adelphia	McClatchy
America Online	McGraw Hill
AOL/Time Warner	Media General
Argyle	Microsoft
AT&T	Multimedia
Beasley Broadcasting	New York Times
Belo	NewsCorp
Bertlesmann	Paxson Communications
Cablevision	Pegasus
Capital Cities/ABC	Pixar
CBS	Playboy Enterprises
Chris Craft	Pulitzer
Clear Channel	Radio One
Comcast	Raycom Media
Cox	Readers Digest
Crown Media Holdings	Scripps
Discovery Communications	Seagram's
Disney	Sinclair
Dow Jones	Sirius
Dreamworks SKG	SONY
Echostar	TCI
Emmis Broadcasting	Time Warner
Entravision	Time Warner Entertainment
Gannett	Times Mirror
General Electric	TiVO
General Motors (Hughes)	Tribune Company
Google	Univision
Granite Broadcasting	Viacom
Gray Television	Vivendi
Hearst Corporation	Washington Post
Hearst-Argyle	Westinghouse
Hollinger	Westwood One
Infinity Media	XM Satellite
Knight Ridder	Yahoo!
Lee Enterprises	Young Broadcasting
Liberty	

APPENDIX B
ANNUAL REVENUE OF MEDIA COMPANIES, 1994-2003

Company	2003	Note(s)	2002	Note(s)	2001	Note(s)	2000	Note(s)	1999	Note(s)	1998	Note(s)
ACME Communications	43,482		36,006		70,065		73,443		60,008		43,928	40
Adelphia	n/a	49	n/a	49	n/a	49	695,741	50	1,133,393	50	514,932	50
America Online	n/a	2	n/a	2	n/a	2	7,703,000		5,724,000	1	3,873,000	
AOL/Time Warner	39,565,000		40,961,000		38,234,000		n/a	2	n/a	2	n/a	2
Argyle	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2
AT&T	n/a	2	8,693,000		9,799,000		8,217,000		6,016,000	41	n/a	2
Beasley Broadcasting	114,482		114,692		115,132		106,154		93,621		81,433	40
Belo	1,436,011		1,427,764	61	1,364,578	61	1,588,812	61	1,433,982	61	1,407,345	61
Bertelsmann	21,088,600	16	19,192,800	16	17,010,600	16	15,784,900	16	13,720,600	16	12,700,400	16
Cablevision	4,177,148	54	3,710,438	53,54	3,725,975	53,54	3,253,076	53,54	3,339,691	53,54	2,448,031	53,54
Capital Cities/ABC	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2
CBS	n/a	2	n/a	2	n/a	2	n/a	2	7,398,000	9	6,805,000	9
Chris Craft	n/a	2	n/a	2	n/a	2	505,504	46	469,347	46	445,850	46
Clear Channel	6,283,940	33	5,973,753	33	5,492,363	33	4,442,932	33	2,678,160		1,350,940	
Comcast	18,348,000		12,460,000		9,674,200		8,218,600		6,209,200		5,145,300	
Cox	5,289,000	36	4,694,427	36	4,066,969	36	3,506,900		2,318,100		1,716,800	
Crown Media Holdings	207,524		161,009		107,057		73,517		49,792	44	23,700	16
Direct TV	9,122,900	27	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2
Discovery Comm	1,717,000	16,47	1,995,000	16,47	1,800,000	16,47	1,730,000	16,47	1,400,000	16,47	1,100,000	16,47
Disney	18,305,000	3,4	16,424,000	3,4	15,675,000	3,4	15,977,000	3,4	14,266,000	3,4	17,444,000	3,5
Dow Jones	1,548,485		1,559,173		1,773,083		2,202,618		2,001,835		2,158,106	
Dreamworks SKG	n/a	52	1,813,000	16	2,219,000	16	1,873,000	16	n/a	2	n/a	2
EchoStar	5,607,612	35	4,631,322	35	3,811,988	35	2,507,275	35	1,442,565	35	756,824	35
Emmis Broadcasting	562,363		533,780		470,618		325,265		232,836		125,855	
Entravision	237,956		238,469		208,908		154,021		58,999	44	44,820	44
Gannett	6,711,115		6,422,246		6,344,245		6,222,318		5,260,190		5,112,000	30
General Electric	6,871,000	32	7,149,000	32	5,769,000	32	6,797,000	32	5,790,000	32	5,269,000	32
General Motors	n/a	2	8,005,600	27,28	7,174,500	27,28	6,261,600	27,28	4,595,600	27,28	2,583,400	27,28,29
Google	961,900	16	347,800	16	864,000	16	19,100	16	0,200	16	n/a	2
Granite Broadcasting	108,544		135,344		113,075		140,070		149,847		161,104	
Gray Television	295,371		198,640		147,619		162,139		134,823		120,337	
Hearst Corporation	n/a	52	3,565,000	15	3,300,000	16	3,400,000	16	2,740,000	16	2,200,000	16
Hearst-Argyle	686,775	10	721,311	10	641,876	10	747,281	10	661,386	10	407,313	10
Hollinger	n/a	68	714,471	67,70	461,999	67,70	468,753	67,70	487,147	67,70	589,216	67,70
Infinity Media	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2
Knight Ridder	2,945,991		2,841,594		2,900,209		3,211,767		3,228,225		3,091,919	
Lee Enterprises	656,741	3	525,896	3	441,153	3	431,513	3	536,333	3	517,293	3
Liberty	4,028,000		2,084,000		2,059,000		1,526,000	38	964,000	38	1,359,000	39
Lin TV Corp	349,529		349,594		271,038	63	295,706		224,446		233,340	

