THE IMPACT OF MULTIPLATFORM COMPETITION ON U.S. TELEVISION STATIONS' FINANCIAL COMMITMENT AND FINANCIAL PERFORMANCE

by

FENGYAO LUO

(Under the Direction of C. Ann Hollifield)

ABSTRACT

This study analyzed the trends of multi-platform competition and local television stations' competition in the past 10 years. It also investigated the impact of two kinds of competition on financial commitment and financial performance. This study used correlation and regression tests to explore relationships between competition and news expenses and, competition and profits of affiliates in all DMA markets. The study found that multi-platform competition has increased. Local stations' competition has declined from being highly concentrated to moderately concentrated in markets smaller than Market 80. Competition had a positive impact on the financial commitment and financial performance, while market size and political events also had impact on the revenue and profit of affiliate stations.

INDEX WORDS: Competition, Financial Commitment, Financial Performance, Audience fragmentation, Revenue, Television

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B.A., Hunan University, China, 2015

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2017

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May 2017

DEDICATION

This thesis is dedicated to my grandmother.

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere gratitude to my committee chair, Dr. Hollifield. She is meticulous and provided me with generous guidance during the process of writing this thesis. She always encouraged me to think and every time I talk with her I feel more inspired. She always answered my questions with patience, passion, and immense knowledge. I feel so lucky to have met Dr. Hollifield, who is kind, insightful and enthusiastic. I would like to provide special thanks for the instruction she gave me, which helped me find the direction of my life's work. She gave me confidence and inspiration.

I would also like to appreciate other members of my thesis committee: Dr. Alison Alexander and Dr. Lee. B. Becker. Many thanks for all the time they have viewed my thesis and for all the suggestions they have proposed. I want to thank Dr. Becker for his valuable suggestions on research design and statistical analysis. I also want to show my appreciation to Dr. Alexander for her outstanding advice and all the support she has given to me during the long process of writing thesis.

I also want to express my sincere gratitude for professors who have taught me in Grady College. Thank you for teaching me and helping me to broaden my horizons and to think more about my future. I want to thank my friends in University of Georgia: Weixia Chen, Shuang Zou, Jingyi Zhang, Wenbo Li, etc. With your help, I enjoyed a memorable master's program and passed easily through all difficulties. I want to thank my parents from the bottom of my heart. I thank them for bringing me into this wonderful world. Lastly, all errors are mine and mine alone.

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CHAPTER 1

INTRODUCTION

Decreased television viewership, reduced cable subscribers, and an increase in market competition have resulted in challenges for the major broadcast television networks. Since the early 1980s, the growth rate of television advertising revenue has been declining (Powers, 1990). Following the 1992 Cable Act, which fostered the competition in delivery services of industry, the number of cable subscribers has declined (Scherer, 2016). Television advertising revenue and viewership for network affiliate news stations also declined in 2015 according to the data from Nielsen Media Research (2016). Some critics thought that this decline was the result of a shift of advertising from television to digital platforms, such as YouTube (Channick, 2017). Cable companies were responsible for service offering and delivery, while some offer streaming media, such as Netflix and Hulu, which also served to deliver content (Thompson, 2015). The viewing audience had more than one platform to watch television programs on, and the ratings of television programs have decreased in comparison to 10 years ago. The multi-platforms for distributing media content have resulted in new competition for network affiliate stations to earn revenue from advertising.

In the meantime, local TV executives have gradually realized that TV revenue can be increased by adding more news programs because local affiliates typically receive all of the advertising revenue that is generated during local newscasts. The share of local television revenue that is generated by news programming has increased, however the average number of news hours per weekday has stabilized in the past five years (Pew Research Center, 2016). With local

television stations increasingly dependent on local news for profits, it is essential to study whether and how competition in local markets impacts local news production in the digital media era.

Useful in addressing this question is the S-C-P (Structure–Conduct–Performance) model, which states that market structure influences market conduct, and thus affects market performance (Busterna, 1988). Market structure refers to the organizational characteristics of a market (Bain, 1958). The key determinant of market structure in S-C-P model is the barrier to entry (Edwards, Allen & Shaik, 2005). Competition is one of the components of market structure. Local broadcast stations adjust their conducts to face the competition in market. The financial commitment theory proposes that local stations increase their financial commitment on news production when the competition in the industry increased (Lacy,1992). The performance refers to the results brought by market adjustment conducted by firms on local markets (Bain, 1958). It can be measured by different ratios that accessed firms' profitability level, which can indicate whether the future development of the whole market is healthy or not.

This study used SCP theory and financial commitment theory to examine the relationships between competition and financial performance, and, competition and media companies' financial commitment to news production. To be more specific, this study investigated how two kind of competition levels – first in the overall attention market and, secondly, direct competition between local broadcast stations -- influenced the number of staff members, new expenses, and television companies' profits. Such understanding is essential because sufficient revenue is necessary to ensure news organizations' sustainable commitment to news production. This study analyzed the market data provided by the NAB (National Association of Broadcasters) over the past 10 years and tried to identify the changing trends of news expenses and advertising proportions in the broadcast television industry. Understanding these trends could assist in predicting the future of

the local TV news industry. The study also provided useful insights to assist managers in media companies with decision making.

CHAPTER 2

LITERATURE REVIEW

Theoretical Framework

Structure-Conduct-Performance Model.

The Structure-Conduct-Performance (SCP) theory explains the relationships among three elements of the market. Market structure influences market conduct, which affects market performance (Busterna, 1988; Wayne, 2003). Market structure refers to the organizational characteristics of a market, such as "the nature of competition and pricing within the market" (Bain, 1958, p.7). The competition in a market is one of the components of market structure. Scholars have found that market competition can facilitate media companies to achieve better economic performance and pursue social values (Lacy, Fico & Simon, 1989; Lacy, Atwater &Qin, 1989; Powers, 1993; Napoli, 2001). However, economic performance and news quality do not grow at the same pace as the increase in competition. It was found that there was at least a weak curvilinear relationship between competition and news quality (Becker, Hollifield, Jacobsson, Jacobsson & Vlad, 2009). Media companies were expected to get the highest financial performance in a monopolized market but not to get the highest news quality (Hollifield, 2006). Oligopolies and monopolies in the market usually led to government intervention and the regulation of market conduct (van Cuilenburg, 1999). The change of competition level in a market stimulated the adaptation of market conduct.

Market conduct refers to "the patterns of behavior which enterprises follow in adapting or adjusting to the markets in which they sell or buy" (Bain, 1958, p.9). Analysis of the strategies of

companies is one of the behaviors that is used to assess market conduct. In the television industry, companies essentially used three strategies to face market competition: a cost leadership strategy, a product differentiation strategy, and a price competitive strategy (Porter, 1985). The cost leadership strategy, which offers acceptable quality to attract large audiences, required companies to continuously focus on cost reduction and investments in process innovation (Porter, 1985). Considering that media goods have high first-copy costs and low reproduction costs, the cost leadership strategy is the best way for broadcasters to conduct because local stations have the advantage of economies of scale when they have been to serve as many audiences as possible (van der Wurff & van Cuilenburg, 2001). Broadcasters have conducted differentiation strategies by offering different content with high quality and innovations (Porter, 1985). The price competitive strategy aimed to reduce production costs over the short term. Broadcasters would replay content that has been aired in other markets or produce similar programs that have already achieved success (van der Wurff & van Cuilenburg, 2001). Under moderate competition, local stations usually conduct cost leadership or differentiation strategies, while under ruinous competition, local stations usually pursue the price competitive strategy (van der Wurff & van Cuilenburg, 2001). When many stations adopt price competitive strategies to reduce production cost, they might not have enough money to develop content innovation, which may result in losing audience in a long term. In order to avoid the bad results brought by ruinous competition, the most important step is that broadcasters should not imitate each other's strategies (Tirole, 1988). The best market conduct for local stations might be keeping a dynamic balance existed in theses three strategies, and thus various content genres would provide diversity (van der Wurff & van Cuilenburg, 2001). Therefore, stations in the environment of moderate competition could attract a large audience and increase their revenue.

Market performance refers to the "strategic results of market adjustments engaged in by sellers and buyers" (Bain, 1958, p.341). When the term is applied to the media industry, it usually refers to the financial performance of media firms, news quality and operational efficiency. News quality is hard to evaluate because people seek different values and information in news media. Despite that, several dimensions exist for measuring news quality, such as press freedom, diversity, and objectivity (McQuail,1992). Financial performance refers to the profit earned by media firms, which is usually measured by total assets, return on total assets, and so on (Taken, Blazovich & Murphy, 2015). A local station's financial performance indicate its operational efficiency, which depends on the resources it can access, the capabilities it can use to deploy the information and knowledge exchange within and outside the station (Lam, Yeung & Cheng, 2016).

Financial Commitment.

Financial commitment is defined as a media corporation's control of financial resources to constantly stimulate innovation and, thus, encourage the development of news products (Lazonick & O'Sullivan, 1996). That is to say, financial commitment displays media's financial investment in news production. Regarding the S-C-P model, financial commitment refers to media companies' focus on investing financial resources in an effort to improve news quality, which is an approach that is closer to conduct rather than performance.

In the newspaper industry, the measurement of financial commitment in the media industry was first conducted by Stanley Bigman (1948), who used the ratio of layout space that was given to news and to advertising to measure news organizations' financial commitment to news production. Litman and Bridges (1986) then summarized the previous research on financial indicators, which included size of full-time staff, number of news services, and proportion of space for news content. Based on Litman and Bridges' research, Lacy (1992) set up a conceptual model

that was applied to newspaper and local television news. This model explained that when market competition increased, media companies devoted more money to news content, and this action would then have a positive influence on news quality (Lacy, 1992). The improvement of news quality increased the audience's utility and, thus, this action resulted in increased circulation and advertising revenues.

In the television industry, the measurement of financial commitment was first conducted by Busterna (1980), who used the expenditures of local television news programming to indicate news quality. Later, Lacy, Atwater, and Qin (1989) revised Busterna's measurements by adding the staff size variable because they considered that staff size might be an intervening variable between competition and news quality. Hours of news were also used to evaluate the quality of content, because they wondered whether more time devoted to news would bring an increase in quality or ratings (Busterna, 1980; Powers, 1993). The development of news gathering technology also was used as a measurement of financial commitment because the new technology could cut current costs and make the product more attractive to audiences (Lacy, Atwater, Qin, & Powers, 1988).

Most studies regarding the relationships between competition and staff size, and competition and news quality have been conducted in the newspaper industry. However, these relationships seldom have been studied in the local television industry. In the newspaper industry, competition level was found to be positively related to the staff size in newsrooms, which in turn influenced news quality (Bustema, 1980; Lacy, Fico & Simon, l989; Lacy & Blanchard, 2003). In the television industry, competition was positively related to staff size and expenses in local stations (Lacy, Atwater & Qin, 1989). Later studies found that when competition intensified in markets, local television stations did not need to increase the number of staff members because

adding more employees was more expensive than increasing hours of news (Bernstein, Lacy, Cassara & Lau, 1990; Power, 1993). Local stations can obtain economies of scale by repurposing news content, such as changing the format of news and designing for different target audiences (Shah, 2014). Local stations cost less expenses on increasing news hours compared to expanding staff size, because initial costs for creating news content are high while the costs of reproduction are relatively low (Priest, 1994). However, these studies were done at least 10 years ago. The audience shares of local broadcast stations have decreasing and audience's attention has been fragmentized toward digital platforms. In current era, the audience shares of "big three"—ABC, CBS, NBC—have decreased from 90 percent in 1970s to less than 45 percent in 2001 (Napoli, 2001). A large number of stations has moved out from VHF assignments in U.S and new stations were joined the local markets, which might cause the change of competition intensity in markets (Jessell, 2009). It is therefore necessary to test the relationship between competition and staff size, and, competition and news expenses in the current era.

Measurements of Competition and Media Performance

In the newspaper industry, scholars have measured competition by circulation and number of staff members (Becker, Beam, & Russial, 1978; Rarick & Hartman, 1966), the level of advertising prices (Busterna,1988), and application of competitive schemes (White & Andsager, 1990).

In the television industry, competition has usually been measured by the number of stations in the market (Busterna, 1980, 1988; Lacy, Atwater, Qin & Powers, 1988). Competition intensity also could be measured by the difference between a firm's market share and the market shares of the leading competitor in the same market (Lacy, 1992; Lacy, Atwater, & Qin, 1989; Powers, 1993; Russi, Siegert, Gerth & Krebs, 2014). In order to allow researchers to compare results in different

markets, the competitive index was introduced in studies (Lacy, Atwater & Qin, 1989). The Herfindahl-Hirschman Index (HHI) is one of the competitive indexes used to measure market concentration by calculating the square of market share of each firm in a market (van der Wurff & van Cuilenburg, 2001). According to the Department of Justice Guidelines (2010), markets in which the HHI is between 1,500 and 2,500 points are moderately concentrated, and markets in which the HHI is in excess of 2,500 points are highly concentrated. Scholars also used the ratio of GDP-PPP (Gross Domestic Product- Purchasing Power Parity) to the total number of media outlets to measure the market competition (Becker, Hollifield, Jacobsson, Jacobsson & Vlad, 2009). The advantage of using this ratio was to control for the influence of different population sizes across countries and markets.

According to traditions of media research, McQuail (1992) defined media performance as "the independent assessment of mass media provision according to alternative 'public interest' criteria, by way of objective and systematic methods of research, taking account of other relevant evidence and the normal operating conditions and requirements of the media concerned" (p. 17). Financial performance is one of the branches of media performance.

The financial performance of media is usually measured by revenue, profits, and financial ratios, such as return on sales, operating profits, and assets turnover (Miller & Shamise, 1996, Peltier 2004). Net profit margin (NPM) is revenue divided by net income. NPM measures the capability of a firm to control its costs and indicates the media's strategic management issues, such as its pricing strategy, or the way that media firms compete in a market (Oliver, 2014). Asset Turnover (AT) is net income divided by average total assets. The AT is used to measure how efficiently a media firm generates sale revenues from its resource bases. Return of Assets (ROA) is a company's net income divided by its average of total assets. ROA measures a firm's efficiency

in utilizing its assets (Soontae, Hyun Seung & Simon, 2006). ROA considers net income more, and AT considers revenue (Morgan & Rego, 2009). Scholars have considered that the variable of cash flow is more reliable than reported profits, because it is less dependent on a firms' accounting practices (Sloan, 1996; Dechow, Kothari, & Watts, 1998; Morgan & Rego, 2009). Cash flow is used to measure the quality of a firm's income and whether the company is positive in terms of its long-term financial obligations. Morgan and Rego (2009) also used the variability of cash flow to measure the stability of cash flows. The variability of cash flow is the coefficient of variation of the previous five-year net operating cash flows.

Effects of Competition on Media Performance

The conceptual model of the financial commitment process proposed by Lacy (1992) indicated that when the intensity of competition increased in markets, the media would commit more money to news content. In the newspaper industry, with the increase of competition levels in markets, the media used more wire services and gave more space for news in layout (Lacy, 1987; Kenney & Lacy, 1987; Lacy, 1988). It was found that newspapers with competition had a larger number of reporters compared to newspapers without competition (Lacy, 1987). When financial commitment increased, which was measured by the number of reporters, the quality index of the newspaper would increase (Lacy & Fico,1989). Therefore, financial commitment to news production was found to have positive effects on the quality of news content.

In the television industry, competition was positively related to local TV news expenses and number of minutes spent on local news (Busterna, 1980, 1988). Scholars also found that there was a positive relationship between competition and staff size in local stations (Lacy, Atwater, Qin, 1989). Competition also was related to a high percentage of stories in which news organizations utilized more reporters and a camera crew (Lacy & Bernstein, 1992). Later, Powers

and Lacy (1991) found that competition increased the number of hours of news, which was positively related to the newsroom budget that was, in turn, positively related to newsroom staff size.

The above studies regarding the relationship between competition and financial commitment were analyzed under the situation of low-to-moderate competition. That is to say, moderate competition intensity increased a media organization's commitment to news production (Hollifield, 2006). However, scholars speculate that the financial commitment model would not apply in markets that contained a large number of competitors, because as revenues declined in the face of high-levels of competition, producers would tend to reduce production costs under the perfect competition (Lacy, 1992; Kwitny, 1990; Picard, 1989; Lacy & Riffe, 1994). When markets grow more concentrated, it was harder for television stations to maintain their market shares (Chan-Olmsted, 1991). In the broadcast television industry, news organizations with larger numbers of competitors provided a lower quality of news (Liu, Putler, & Weinberg, 2004). In international markets, a weak curvilinear relationship was found between competition and quality of news products (Hollifield, 2006; Becker, Hollifield, Jacobsson, Jacobsson & Vlad, 2009). Taken together, this research suggests that competition is necessary for the news industry to produce high-quality products, but hyper-competition might bring harmful results to the development of the news industry and hinder the quality of news.

As Lacy's (1992) financial commitment model indicated, audiences' demands could be met with high quality news, so "news organization's performance in the market improved (circulation and ratings improve)" (p.8). In the newspaper industry, competitive markets had greater circulation turnover rates than monopolistic markets (Fee & Hadlock, 2000). The competition in markets increased newspapers' profit margins by enlarging newsroom size and

increasing starting salaries (Chang & Zeldes, 2002; Lacy & Blanchard, 2003). In television, no research has studied the relationship between competition intensity and media organizations' financial performance. This study, therefore, intends to explore the influence of competition on staff size and profit margins over the past 10 years.

This study updated Lacy's model on three levels: Level 1—create a measure for competition in the attention market. The measurement for direct competition in DMA markets reflect the situation that audience's attention is fragmentized to multi-platforms. Although the ratings of broadcast stations are decreasing, the overall viewership of content on multi-platforms does not change. The attention market is crucial in digital age because, in an information-rich world, the information that draw people's attention can bring economic profits as well (Anderson & de Palma, 2012). Understanding the trend of attention, we are able to predict the direction the television industry will move (Tore, 2010). Level 2—competition intensity influences the financial commitment; Level 3—competition intensity influences the financial performance (Figure 1). The following research questions and hypotheses will fill the blank field of research that investigates the trend of competition in DMA markets in past 10 years and its impact on financial commitment and financial performance separately.

CHAPTER 3

RESEARCH QUESTIONS AND HYPOTHESES

Previous studies found a positive correlation between competition intensity and financial commitment in local broadcast stations, which is measure by the competition index (Lacy &Bernstein, 1991). Lacy (1992) pointed out that the financial commitment model might not be appropriate for markets that have large numbers of stations, which is known as the perfectly competitive market. In later studies, scholars found that moderate competition is related to increased financial commitment to news production while high levels of competition reduce financial commitment to news (Owen & Wildman, 1992; Hollifield, 2006). As the perfect competition happens when thousands of stations compete and each has nearly zero percent market share, it is hard to appear such hypercompetitive situation in a DMA market. Therefore, as shown in Figure 1, competition intensity is positively related to local stations' financial commitment to news production.

H1: Competition is positively related to the staff size in U.S TV markets.

H2: Competition is positively related to the percentage of news expenses out of all operating expenses in U.S TV markets.

Former studies also tested the relationship between financial commitment and market performance in local broadcast industry. They found that the competition had positive correlation to hours of news, which were also positively related to the rating of evening newscast (Powers & Lacy, 1991). This study focuses on financial performance and uses financial profits to measure

stations' performance. Therefore, as shown in Figure 1, competition intensity is positively related to financial performance, and financial commitment is positively related to financial performance.

H3: The staff sizes in local stations are positively related to the net revenue of media companies in U.S. TV markets.

H4: The percentages of news expenses out of all operating expenses in local stations are positively related to the net revenue of media companies in U.S. TV markets

H5: The percentages of news expenses out of all operating expenses in local stations are positively related to the pre-tax profit margin of media companies in U.S television markets.

H6: Competition is positively related to the cash flow of media companies in U.S. TV markets.

H7: Competition is positively related to the net pre-tax profit margins of media companies in U.S television markets.