Company	1997	Note(s)	1996	Note(s)	1995	Note(s)	1994	Note(s)
ACME Communications	11,343	40	n/a	62	n/a	62	n/a	62
Adelphia	472,778	51	403,597	51	361,505	51	319,045	51
America Online	2,634,000		1,823,000		712,828		197,876	
AOL/Time Warner	n/a	2	n/a	2	n/a	2	n/a	2
Argyle	n/a	2	73,294		46,944		n/a	2
AT&T	n/a	2	n/a	2	n/a	2	n/a	2
Beasley Broadcasting	73,704	40	62,413	40	47,489	40	25,200	16
Belo	1248,381		824,308		735,343		628,125	
Bertelsmann	12,859,700	16	14,126,200	16	14,888,800	16	11,589,300	16
Cablevision	1,949,358	54	1,315,142	54	1,078,060	54	837,169	54
Capital Cities/ABC	n/a	2	n/a	2	6,786,300	6	6,379,237	
CBS	5,363,000	9	n/a	9	n/a	9	3,711,000	
Chris Craft	443,499	46	446,292	46	454,702	46	457,533	46
Clear Channel	790,178		398,000		398,000		200,695	
Comcast	4,912,600		4,038,400		3,362,946		1,375,304	
Cox	1,610,364		1,460,285		1,286,246	37	736,308	37
Crown Media Holdings	9,800	16	3,000	16	n/a	2	n/a	2
Direct TV	n/a	2	n/a	2	n/a	2	n/a	2
Discovery Comm	860,000	16,47	661,800	16,47	451,500	16,47	200,000	16,47
Disney	17,459,000	3,5	14,237,000	3,5	6,001,500	3,5	4,893,300	3,5
Dow Jones	2,572,518		2,481,592		2,283,761		2,090,977	
Dreamworks SKG	n/a	2	n/a	2	n/a	2	n/a	2
EchoStar	355,385	35	63,678	35	n/a	2	n/a	2
Emmis Broadcasting	103,292		99,830		66,800	37	50,311	37
Entravision	30,456	44	12,074	44	7,100	16	n/a	62
Gannett	4,684,000	30	4,341,000	30	4,007,000		3,824,523	
General Electric	5,153,000	32	5,232,000	32	3,919,000	32	3,361,000	32
General Motors	1,906,800	27,28,29	n/a	2	n/a	2	n/a	2
Google	n/a	2	n/a	2	n/a	2	n/a	2
Granite Broadcasting	153,512		129,164		99,900	37	62,900	37
Gray Television	96,836		77,827		58,600	37	36,500	37
Hearst Corporation	2,832,700	16	2,568,400	16	2,513,000	16	2,298,700	16
Hearst-Argyle	387,782	10	n/a	2	n/a	2	n/a	2
Hollinger	633,633	67,70	607,372	67,70	559,213	67,70	422,067	67,70
Infinity Media	n/a	2	n/a	2	372,429		313,359	
Knight Ridder	2,876,785		2,374,224	55	2,250,182	55	2,134,922	55
Lee Enterprises	446,686	3	427,369	3	443,188	3	402,551	3
Liberty	1,225,000	39	2,208,000	39,40	1,821,000	39,40	n/a	2
Lin TV Corp	291,519	64	273,367		217,247	37	150,523	37