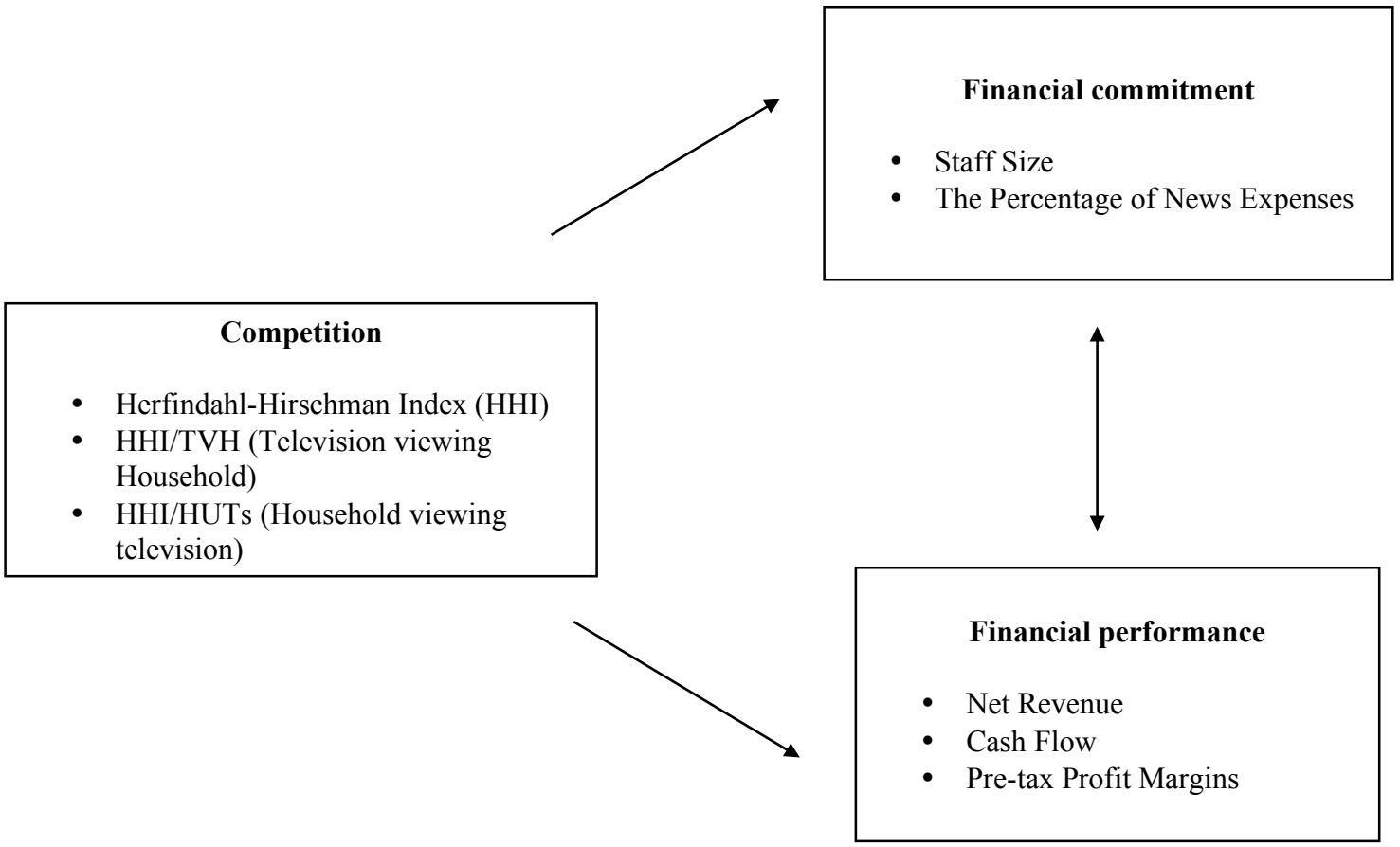

Figure 1. The Competition and Financial Commitment and Financial Performance Model

CHAPTER 4

METHODOLOGY

Data Sources

Media markets are defined by "analyzing the specific product and geographical dimensions, assessing trends and patterns, and determining the extent of market competition and concentration" (Albarran, 2010). Competition is one of the components of market structure. Based on the S-C-P model, this study discussed conduct and performance at the market level. This study analyzed independent variable based on data in each DMA market and investigated dependent variables based on average data in market groups.

The main data sources for this study were the U.S. National Association of Broadcasters' (NAB) *The Television Industry: A Market by Market Review* and *Television Financial Report: Industry Business Report. The Television Industry: A Market by Market Review* books contain basic economic and demographic data regarding the economic prospects for each designated market area (DMA). The demographic and economic history information is provided by Claritas, Inc. While, the penetration of media devices in markets is provided by Nielsen Media Research. In DMA market-by-market books, the retail sales data only includes "bricks and mortar" numbers, which means sales from retail establishments. The term "TV net revenue" in this series of books means the advertising revenues of broadcasting companies in DMA markets and does not include cable advertising revenue.

Annual revenue sources and departmental expenses that are aggregated across market groups are contained in *Television Financial Report: Industry Business Report*. The data in the

Television Financial Report: Industry Business Report were aggregated every 10 DMAs in the first 130 DMAs and then aggregated in the remaining DMAs into three categories (Market 130-150; Market 151-175; Market 176+). Therefore, the 210 DMA markets were categorized into 16 market groups in each year. These data were gathered through financial questionnaires that were sent to all commercial television stations in all DMA markets. The average response rate for usable financial questionnaires to gather revenue and expenses information was 60% each year. This study analyzed data from 2005, 2010, 2012, and 2013. These years were chosen based on the available DMA data. Worthy of mention is the fact that the financial data in 2005 and 2010 were grouped by network affiliate stations, including ABC, CBS, and NBC. Data collection and reporting were changed in 2012 and 2013 so that the "network affiliate" financial data aggregated responses from ABC, CBS and NBC, as before, but also added in data from local stations that were affiliated with the FOX network. This study considered the impact of FOX in the following findings and discussion sections. The impact of FOX cannot be disaggregated from the original data.

In order to make the independent variables usable in this case, this study adjusted the data from the market review book by adding 10 ordered DMAs together and then averaging them. In addition, this study adjusted the inflation according to different years' inflation rates to ensure that the comparison between the two revenue variables in different years is fair. This study adjusts inflation on monetary figures for 2005, 2010, 2012 to be comparable to those in 2013.

Because the audience shares of each station in 2013 were not available, this study used data from 2005, 2010 and 2012 to test the relationship between competition and financial situation. 2005 was the year that Facebook began to be well-known. At that time, people relied on traditional media and websites to obtain information, and social media did not have a large impact on people's

television viewing habits. 2010 was the year in which social media became very popular. 2012 was an election year when political news contributed to higher ratings for television stations. Comparing the change of competition intensity in previous years helps scholars gain some new insights about the television industry, so this study chose 2005, 2010 and 2012 as sample years to analyze the pattern of competition in markets.

Variables

This study used eight variables, and two of them are independent variables Herfindahl-Hirschman Index based on rating (HHI/TVH) and Herfindahl-Hirschman Index based on adjusted rating (HHI/HUTs) to measure competition. Six dependent variables include the number of full-time employees, the number of part-time employees, and the percentage of news programs in total expenses to measure financial commitment, and net revenue, cash flow, and net pre-tax profit margin to measure financial performance. The data for the independent variables are from *The Television Industry: A Market by Market Review*, which provides data in each market. The data for the dependent variables are from *Television Financial Report: Industry Business Report,* which provides data in market groups. In order to test the correlation between independent variables and dependent variables, this study aggregated and averaged data of independent variables to match the market groups of dependent variables.

Competition. This study used the Herfindahl-Hirschman Index (HHI) to measure competition in markets. HHI is a commonly accepted measurement for market concentration, and this measurement is used by the U.S. Federal Communications Commission (FCC) in its regulation of broadcast and cable markets. In this study, weekly average audience market shares for each station from 7 AM to 1 AM Monday-Sunday were measured by Nielsen in its November measurement period. The audience share data of each stations in the markets were provided by

The Television Industry: A Market by Market Review, and these data were available for each market. Audience shares were used to calculate market HHI by squaring the market share of each firm that was competing in a market. As the HHI index increases, the entry barrier becomes stronger, and the competition in the market is lower. The largest HHI index, which equals 10,000, indicates a monopoly situation in the market. Therefore, the HHI index has a negative relationship with the competition level in markets.

HHI/TVH. HHI based on TVH (Television Viewing Household) is calculated by squaring the absolute values of audience share in each broadcast station and summing the values. The absolute values of audience share are average all-day rating from Monday to Sunday for each station. The absolute value of the rating indicates the percentage of people who are watching the programs on a specific station on their televisions. Using Nielsen ratings as the basis of the HHI index effectively creates a measure of competition in the overall attention market. In other words, ratings measure how much market share each station is winning out of all of the possible competitors for the audience's attention in that market, including other broadcast stations, cable networks, streaming services, and all other media and non-media activities. Thus, ratings provide a measure of market concentration in the attention economy.

HHI/HUTs. HHI based on HUTs (Households Using Television) is calculated by squaring the adjusted values of audience share for each broadcast stations. The adjusted values of each station are also provided by market-by-market review books, which represent "the subject stations' audience share as a percentage of the aggregate shares of all commercial television stations in the market" (Bond & Pecaro, 2014, p. xi). Because the adjusted values of audience shares in 2010 are not available, this research uses a formula to transform absolute values into adjusted values. Based on the concept of adjusted value, this formula is listed as follows: adjusted value = 100*absolute

value/ (total audience share – PBS share). Use of the adjusted values of audience shares as the basis of the HHI index provides a more traditional measure of market concentration by confining the measure to only direct competition for the broadcast audience. A more direct comparison of broadcasters makes it easier to compare stations' performance between markets. Adjusted values of audience shares indicate the proportion of people who are watching a specific station among people who are watching television in a market. Therefore, an HHI index with an adjusted value is known as HHI based on HUTs.

Financial Commitment. Two indicators are used as measures: the number of staff members and the percentage of news expenses in terms of all of a station's overall operating expenses (Powers, 1993). In former studies, the expenses of news have been used as a measurement for financial commitment to the television industry (Busterna, 1980; Lacy, Atwater, & Qin, 1989). This study used correlation to analyze the relationship between competition and staff size and competition and the percentage of news expenses out of operational expenses. As former studies found that moderate competition was related to increased financial commitment to news production while high levels of competition reduced financial commitment to news (Owen & Wildman, 1992; Hollifield, 2006), this study tested hypotheses by Spearman's correlation, which measures the relationship between two variables that are related, but not linearly.

Staff size. This study used the number of full-time employees and the number of part-time employees to measure the staff size. The data for staff size come from *Television Financial Report: Industry Business Report,* which provides aggregated data in market groups. This book defines employees as "full-time" when they are employed for 30 hours or more per week and as "part-time" when they work less than 30 hours per week (p.164). This study used the national average of the number of full-time employees and part-time employees to analyze the patterns of staff sizes.

The average numbers of full-time employees and part-time employees per stations in market groups were used to test the correlation between competition and staff size.

The percentage of news expenses. The percentage of news expenses measures how large the proportion is of the expenses that are spent on the news production. The data for the percentage of news expenses come from *Television Financial Report: Industry Business Report,* which provides aggregated data in market groups. The variable of the percentage of news expenses represents the average percentage of news expenses in terms of operational expenses in affiliate stations in the market groups. This study used the national average of the percentage of news expenses in terms of operational expenses to analyze its pattern.

Financial Performance. Three indicators were used to measure affiliate stations' financial performance: net revenue, cash flow and net pre-tax profit margin. This study uses Spearman's correlation to analyze the relationship between financial commitment and financial performance, and, competition and financial performance.

Net revenue. The data of net revenue for affiliate stations come from *Television Financial Report: Industry Business Report,* which defines net revenues as "total of gross advertising revenues, plus network compensation plus trade-outs and barter plus multicast revenue plus other broadcast related revenues minus agency and rep commissions" (p.164). In order to compare the net revenue across years, this study adjusted for inflation on net revenue for 2005, 2010, 2012 to be comparable to those in 2013. The variable net revenue represents the average net revenue per stations in market groups.

Cash flow. The data of cash flow for affiliate stations came from *Television Financial Report: Industry Business Report* and defined cash flow as the result of net revenues minus total expenses. This study also adjusted inflation on cash flow for 2005, 2010, 2012 to be comparable

to those in 2013. The variable cash flow represents the average cash flow per stations in market groups.

Net pre-tax profit margin. The data of pre-tax profits for affiliate stations came from *Television Financial Report: Industry Business Report* and defined pre-tax profit as cash flow minus depreciation and amortization and then minus interest expense. The net pre-tax profit margin is calculated through dividing pre-tax profits by net revenue. The pre-tax profit margin evaluates a company's profitability and operational efficiency. The net pre-tax profit margin in this study represented the average net pre-tax profit margin per station in market groups.

CHAPTER 5

RESULTS

This research will introduce the demographic data and market situation for each sample year. It then uses the comparison of each year's HHI index based on TVH and HUTs to explain the change of competition from 2005 to 2012. After painting a general picture of market structure, this study presents the description of personnel, news expenses and profit conditions for affiliate stations. This process matches the S-C-P model, which maintains that market structure influences the market performance. Finally, the hypotheses will be tested to show whether they are supported or not.

As noted previously, this research attempts to find the relationship between competition and financial commitment, and, competition and financial performance. The descriptive analysis regarding dependent variables is categorized in terms of staff size (the number of full-time employees, the number of part-time employees), news expenses (the percentage of news program in total expenses) and financial data (net revenue, cash flow, pre-tax profit margin). The staff size and news expenses help to explain the financial commitment that broadcast stations made to news production. The financial data, which indicates the profits and efficiency to product profits, are used to shed light on the financial performance of broadcast stations.

Data Description in Sample Years

This study uses eight variables, two of them are independent variables HHI/TVH and HHI/HUTs, and six dependent variables the number of full-time employees, the number of part-

time employees, the percentage of news program in total expenses, net revenue, cash flow, and net pre-tax profit margin.

As noted previously, the HHI/TVH index is a measure of competition in the overall audience attention market, in that it measures the degree to which potential audience members are watching broadcast television out of all of the other activities in life that could be winning their attention during the day. The HHI/HUT index is a measure of the level of direct competition for audience between the different broadcast television stations competing in a given market.

The *HHI/TVH index* ranged from 94 to 1,085 in 2005, with a national average of 583 and a standard deviation of 162 (Table 1). In 2010, *HHI/TVH* ranged from 110 to 924, with a national average of 452 and a standard deviation of 143. In the HHI index, higher scores indicate higher levels of market concentration, with a score of 10,000 indicating a monopoly market. In 2012, *HHI/TVH* ranged from 94 to 889, with a national average of 443 and a standard deviation of 145. The decreasing standard deviations among HHI/TVH over years indicate that the multi-platform competition in attention markets tends to become similar in each market.

The *HHI/HUTs index* ranged from 678 to 10,000 in 2005, with a national average of 3,374 and a standard deviation of 1945 (Table 1). In 2010, *HHI/HUTs* ranged from 1,005 to 10,000, with a national average of 3,015 and a standard deviation of 1,655. In 2012, *HHI/HUTs* ranged from 1,145 to 10,000, with a national average of 2,915 and a standard deviation of 1,467. The decreasing standard deviations among HHI/HUTs over years indicate that the competition in local broadcast stations has the tendency to become similar in each market.

Table 1

Mean Values and Standard Deviations of Independent Variables

Variable	M	SD	Min	Max
2005 HHI/TVH (N=207)	584	162	94	1085
2010 HHI/TVH (N=210)	452	143	110	924
2012 HHI/TVH (N=210)	443	145	94	889
2005 HHI/HUTs (N=207)	3374	1945	678	10000
2010 HHI/HUTs (N=210)	3015	1655	1005	10000
2012 HHI/HUTs (N=210)	2915	1467	1145	10000

Note. Due to the impact of Hurricanes and Rita, 2005 audience share in following markets (Miami-Ft. Lauderdale; West Palm Beach-Ft.Pierce; New Orleans; Biloxi-Gulfport) were not available.

The dependent variables are sorted in DMA markets, and thus the data are skewed because larger cities usually have large numbers of household and retail sales, and better sources to generate broadcast programs. Because the data are skewed, this study uses the national average to compare dependent variables in sample years.

The average number of *Full-time Employees* by market group ranged from 32 to 207 in 2005, with a national average of 92 (Table 2). In 2010, the number of *Full-time Employees* by market group ranged from 31 to 183, with a national average of 84. In 2012, the number of *Full-time Employees* by market group ranged from 28 to 183, with a national average of 79. In 2013, the number of *Full-time Employees* by market group ranged from 30 to 182, with a national

average of 81. These data show that the average number of full-time employees per network affiliated broadcast station dropped 12 percent over the eight years examined in the study.

The number of *Part-time Employees* ranged from 7 to 35 in 2005, with a national average of 13 (Table 2). In 2010, the number of *Part-time Employees* ranged from 6 to 41, with a national average of 12. In 2012, the number of *Part-time Employees* ranged from 6 to 33, with a national average of 10. In 2013, the number of *Part-time Employees* ranged from 5 to 31, with a national average of 9. The data indicates that the national average number of part-time employees per network affiliated broadcast station dropped 30.77 percent over the eight years examined in the study.

The *Percentage of News Expenses* out of all operating expenses ranged from 17.5% to 31.6% in 2005, with a national average of 28.7% (Table 2). In 2010, the *Percentage of News Expenses* out of all operating expenses ranged from 17.3% to 31.4%, with a national average of 27.6%. In 2012, the *Percentage of News Expenses* out of all operating expenses ranged from 15.1% to 29.8%, with a national average of 26.6%. In 2013, *Percentage of News Expenses* out of all operating expenses ranged from 15.0% to 29.4%, with a national average of 26.6%. The percentage of news expenses out of all operating expenses decreased most in market group "Market 151-175", which lost 21.03 percent of news expenses over eight years. It indicates that smaller markets are more easily suffered the decrease of percentage of news expenses out of all operating expenses.

Inflation adjusted values for the variable *Net Revenue* ranged from $3,680,896 to $141,229,359 in 2005, with a national average of $23,130,023 (Table 2). In 2010, the *Net Revenue* ranged from $3,817,111 to $117,422,199, with a national average of $22,424,672. In 2012, the *Net Revenue* ranged from $4,405,689 to $107,889,728, with a national average of $22,596,834.

Table 2

The Descriptive Financial Data of Affiliated Stations[a] (N=16)

Variables	2005			2010			2012			2013		
	Min	Max	National Average[b]	Min	Max	National Average	Min	Max	National Average	Min	Max	National Average
FTE	32	207	92	31	183	84	28	183	79	30	182	81
PTE	7	35	13	6	41	12	6	33	10	5	31	9
NewsExpper	17.5%	31.6%	28.7%	17.3%	31.4%	27.6%	15.1%	29.8%	26.6%	15.0%	29.4%	26.6%
Netrev	$3,680,896	$141,229,359	$23,130,023	$3,817,111	$117,422,199	$22,424,672	$4,405,689	$107,889,728	$22,596,834	$4,265,801	$103,608,158	$21,365,661
CashFlow	$772,174	$75,706,587	$8,820,036	$890,656	$51,957,722	$8,070,734	$1,340,462	$48,960,079	$9,336,579	$875,794	$46,909,048	$7,837,287
NetPM	2%	50%	27.64%	3%	40%	26.00%	17%	41%	34.10%	6%	41%	28.80%

Note. Adapt from Television financial report. (n.d). Washington, D.C. : National Association of Broadcasters,. Netrev= Net Revenues (Average); FTE=(Average) Full Time Employees; PTE=(Average) Part Time Employees; NewsExpper= News Expenses Percent; CashFlow=Cash Flow; NetPM= Net Pre-Tax Profit Margin

a) All dollar figures adjusted for inflation to 2013 dollars.

b) National average is the average of all stations in affiliates, which is also provided by Television financial report. (n.d). Washington, D.C. : National Association of Broadcasters

In 2013, the *Net Revenue* ranged from $4,265,801 to $103,608,158, with a national average of $21,365,661. These data indicate that the inflation adjusted values for *Net Revenue* varied a lot in big markets and small markets. They also show that the overall *Net Revenue* trend increased 8 percent in affiliated broadcast stations over eight years.

Inflation adjusted values for the variable *Cash Flow* ranged from $772,174 to $75,706,587 in 2005, with a national average of $8,820,036 (Table 2). In 2010, *Cash Flow* ranged from $890,656 to $51,957,722, with a national average of $8,070,734. In 2012, *Cash Flow* ranged from $1,340,462 to $48,960,079, with a national average of $9,336,579. In 2013, *Cash Flow* ranged from $875,794 to $46,909,048, with a national average of $7,837,287. The market group "Market 111-120" increased most in affiliate broadcast stations, which is 55 percent, and another market group "Market 1-10" decreased most, which is 38 percent. These data show that the amount and changing rate of *Cash Flow* in market groups varied a lot in big markets and small markets.

For the variable *Net Pre-tax Profit Margin* in 2005 ranged from 2 percent to 50 percent, with a national average of 27.64 percent (Table 2). In 2010, *Net Pre-tax Profit Margin* ranged from 3 percent to 40 percent, with a national average of 26.00 percent. In 2012, *Net Pre-tax Profit Margin* ranged from 17 percent to 41 percent, with a national average of 34.10 percent. In 2013, *Net Pre-tax Profit Margin* ranged from 6 percent to 41 percent, with a national average of 28.80 percent. The market group "Market 121-130" increased most in affiliate broadcast stations, which is 656 percent, and another market group "Market 1-10" decreased most, which is 17 percent. These data indicate that the *Net Pre-tax Profit Margins* and their change rate differed greatly in different markets.