Company	2003	Note(s)	2002	Note(s)	2001	Note(s)	2000	Note(s)	1999	Note(s)	1998	Note(s)
McClatchy	1,099,391		1,081,898		1,080,053		1,142,124		1,084,947		968,651	
McGraw Hill	3,058,800	42	3,166,600	42	3,168,300	42	3,000,700	42	2,767,400	42	2,576,000	42
Media General	837,423		836,800		807,176		830,601		795,408		973,978	
Microsoft	2,365,000	24,48	1,924,000	24,48	n/a	2	n/a	2	n/a	2	n/a	2
Multimedia	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2
NewsCorp	17,474,000	10	15,195,000	10	10,303,000		10,507,000	4,5	10,106,000	4,5	9,489,000	4,5
NYTimes	3,227,000		3,079,001		3,015,950		3,489,455		3,130,629		2,936,705	
Paxson Communications	317,006		321,896		308,806		315,936		248,362		134,196	
Pegasus	862,852		901,773		872,552		617,508	60	322,768		195,221	
Pixar	262,498		201,724		70,223		172,267		121,037		14,307	
Playboy Enterprises	296,400	56	264,405	56	280,400	56	275,362	56	278,949	56	236,174	56
Pulitzer	422,664		415,960		413,506		407,541		391,383		372,924	
Radio One	303,150		295,851		243,804		155,666		81,703		46,109	
Raycom Media	n/a	52	360,000	16	328,000	16	331,000	16	326,200	16	303,900	16
Readers Digest	2,474,900	24	2,368,600	24	2,518,200	24	2,554,000	24	2,532,000	24	2,691,000	24
Scripps	1,875,000		1,536,000		1,437,000		1,719,359		1,571,000		1,455,000	
Seagram's	n/a	2	n/a	2	n/a	2	9,716,000	24,25	6,682,000	24,25	4,254,000	24,25
Sinclair	738,741		735,789		710,281		788,862		733,639		736,804	
Sirius	12,872		0,805		n/a	2	n/a	2	n/a	2	n/a	2
SONY	12,412,454	11,12,13,15	10,210,828	11,12,13,15	9,264,045	11,12,13,15	10,734,137	11,12,13,15	11,069,963	11,12,13,15	9,948,248	11,12,13
TCI	n/a	2	n/a	2	n/a	2	n/a	2	1,145,000		7,351,000	
Time Warner	n/a	2	n/a	2	n/a	2	28,510,000		27,333,000	3	14,582,000	
Time Warner Entertainment	n/a	2	n/a	2	n/a	2	n/a	2	n/a	2	12,246,000	
Times Mirror	n/a	2	n/a	2	n/a	2	673,723		2,893,255	45	2,570,861	45
TiVO	61,560	66	39,261	66	19,387		3,571		0,223		n/a	2
Tribune Co	5,594,829	34	5,384,428	34	5,253,366	34	4,910,363	34	3,221,890	34	2,980,889	34
Univision	1,311,015		1,091,293		887,870		863,459		693,090		577,053	
Viacom	26,585,000		24,605,700		23,222,800		20,043,700		12,468,000	7	11,674,900	7
Vivendi	10,217,295	13,17,18	14,110,429	13,18,19	17,775,916	13,19,20	4,907,381	13,19,21	574,673	13,22	116,749	13,23
Washington Post	2,000,811	43	1,963,103	43	1,923,402	43	2,058,329	43	1,975,496	43	1,901,915	43
Westinghouse	n/a	2	n/a	2	n/a	2	n/a	2	n/a	9	n/a	9
Westwood One	539,226	65	550,751	65	515,940	65	553,693	65	358,305	65	259,310	65
XM Satellite	91,781		20,181		0,533		n/a	2	n/a	2	n/a	2
Yahoo	1,497,925	57	859,509	57	685,216	57	1,004,438	58	532,219	58	203,270	58
Young Broadcasting	207,668		225,108		368,173		436,071		280,659		277,052	