Data Patterns Across Sample Years

The multi-platform competition in attention market is measured by HHI/TVH. The scatter plots of HHI/TVH in sample years suggest that a weak curve-linear relationship between HHI index based on ratings and market number (Figure 2-4). The trend of HHI index based on ratings increased in the range of Market 1 to Market 120 and decreased in the rest of the small markets, which indicates that higher levels of competition are associated with large market size. As the multi-platform competition in attention market decreases, up to a point, the competition level seems to increases in small markets.

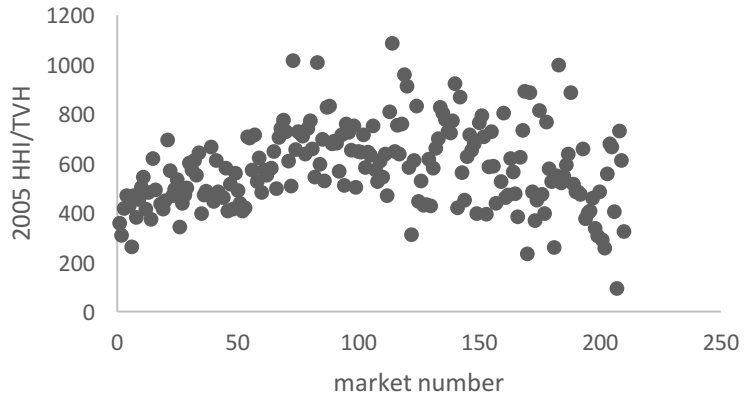

Figure 2. the HHI Index Based on TVH in all DMA Markets in 2005.

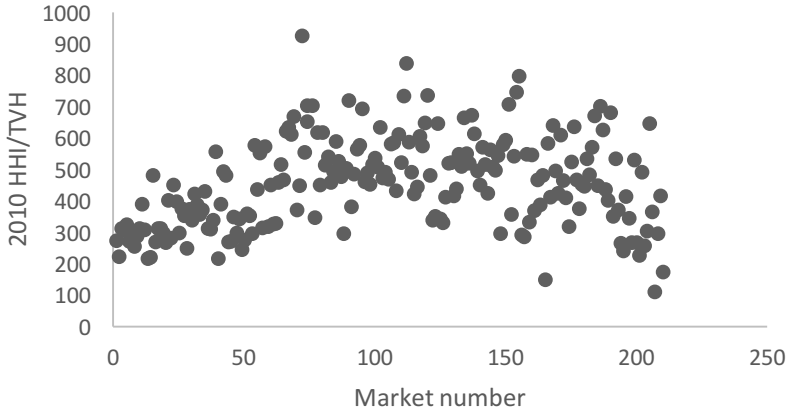

Figure 3. the HHI Index Based on TVH in all DMA Markets in 2010.

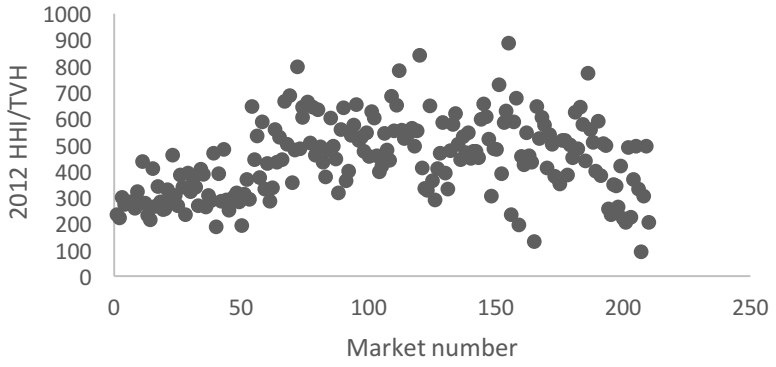

Figure 4. the HHI Index Based on TVH in all DMA Markets in 2012.

In order to compare the HHI index in sample years, this study aggregated the HHI/TVH in the group as the financial data and then averaged these HHI/ TVH indexes. As Figure 5 shows, the shape of the HHI/TVH line does not change, but the overall HHI/TVH index decreased from 2005 to 2012 and indicates that the multi-platform competition in attention markets increased and fewer people were watching broadcast programs on television over the seven years that were examined in this study.

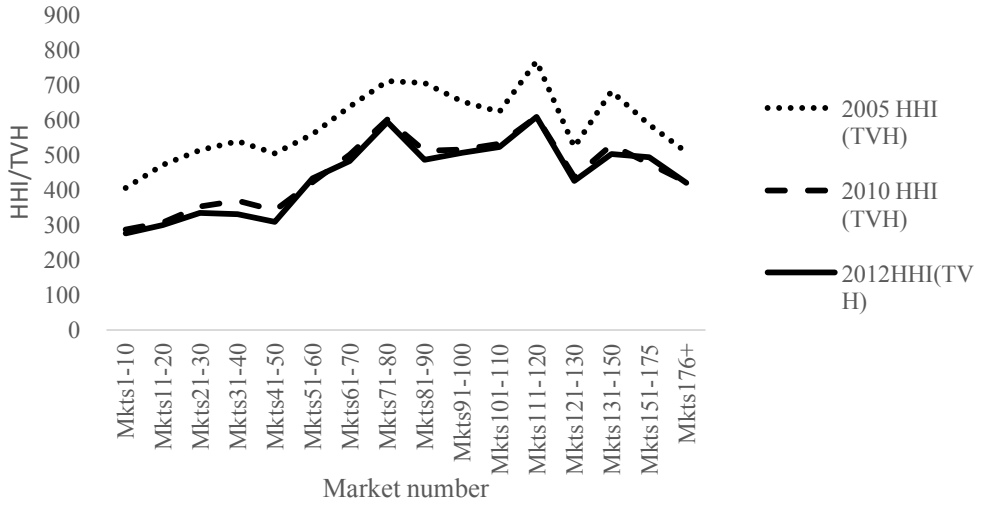

Figure 5. the Trend of Average HHI Index Based on TVH in 2005, 2010 and 2012.

The competition among local broadcast stations is measured by HHI/HUTs. The scatter plots of HHI/HUT in sample years suggest that an exponential relationship between between HHI/HUTs and market number (Figure 6-8). The HHI/HUTs index increased with the shrinking markets size. It indicates that the competition among local broadcast stations tends to be intense in large markets, while the barriers to enter in local broadcast industry are extremely strong in small markets.

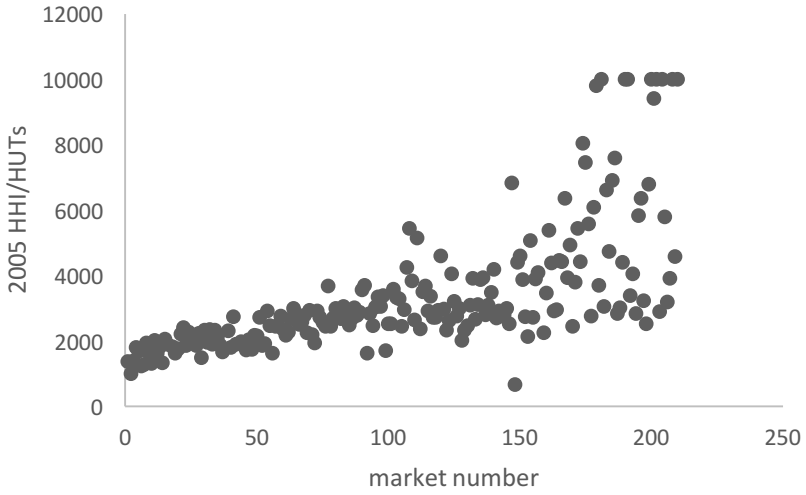

Figure 6. the HHI Index Based on HUTs in all DMA Markets in 2005.

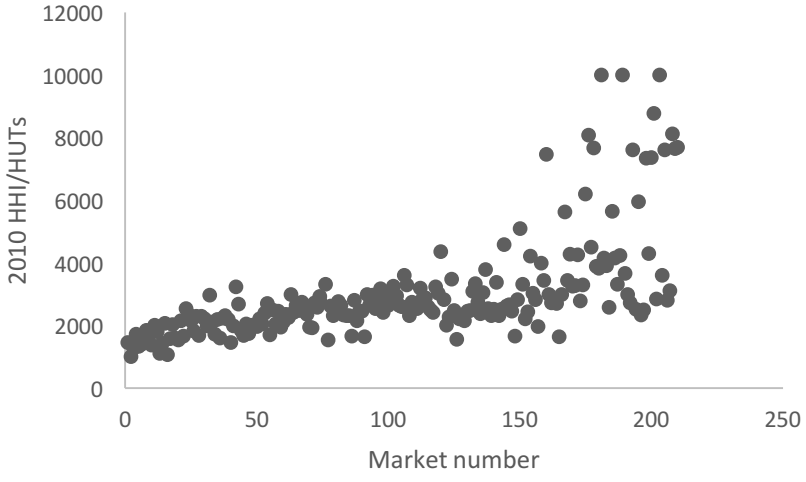

Figure 7. the HHI Index Based on HUTs in all DMA Markets in 2010.

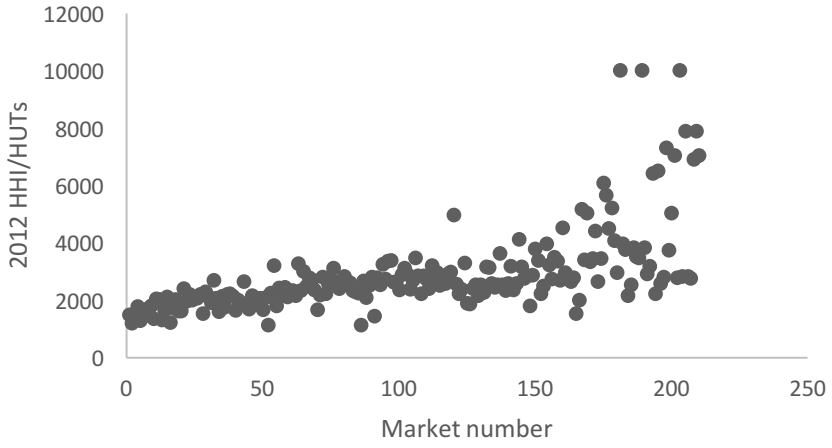

Figure 8. the HHI Index Based on HUTs in all DMA Markets in 2012.

This study also aggregated the HHI/HUTs in the group as the financial data and then averaged these indexes. As Figure 9 shows, for markets whose numbers are over 80, HHI/HUTs in 2005 were higher than the other two years. In the other markets which are bigger than Market 80, the HHI/HUTs did not change from 2005 to 2012, and suggests that the competition intensity among local broadcast stations has increased in small markets across years while the competition intensity remained the same in large markets.

The competition in local broadcast stations turned from highly concentrated toward moderately concentrated in markets whose sizes were smaller than Market 80. According to the Department of Justice Guidelines (2010), markets in which the HHI is between 1,500 and 2,500 points are moderately concentrated, and markets in which the HHI is in excess of 2,500 points are highly concentrated. As Figure 9 shows, the reference line refers to the HHI/HUTs value as 2,500 and the indexes that are above the line decreased from 2005 to 2012 among these small markets, which indicates that the competition among local broadcast stations has increased over seven years in markets that are smaller than Market 80.

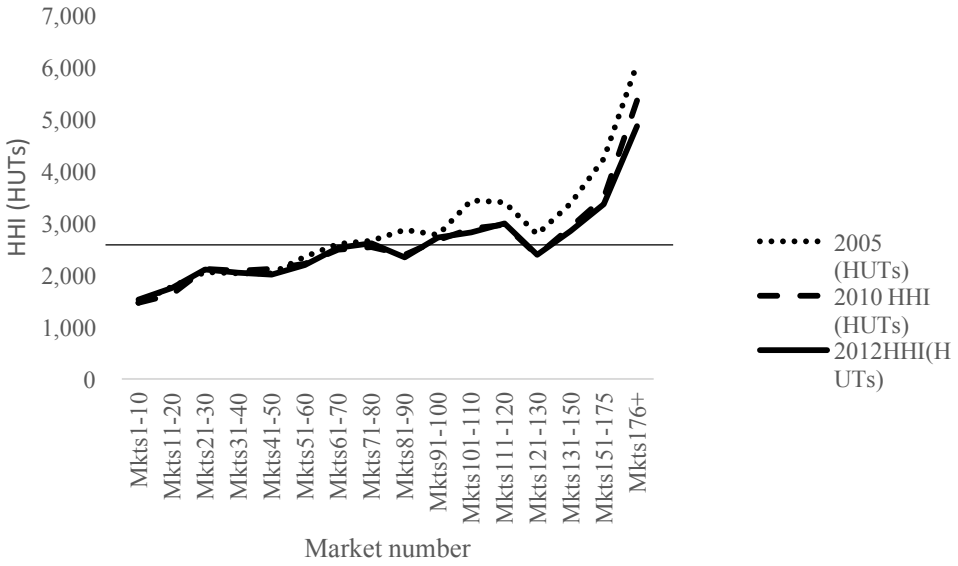

Figure 9. the Change Trend of Average HHI Index Based on HUTs in 2005, 2010 and 2012.

Both the number of *Full-time Employees* and *Part-time Employees* have decreased (Figure 10). In aggregated DMA markets (n=16), the national average of *Full-time Employees'* number in affiliate stations decreased by 9 percent from 2005 to 2010, and decreased by 6 percent from 2010 to 2012 and increased by 3 percent from 2012 to 2013. The national average amount of *Part-time Employees* at affiliate stations decreased by 8 percent from 2005 to 2010 and decreased by17 percent from 2010 to 2012 and decreased by 10 percent from 2012 to 2013. It indicates that the overall staff size has reduced in local broadcast stations across years. The reduced staff sizes in local television stations might be the consequence of improving the efficiency of reporting and hiring multi-media reporters instead of writing reporters.

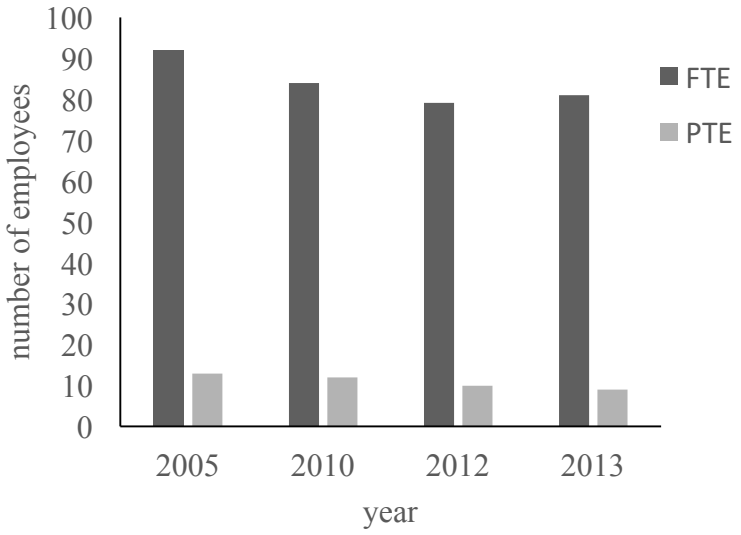

Figure 10. the Number of Employees for Affiliated Stations in Four Different Years

The *Percentage of News Expenses* out of all operating expenses has decreased (Figure 11). In aggregated DMA markets (n=16), the national average of *Percentage of News Expenses* out of all operating expenses in affiliate stations reduced by 1.1 percent from 2005 to 2010 and reduced by 1.0 percent from 2010 to 2012 and maintained the same from 2012 to 2013. The overall trend of the percentage of news expenses in terms of total expenses decreased by 2 percent over the eight years examined in this study, which suggests that local affiliate stations have spent less budget on news production. Decreased news expenses are probably the result of the reduced price of media equipment and shrinking staff sizes.

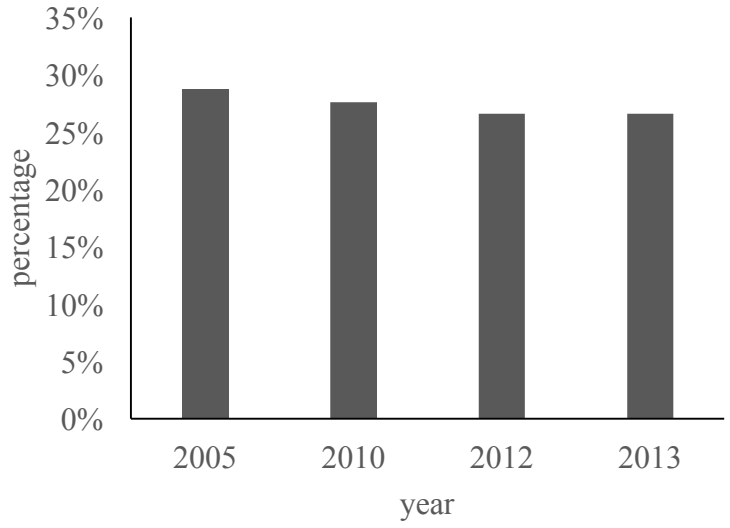

Figure 11. the Percentage of News Expenses out of Operational Expenses in Four Different Years

Inflation adjusted values for the variable *Net Revenue* increased from 2005 to 2012 and decreased from 2012 to 2013 (Figure 12). In aggregated DMA markets (n=16), the national average of *Net Revenue* in affiliate stations increased by 12 percent from 2005 to 2010, increased by 30 percent from 2010 to 2012, and then decreased by 28 percent from 2012 to 2013. The overall trend of inflation adjusted *Net Revenue* decreased by 8 percent over the eight years in this study. These data indicate that the net revenue earned by affiliate stations reduced over past years. Local stations face the challenge that it is harder to earn or remain the net revenue.

Inflation adjusted values for the *Cash Flow* of location stations fluctuated from 2005 to 2013 (Figure 12). In aggregated DMA markets (n=16), the national average of *Cash Flow* in affiliate stations decreased by 8 percent from 2005 to 2010, increased by 16 percent from 2010 to 2012 and decreased by 16 percent from 2012 to 2013. Because of the effect of the presidential election in 2012, the *Cash Flow* rose and fell in these sample years. If skipping the *Cash Flow* in

2012, its average decreased 3 percent from 2010 to 2013 and decreased 11 percent from 2005 to 2013, which indicates that the profits of local television stations fell over years in the long run, while the decline rate was moderate.

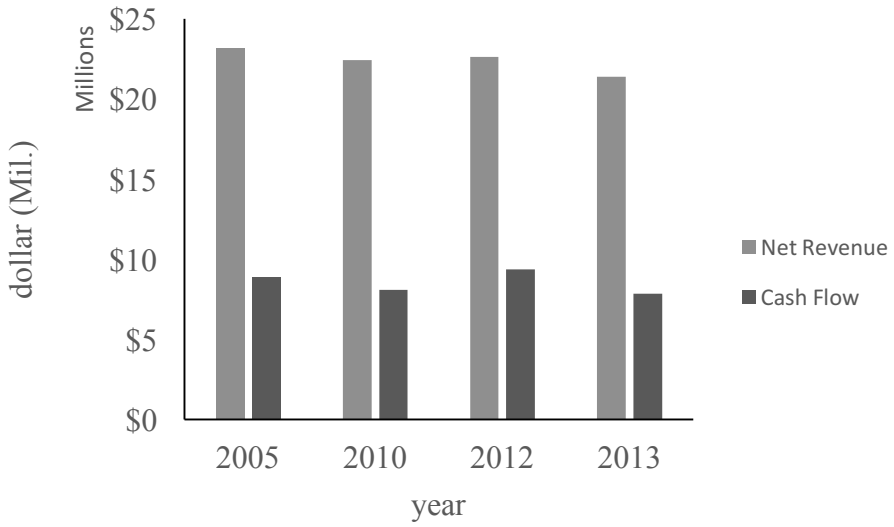

Figure 12. The National Average of Net Revenue and Cash Flow (in millions)

The *Net Pre-tax Profits Margin* also rose and fell from 2005 to 2013 (Figure 13). In aggregated DMA markets (n=16), the national average of *Net Pre-tax Profits Margin* decreased 1.64 percent from 2005 to 2010 and increased 8.10 percent from 2010 to 2012 and decreased 5.30 percent from 2012 to 2013. The standard deviation of *Net Pre-tax Profits Margin* decreased from 2005 to 2012 and increased slightly in 2013. The overall trend of standard deviation decreased over the eight years examined by this study, which suggests that the *Net Pre-tax Profits Margins* become similar in each market. In sum, the *Net Pre-tax Profits Margin* decreased 1.16 percent from 2005 to 2013, which indicates that the *Net Pre-tax Profits Margin* maintained the same level and dropped only slightly over years.