Company	1997	Note(s)	1996	Note(s)	1995	Note(s)	1994	Note(s)
McClatchy	641.950		624.233		540.879		471.418	
McGraw Hill	2,553.975	42	2,221.877	42	2,147.514	42	2,006.420	42
Media General	909.987		765.105		707.776		626.247	
Microsoft	n/a	2	n/a	2	n/a	2	n/a	2
Multimedia	n/a	2	n/a	2	n/a	2	605.899	31
NewsCorp	7,837.000	4,5	6,838.000	4,5	6,283.000	4,5	5,544.000	4,5
NYTimes	2,866.418		2,615.026		2,409.069		2,357.563	
Paxson Communications	88.421		144.497		103.073		62.067	59
Pegasus	86.818		47.929		32.148	37	28.191	37
Pixar	34.699		38.227		12.113	37	5,590.000	37
Playboy Enterprises	212.404	56	197.746	56	178.970	56	163.467	56
Pulitzer	584.985		534.088		472.627		485.985	
Radio One	32.367		23.702	26	21.455	26	15.500	16
Raycom Media	286.000	16	205.600	16	192.300	16	n/a	52
Readers Digest	2,839.000	24	3,098.100	24	3,068.500	24	2,806.400	24
Scripps	1,242.000		1,122.000		1,030.000		1,220.000	
Seagram's	5,417.000	24,25	4,876.000	24,25,26	4,744.000	y,z	4,606.000	y,z
Sinclair	516.435		378.488		206.100	37	129.354	37
Sirius	n/a	2	n/a	2	n/a	2	n/a	2
SONY	8,454.196	11,12,13,15	7,641.230	11,12,13,15	8,265.304	11,12,13,15	7,726.561	11,12,13,15
TCI	6,167.000		5,954.000		6,851.000		4,936.000	
Time Warner	13,294.000		10,064.000		8,067.000		7,396.000	
Time Warner Entertainment	11,318.000		10,861.000		9,629.000		8,509.000	
Times Mirror	2,444.827	45	2,370.103	45	2,358.319	45	2,352.802	45
TIVO	n/a	2	n/a	2	n/a	2	n/a	2
Tribune Co	2,719.780	34	2,405.705	34	2,244.700	34	2,154.900	34
Univision	459.741		244.858		173.100	37	139.000	37
Viacom	12,838.800	7	11,722.230	7	11,688.700	7	7,363.200	7
Vivendi	n/a	2	n/a	2	n/a	2	n/a	2
Washington Post	1,798.854	43	1,664.000	43	1,548.000	43	1,468.172	43
Westinghouse	n/a	9	4,145.000		3,030.000	69	870.000	
Westwood One	240.790	65	171.784	65	145.729		136.340	
XM Satellite	n/a	2	n/a	2	n/a	2	n/a	2
Yahoo	67.411	58	19.073	58	1.363	58	n/a	2
Young Broadcasting	263.534		154.343		122.530	37	78.788	37