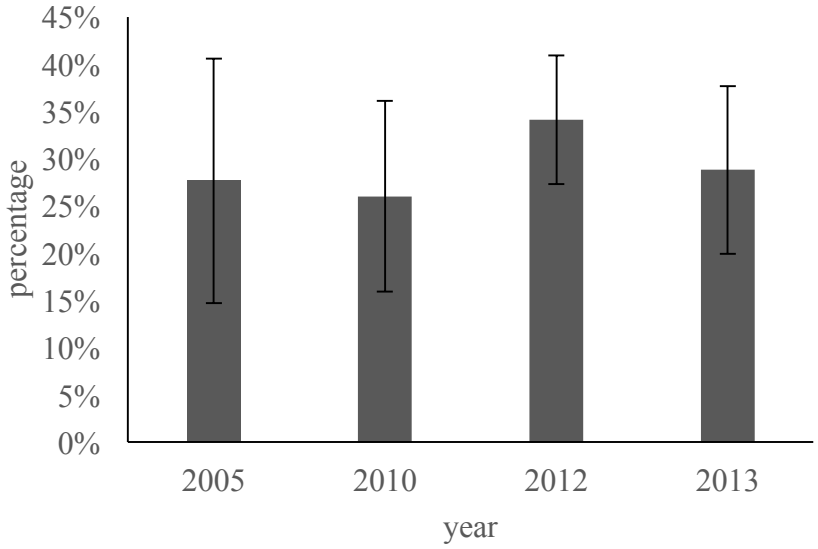

Figure 13. the Net Pre-tax Profit Margin (in percentage) for Affiliated Stations. Error bars denote one standard deviation around the mean.

The multi-platform competition in attention market increased over the years that were examined in this study and suggests that overall audience share of each station decreased and that fewer people watched programs on television and likely turned to other media platforms. The competition in local broadcast stations did not change from 2005 to 2012 in large markets, and became stronger in markets which is smaller than Market 80. Among these small markets, the competition in local broadcast stations has the tendency to turn from highly concentrated toward moderately concentrated. The staff size reduced and the percentage of news expenses out of operational expenses decreased over the years, which suggests that local broadcast stations put less financial commitment on news production, which might be the result of updating technology or applying wireless equipment. The net revenue and cash flow fluctuated in the sample years, and the overall trend of net revenue and cash flow decreased moderately over years. Although the net

revenue and cash flow decreased, the net pre-tax profit margins basically remained the same, which shows that the general managers of local stations reduced expenses in order to make a balance with the decreasing net revenue. As competition increased in markets, local stations placed less financial commitment on news production. Overall net revenue decreased, and local stations reduced their expenses and maintained the same profitability level over the years of the study.

Hypotheses Test

H1 was supported. Multi-platform competition in the attention market was positively related to the staff size in U.S TV markets, but the relationship was weak or moderate. As mentioned previously, in the HHI index, higher scores indicate higher levels of market concentration, with a score of 10,000 indicating a monopoly market. The larger HHI index is, the entry barrier is stronger and the competition in market is lower. Therefore, HHI index has a negative relationship with the competition level in markets. The Spearman's correlation results show that the HHI/TVH in 2005 was negatively related to the number of full-time employees ($R= -0.494$, $p>0.05$, Table 3) and part-time employees ($R=-0.265$, $p>0.05$, Table 3). The HHI/TVH in 2010 was negatively related to the number of full-time employees ($R= -0.645$, $p<0.01$, Table 4) and part-time employees ($R=-0.589$, $p<0.05$, Table 4). The HHI/TVH in 2012 was negatively related to the number of full-time employees ($R= -0.584$, $p<0.05$, Table 5) and part-time employees ($R=-0.551$, $p<0.05$, Table 5).

Competition in local broadcast stations was also positively related to the staff size in U.S TV markets, and the relationship was strong. The HHI/HUTs in 2005 was negatively related to the number of full-time employees ($R= -0.953$, $p<0.01$, Table 3) and part-time employees ($R=-0.584$, $p<0.05$, Table 3). The HHI/HUTs in 2010 was negatively related to the number of full-time employees ($R= -0.929$, $p<0.01$, Table 4) and part-time employees ($R=-0.888$, $p<0.01$, Table 4).

The HHI/HUTs in 2012 was negatively related to the number of full-time employees (R= -0.896, $p<0.01$, Table 5) and part-time employees (R=-0.764, $p<0.01$, Table 5). The correlation tests indicate that both two kinds of competition were positively related to staff size. When competition increased in markets, local stations will likely add more employees. The competition among local broadcast stations has a stronger impact on staff size than multi-platform competition in the attention market because the multi-platform competition concerns audiences' attention which might be fragmented by the development of other platforms in market.

H2 was supported. The multi-platform competition in attention markets was positively related to the ratio of news production expenses to stations' total expenses but, again, the relationship was weak or moderate. The HHI/TVH in 2005 was negatively related to the percentage of news production in total expenses (R= -0.473, $p>0.05$, Table 3). The HHI/TVH in 2010 was negatively related to the percentage of news production in total expenses (R= -0.500, $p<0.05$, Table 4). The HHI/TVH in 2012 was negatively related to the percentage of news production in total expenses (R= -0.591, $p<0.05$, Table 5).

The competition in local broadcast stations was also positively related to the percentage of news production in total expenses and the total station expenses, and the relationship is strong. The HHI/HUTs in 2005 was negatively related to the percentage of news production in total expenses (R= -0.873, $p<0.01$, Table 3). The HHI/HUTs in 2010 was negatively related to the percentage of news production in total expenses (R= -0.835, $p<0.01$, Table 4). The HHI/HUTs in 2012 was negatively related to the percentage of news production in total expenses (R= -0.897, $p<0.01$, Table 5). The correlation tests showed that both multi-platform competition and competition among local broadcast stations are positively related to the percentage of news expenses in total expenses. These results support Lacy's (1992) financial commitment model

which maintains that television stations will place more effort in news expenses when competition increases in markets.

Table 3

Competition Variables, Personnel Variables, News Expenses Variables, Financial performance Variables: Correlation Statistics in 2005 (N=16)

Variables	1	2	3	4	5	6	7
1. HHI/TVH	-						
2. HHI/HUTs	.521*	-					
3. FTE	-.494	-.953**	-				
4. PTE	-.265	-.584*	.711**	-			
5. News expense%	-.473	-.873**	.921**	.586*	-		
6. Net Revenue	-.453	-.944**	.974**	.680**	.880**	-	
7. Cash flow	-.438	-.924**	.953**	.696**	.867**	.994**	-
8. Net Pre-tax PM	-.459	-.782**	.803**	.631**	.774**	.876**	.915**

*$\rho < .05$. ** $\rho < .01$

Table 4

Competition Variables, Personnel Variables, News Expenses Variables, Financial performance Variables: Correlation Statistics in 2010 (N=16)

Variables	1	2	3	4	5	6	7
1. HHI/TVH	-						
2. HHI/HUTs	.736*	-					
3. FTE	-.645**	-.929**	-				
4. PTE	-.589*	-.888**	.938**	-			
5. News expense%	-.500*	-.835**	.885**	.921*	-		
6. Net Revenue	-.624**	-.906**	.994**	.927**	.859**	-	
7. Cash flow	-.606*	-.885**	.962**	.882**	.832**	.971**	-
8. Net Pre-tax PM	-.834**	-.859**	.803**	.757**	.668**	.788**	.835**

*$\rho < .05$. **$\rho < .01$

Table 5

Competition Variables, Personnel Variables, News Expenses Variables, Financial performance Variables: Correlation Statistics in 2012 (N=16)

Variables	1	2	3	4	5	6	7
1. HHI/TVH	-						
2. HHI/HUTs	.753*	-					
3. FTE	-.584**	-.896**	-				
4. PTE	-.551*	-.764**	.835**	-			

Variables	1	2	3	4	5	6	7
5. News expense%	-.591*	-.897**	.979**	.854*	-		
6. Net Revenue	-.600*	-.897**	.993**	.785**	.965**	-	
7. Cash flow	-.565*	-.856**	.987**	.806**	.953**	.988**	-
8. Net Pre-tax PM	-.594*	-.847**	.921**	.763**	.903**	.932**	.926**

*$\rho < .05$. ** $\rho < .01$

H3 was supported. The staff sizes in local stations were positively related to the net revenue of media companies in U.S. television markets, and the relationship was strong. The number of full-time employees (R=0.974, p<0.01, Table 3) and the number of part-time employees (R=0.680, p<0.01, Table 3) in 2005 were positively related to the net revenue. The number of full-time employees (R=0.994, p<0.01, Table 4) and the number of part-time employees (R=0.927, p<0.01, Table 4) in 2010 were positively related to the net revenue. The number of full-time employees (R=0.993, p<0.01, Table 5) and the number of part-time employees (R=0.785, p<0.01, Table 5) in 2012 were positively related to the net revenue. This study assumed the positive interrelationship between financial commitment and financial performance. The correlation tests show that the staff size are positively associated with the net revenue of affiliate stations. In other words, stations likely reduce the size of their staff, when net revenue of stations decreases.

H4 was supported. The percentage of news expenses out of all operating expenses in local stations was positively related to the net revenue of media companies in U.S. TV markets. The percentage of news expenses out of all operating expenses in 2005 was positively related to the net revenue (R=0.880, p<0.01, Table 3). The percentage of news expenses out of all operating expenses in 2010 was positively related to the net revenue (R=0.859, p<0.01, Table 4). The

percentage of news expenses out of all operating expenses in 2012 was positively related to the net revenue (R=0.965, p<0.01, Table 5). The correlation tests show that the percentage of news expenses out of all operating expenses are positively associated with the net revenue of affiliate stations. That is to say, stations will likely reduce their budget on news production, when net revenue of stations decreases.

H5 was supported. The percentages of news expenses out of all operating expenses in local stations were positively related to the net pre-tax profit margins of media companies in U.S television markets, and the relationship was moderate or strong. The percentages of news expenses out of all operating expenses in local stations of 2005 were positively related to net pre-tax profit margins (R= 0.774, p<0.01, Table 3). The percentages of news expenses out of all operating expenses in local stations of 2010 were positively related to net pre-tax profit margins (R= 0.668, p<0.01, Table 4). The percentages of news expenses out of all operating expenses in local stations of 2012 were positively related to net pre-tax profit margins (R= 0.903, p<0.01, Table 5). The correlation tests show that the percentage of news expenses out of all operating expenses are positively associated with the the net pre-tax profit margins of stations. That is to say, stations put more financial commitment on news production when stations have continuous capability to earn profits.

H6 was supported. Multi-platform competition in attention market were positively related to the cash flow of media companies in U.S. TV markets, and the relationship was moderate. The larger HHI index is, the entry barrier is stronger and the competition in market is lower. The largest HHI index, which equals 10,000, indicates the monopoly situation in the market. Therefore, HHI index has a negative relationship with the competition level in markets. The Spearman's correlation results show that the HHI/TVH in 2005 was negatively related to the cash flow (R= -

0.438, p>0.05, Table 3). The HHI/TVH in 2010 was negatively related to the cash flow (R= -0.606, p<0.05, Table 4). The HHI/TVH in 2012 was negatively related to the cash flow (R= -0.565, p<0.05, Table 5).