Notes to Appendix B

- 1) Source: 2001 Annual Report, retrieved from Mergent Online:
<http://www.mergentonline.com.ucfproxy.fcla.edu/>
- 2) For this particular year, company was not incorporated, or had no significant revenues in media segments.
- 3) Fiscal Year-end of 9/30.
- 4) Does not include revenues from Parks & Resorts or from Consumer Products segments.
- 5) Does not include revenues from Theme Parks & Resorts segment.
- 6) Source: 1995 10-K for The Disney Corporation. Reflects difference between pro-forma revenues for combined company and revenues for Disney prior to merger with Capital Cities/ABC.
- 7) Does not include revenues from Parks segment.
- 8) Parks revenue could not be separated from within segment titled, "Video and all revenues Music/Theme Parks," so all were included.
- 9) For 1995 and 1996, CBS was part of Westinghouse. From 1997 to 1999, company was renamed 'CBS.'
- 10) Source: Corporate annual report; retrieved from company website.
- 11) Source: SEC Form 20F; retrieved via EDGAR <http://www.sec.gov/cgi-bin/srch-edgar>
- 12) Includes revenues for "music" and "pictures" segments.
- 13) Currency exchange rate for appropriate year from <get website or source>
- 14) Source: 1996 SEC Form 20F.
- 15) Fiscal Year-end of 3/31.
- 16) Source: Hoover's On-line. <http://premium.hoovers.com/subscribe/>
- 17) Source: SEC Form 6K; retrieved from
<http://finance.vivendiuniversal.com/finance/documents/financial/annual-report/>
- 18) Includes revenues for "Universal Music Group," "Vivendi Universal Games," and "Vivendi Universal Entertainment" segments.
- 19) Source: SEC Form 20F; retrieved from
<http://finance.vivendiuniversal.com/finance/documents/financial/annual-report/>
- 20) Includes revenues for "Music," "Publishing," "TV & Film: USG," and "Internet" segments.
- 21) Includes revenues for "Music," "Publishing," "TV & Film (less CANAL+)," and "Internet" segments.
- 22) Includes revenues for "Media" and "Audio visual activities" in Americas.
- 23) Includes revenues for "Publishing and Media" in Americas
- 24) Fiscal Year-end of 6/30.
- 25) Includes revenues for "Music" and "Filmed Entertainment" segments
- 26) Source: 1997 10K.
- 27) Includes revenues for broadcasting services and satellite services
- 28) Includes revenues from 10K, Hughes Electronics, even though 100% owned by General Motors.
- 29) Source: 1999 10-K, Hughes Electronics.
- 30) Does not include revenues for "Alarm Security" operations.
- 31) Does not include revenue for "Security" operations.
- 32) Includes revenues from "NBC" or "Broadcasting" segments.
- 33) Does not include revenues for "Live Entertainment" segment.
- 34) Unable to determine revenues related to Chicago Cubs, so included in total. Represents less than 5% of total revenues.
- 35) Does not include revenues for "Echostar Technologies" segment.
- 36) Does not include revenues for "Telephony" segment.
- 37) Source: 1996 10-K.
- 38) 100% owned by AT&T; revenues for this year were added to AT&T revenues when calculating market shares for HHI value.
- 39) 100% owned by TCI revenues for this year were added to TCI revenues when calculating market shares for HHI value.
- 40) Source, 1999 10-K.

- 41) *Includes TCI revenue for 2 months as documented in TCI 10-K.*
- 42) *Does not include revenue for "Financial Services" segment.*
- 43) *Does not include revenues from Kaplan's Pre-Testing Services and other non-media subsidiaries.*
- 44) *Source: 2000 10-K.*
- 45) *Does not include revenues from "Professional Information" segment.*
- 46) *Does not include revenues from Industrial Division.*
- 47) *Currently owned by other media companies--Liberty Media, Cox, and Advance Newhouse. Ownership is considered an investment, not subsidiary, so revenues are not added to owners' totals.*
- 48) *Includes revenues from MSN operations.*
- 49) *Financial information unavailable subsequent to Chapter 11 filing.*
- 50) *Does not include revenues from Adelphia Business Solutions or Hyperion Solutions.*
- 51) *Unable to break telephone (non-media) revenues from cable revenues. All were included, as cable revenues represented the significant majority.*
- 52) *Revenues for this year for this privately-held firm are not available from third party sources (e.g., Hoovers).*
- 53) *Does not include revenues for "Retail Electronics" segment.*
- 54) *Includes revenues of New York Knicks, as it is part of media-related segment and is not presented with separate revenue information.*
- 55) *Does not include revenues from "Business Information Services" segment.*
- 56) *Includes revenues from publishing, entertainment, and online.*
- 57) *Includes revenues from "Marketing Services" and "Fees."*
- 58) *Includes revenues from "Advertising."*
- 59) *Source: 1995 10-K.*
- 60) *Source: 2001 10-K.*
- 61) *Source: Corporate annual report at corporate website: <http://www.belo.com/invest/>*
- 62) *Revenues for this year are not available.*
- 63) *Source: 2002 10-K.*
- 64) *Source: 1998 10-K.*
- 65) *Managed by Infinity Corp., a division of Viacom. Revenues are not included with Viacom revenues, however, because ownership is independent.*
- 66) *Includes revenues from "Service revenues" segment.*
- 67) *Does not include revenues for U.K. and Canadian operations.*
- 68) *To date, no reporting of revenues for Fiscal Year 2003.*
- 69) *Westinghouse acquired CBS in November, 1995. Revenues assume ownership for all of 1995, determined by Westinghouse's proforma revenues for that year.*
- 70) *Source: 10-K, retrieved via Hoovers Online. <http://premium.hoovers.com/subscribe/>*

REFERENCES

- Albarran, A. B. & Dimmick, J. (1996). Concentration and economics of multifirmity in the communication industries. *The Journal of Media Economics*, (9)4, 41-50.
- Bagdikian, B. (2004). *The new media monopoly*. Boston: Beacon Press.
- Barron, J. A. (2000). Structural regulation of the media and the diversity rationale. *Federal Communications Law Journal*, (52)3, 555-560.
- Bates, B. J. (1993). Concentration in local television markets. *The Journal of Media Economics*, (6)3, 3-22.
- Bednarski, A. (2003). From diversity to duplication: Mega-mergers and the failure of the marketplace model under the Telecommunications Act of 1996. *Federal Communications Law Journal*, (55)2, 273-295.
- Beebe, J. H. (1977). Institutional structure and program choices in television markets. *Quarterly Journal of Economics* (91)1, 15-37.
- Bogart, L. (1998).
- Bellour, R. (1996). The Double Helix. In T. Druckery (Ed.), *Electronic culture: Technology and visual representation* (pp.173-199). New York: Aperture Foundation, Inc.
- Bogart, L. (1998). Media and democracy. In E. E. Dennis & R. W. Snyder (Ed.), *Media and democracy* (pp.3-12). New Brunswick, NJ: Transaction Publishers.
- Chambers, T. (2001). Losing owners: Deregulation and small radio markets. *Journal of Radio Studies*, (8)2, 292-315.
- Chester, J. & Larson, G. O. (2002, July). A 12-step program for media democracy. *The Nation*. Retrieved November 22, 2003 from <http://www.Democraticmedia.org/resources/articles/twelveSteps.html> .

- De Jong, A.S. & Bates, B.J. (1991). Channel diversity in cable television [Electronic version]. *Journal of Broadcasting & Electronic Media*, (35)2, 159-166.
- Doyle, G. (2000). The economics of monomedia and cross-media expansion: A study of the case favouring deregulation of TV and newspaper ownership in the U.K. *Journal of Cultural Economics*, 24(1), 1-26.
- Drushel, B. E. (1998). The Telecommunications Act of 1996 and radio market structure. *The Journal of Media Economics*, 11(3), 3-20.
- Einstein, M. (2004). The financial interest and syndications rules and changes in program diversity. *Journal of Media Economics*, 17(1), 1-18.
- Einstein, M. (2002). Program diversity and the program selection process on broadcast network television. In *Federal Communications Commissions: Media Ownership Working Group 5*. Retrieved June 12, 2004 from <http://www.fcc.gov/ownership/studies.html>.
- Gattuso, J. L., Compaine, B., Okun, R., & Core, C. (2003, October). *Adjusting the Picture: Media concentration or diversity?* Heritage Lecture #798. Retrieved November 22, 2003 from <http://www.heritage.org/Research/InternetandTechnology/HL798.cfm>.
- Grant, A. E. (1994). The promise fulfilled? An empirical analysis of program diversity on television [Electronic version]. *The Journal of Media Economics*, 7(1), 51-64.
- Greco, A. N. (2000). Market concentration levels in the U. S. consumer book industry: 1995-1996 [Electronic version]. *Journal of Cultural Economics*, 24(4), 321-336.
- Hannan, T. H. (1997). Market share inequality, the number of competitors, and the HHI: An

- examination of bank pricing [Electronic version]. *Review of Industrial Organization*, 12(1), 23-35.
- Hearn, T. (2003, April 21). New divider: 'Diversity index' [Electronic version]. *Multichannel news*, 24, p. 36.
- Herman, E. S. and Chomsky, N. (1988) *Manufacturing consent: The political economy of the mass media*. New York: Pantheon.
- Higgins, J. M. (2003, November 10). A pause in consolidation [Electronic version]. *Broadcasting & Cable*, p. 32.
- Howard, H. H. (1998). The 1996 Telecommunications Act and TV station ownership: 1 year later. *The Journal of Media Economics*, 11(3), 21-32.
- Klaehn, J. (2002). A critical view and assessment of Herman and Chomsky's "Propaganda Model." *European Journal of Communication*, 17(2), 145-182.
- Kleiman, H. (1991). Content diversity and the FCC's minority and gender licensing policies [Electronic version]. *Journal of Broadcasting and Electronic Media*, 35(4), 411-429.
- Kubey, R. & Shifflet, M. (1995). Demographic diversity on cable: Have the new cable channels made a difference in the representation of gender, race, and age? [Electronic version]. *Journal of Broadcasting & Electronic Media*, 39(4), 459-471.
- Kwerel, E., Levy, J., Pepper, R., & Sappington, D. (2002). Economic issues at the Federal Communications Commission. [Electronic version]. *Review of Industrial Organization*, (21)4, 337-356.
- Labaton, S. (2003, July 23). Bush's allies flee on media rule. [Electronic version]. *The New York Times*, Section 4, Page 2.

- Lin, C. A. (1995). Diversity of network prime-time program formats during the 1980s [Electronic version]. *The Journal of Media Economics*, 8(4), 17-28.
- McAuliffe, R. (Ed.). (1997). *The Blackwell encyclopedic dictionary of managerialeconomics*. Cambridge, MA: Blackwell Publishers.
- McChesney, R. W. (1993). *Telecommunications, mass media, and democracy: The battle for the control of U.S. broadcasting, 1928-1935*. New York: Oxford University Press.
- McChesney, R. W. (1999). *Rich media, poor democracy: Communication politics in dubious times*. New York: The New Press.
- McDowell, A. (2003, November 12). Gore laments television's rise in dominance—Newspapers foster more debate [Electronic version]. *The Commercial Appeal*, B- 8.
- Napoli, P. M. (1997). Rethinking program diversity assessment: An audience-centered approach [Electronic version]. *The Journal of Media Economics*, 10(4), 59-74.
- Napoli, P. M. (1999). Deconstructing the diversity principle [Electronic version]. *Journal of Communication*, 49(4), 7-34.
- Noll, R. G. & Price, M. E. (1998). Communications policy: Convergence, choice, and the Markle Foundation. In R. G. Noll & M. E. Price (Ed.), *A Communications Cornucopia* (pp.1-38). Washington, D. C.: The Brookings Institution.
- O'Neill, M. J. (1993). *The roar of the crowd*. New York: Times Books, Division of Random House.
- Owning the airwaves. (2003, October 7). [Electronic version]. *The Economist*. Retrieved November 22, 2003 from http://www.economist.com/agenda/displayStory.cfm?story_id=2117246.

- Picard, R. G. (1996). The rise and fall of communication empires. *The Journal of Media Economics*, (9)4, 23-40.
- Powell, M. K. (2003, January 21). Should limits on broadcast ownership change? Retrieved November 22, 2003 from http://www.usatoday.com/news/opinion/editorials/2003-01-21-powell_x.htm .
- Prometheus Radio Project v. Federal Communications Commission, Lexis 12720 (.S. Ct. App. 2004). Retrieved June 28, 2004 from http://web.lexis-nexis.com.ucfproxy.fcla.edu/universe/document?_m=71a117355115402748d871a94470ef96&_docnum=1&wchp=dGLbVzz-zSkVA&_md5=90eb976af0149db0b6388244a6dee5bd .
- Rhoades, S. A. (1993, March). The Herfindahl-Hirschman Index [Electronic version]. *Federal Reserve Bulletin*, 79, 188-189.
- Schudson, M. (2002). [Review of the book *The business of media: Corporate media and the public interest*]. *The Information Society*, 18, 307-308.
- Steiner, P. O. (1952). Program patterns and preferences, and the workability of competition in radio broadcasting. *Quarterly Journal of Economics*, 66(2), 194-223.
- Sturken, M. & Cartwright, L. (2001). *Practices of looking: An introduction to visual culture*. New York, NY: Oxford University Press.
- Thierer, A. & Crews, C. W. (2003, June 16). The media ownership debate: Who are the real media masters? [Electronic version]. *Tech Knowledge*, Issue 51.
- ValueLine.com. (2004). The Value Line Investment Survey: Look up Industry. Retrieved May 7, 2004 from <http://www.valueline.com.ucfproxy.fcla.edu/secure/vlispdf/stk1700/industry.cfm>

Wellstone, P. (2000). Growing media consolidation must be examined to preserve our democracy. *Federal Communications Law Journal*, (52)3, 551-554.

Yoo, C. S. (2000). Copyright and democracy: A cautionary note. *Vanderbilt Law Review* (53)6, 1933-1963.

Yoo, C. S. (2002). Vertical integration and media regulation in the new economy [Electronic version]. *Yale Journal on Regulation* 19(1), 171-300.