Competition in local broadcast stations was also positively related to the cash flow of media companies in U.S. TV markets, and the relationship was strong. The Spearman's correlation results show that the HHI/HUTs in 2005 was negatively related to the cash flow (R= -0.924, p<0.01, Table 3). The HHI/ HUTs in 2010 was negatively related to the cash flow (R= -0.885, p<0.01, Table 4). The HHI/ HUTs in 2012 was negatively related to the cash flow (R= -0.856, p<0.01, Table 5). The correlation results show that the two kinds of competition are positively associate with cash flow. The market size has impact on the correlation result test on H6. As Figure 14 shows, the average cash flows of stations increase with the increasing market size. A Market group of 176+ indicates markets in small cities while a market group of 1-10 means markets in large cities. The market groups of large cities usually have large cash flow and intense competition, and thus explain the association between competition and cash flow.

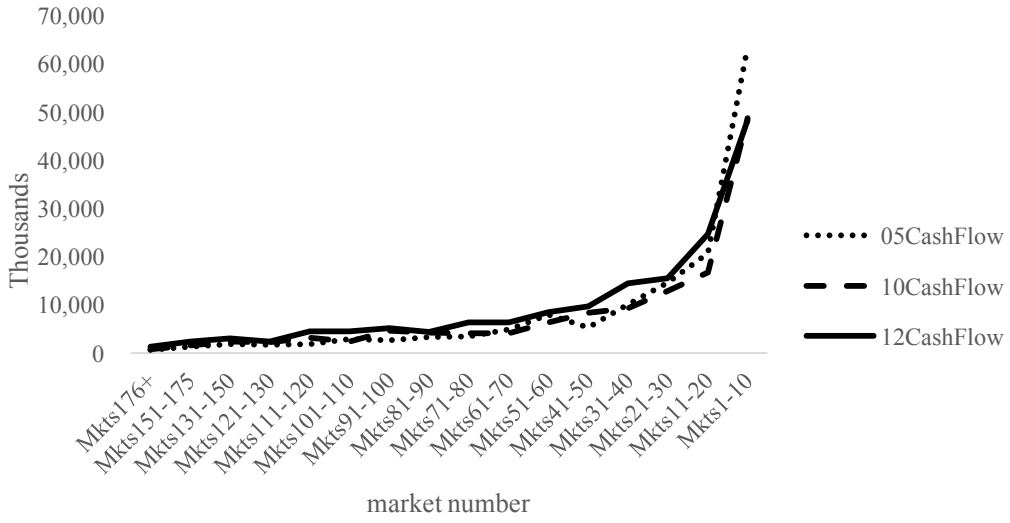

Figure 14. the Trend of Average Cash Flow in 2005, 2010 and 2012

H7 was supported. Multi-platform competition in attention market was positively related to the *Net Pre-Tax Profit Margins* of media companies in U.S television markets, and the relationship was moderate or strong. The Spearman's correlation results show that the HHI/TVH in 2005 had negative relations with *Net Pre-Tax Profit Margins* ($R= -0.459$, $p>0.05$, Table 3). The HHI/TVH in 2010 had negative relations with *Net Pre-Tax Profit Margins* ($R= -0.834$, $p<0.01$, Table 4). The HHI/TVH in 2012 had negative relations with *Net Pre-Tax Profit Margins* ($R= -0.594$, $p<0.05$, Table 5).

Competition in local broadcast stations is positively related to the *Net Pre-Tax Profit Margins* of media companies in U.S television markets. The Spearman's correlation results show that the HHI/HUTs in 2005 has strong relations with *Net Pre-Tax Profit Margins* ($R= -0.782$, $p<0.01$, Table 3). The HHI/HUTs in 2010 has strong relations with *Net Pre-Tax Profit Margins* ($R= -0.859$, $p<0.01$, Table 4). The HHI/HUTs in 2012 has strong relations with *Net Pre-Tax Profit Margins* ($R= -0.847$, $p<0.01$, Table 5). The correlation results show that the two kinds of competition are positively associate with net pre-tax profit margin. The market size also has impact on the correlation result test on H6. As Figure 15 shows, the average net pre-tax profit margins of stations increase with the increasing market size. Market group 176+ indicates markets in small cities, while market group 1-10 means markets in large cities. The market groups of large cities usually have large net pre-tax profit margins and intense competition, and thus explain the association between competition and pre-tax profit margin.

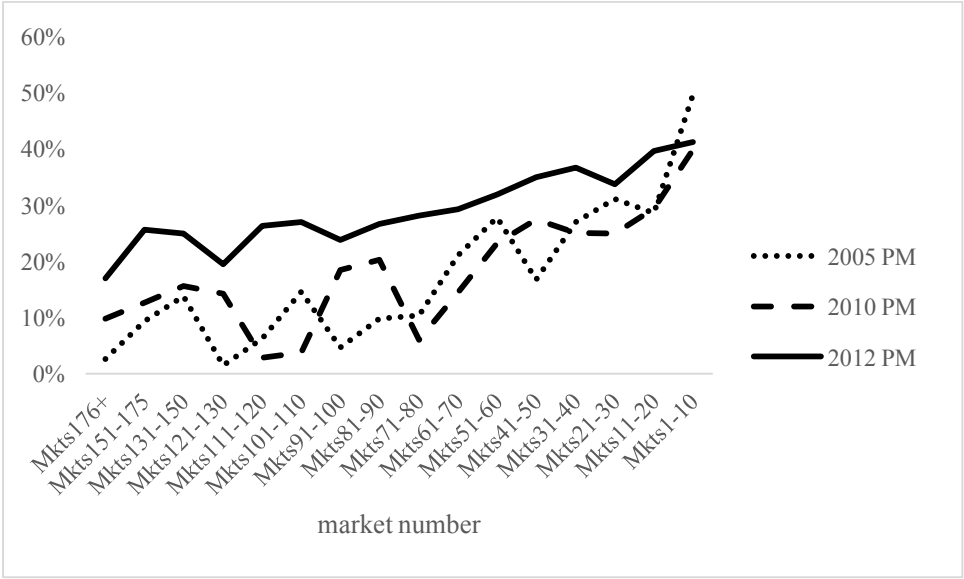

Figure 15. the Trend of Average Net Pre-tax Profit Margin in 2005, 2010 and 2012

Our results indicate that multi-platform competition in attention market and competition in local broadcast stations is positively associated with financial commitment on news production, which supported Lacy's (1992) financial commitment model. The positive relationship between financial commitment and financial performance is also found in study. This study also found the positive relationship between competition and financial performance. One interpretation of this finding is that because the market groups of large cities usually have stations with better financial performance and intense competition, the relationship between competition and financial performance is found to be positive. Another interpretation is that, as mentioned previously, competition among local stations tends to turn from highly concentrated toward moderately concentrated. In the environment of moderately concentrated competition, the financial performance of markets increases as competition increases.

CHAPTER 6

DISCUSSION AND CONCLUSION

Summary and Discussion of Major Findings

The results of this study provide new insights about the change of competition in past few years. In the aspect of attention markets, which contain broadcast stations, cable and other media platforms, the multi-platform competition in attention markets in current era is higher than 10 years ago. The total audience shares in a market are lower than they were in 2005, because fewer people are watching programs on television.

As scholars mentioned, perhaps audience fragmentation is the best explanation for "the decline of the Big Three (ABC, NBC, CBS) broadcast networks' share of television audience" (Napoli, 2001, p.136). Media audiences are widely distributed because of the growing number of media platforms and the multiple content options that are delivered by a medium. Two forms of audience fragmentation exist, intermedia fragmentation and intramedia fragmentation (Napoli, 2001). Intermedia fragmentation refers to the growing number of media platforms that provide an audience with more options to consume (Napoli, 2001). Intermedia fragmentation explains the decreased audience shares in broadcast stations and increased multi-platform competition in attention markets. For example, consumers can choose other media for watching TV programs, such as Netflix and YouTube, so the audience share of broadcast stations decreases.

In the aspect of direct competition between local broadcast stations, the competition level in first 80 markets is the same as 10 years ago, and the competition level has increased in the rest of markets. The competition in local stations has turned from highly concentrated toward

moderately concentrated in markets whose sizes are smaller than Market 80. It indicates that local residents have more channels to select from when they are viewing television in these small markets.

Intramedia can explain the increasing competition in local stations among most of small markets in the U.S local broadcast television industry. Intramedia fragmentation refers to the development of a medium's capability to deliver multiple forms of content (Napoli, 2001). When more local stations are permitted in a market, the competition level should increase since more channels compete for limited numbers of households. With increasing number of local stations, residents have more channels to choose when they are watching broadcast programs.

As competition is one of the components of market structure, this study applied the S-C-P theory and found the relationship between competition, financial commitment, and financial performance. The S-C-P theory maintains that the market structure influences market conduct and then influences the financial performance. This study uses financial commitment to measure the market conduct and use the financial performance to indicate market performance. In terms of personnel, this study found that the staff size on average in the television industry was shrinking. Other studies, such as Pew's State of the News Media 2011 report and RTDNA/ Hofstra Annual Survey, have acknowledged the trend of shrinking staff size in television industry. In terms of news expenses, this study found that the percentage of news production out of operational expenses decreased over eight years. One possible explanation is that because the television industry hired multimedia reporters and asked reporters to improve their efficiency. In research on changing newsroom condition, reporters have described being required in recent years to produce a larger number of stories per day (Waldman, 2011). With multimedia reporters, television stations also reduced the size of their camera crews and recording crews and, thus, reduced their expenses

toward paying salaries. However, whether local stations replace newsroom staff as multimedia reports can not be told through the data analysis in this study. This study established the links between competition and the percentage of news production out of operational expenses, and suggested further research goes into surveys or interviews to learn specific changes in television industry.

In terms of financial performance, this study found that the net revenue, cash flow and pre-tax profit margins fluctuate from 2005 to 2013. The increase of revenue and profit was largely influenced by the election events in 2010 and 2012, because of the influx of political advertising revenue. The results of correlation test indicate that multi-platform competition and local stations' competition had positive relationships with variables that measured the financial performance. We also observe that profits and revenue of affiliates are also influenced by other factors, such as the trend of advertising spending and political events, which is supported by other scholars' research (Waldman, 2011). This study found that the net pre-tax profit-margins basically remained the same over eight years, although the trend of net revenue dropped. The steady net pre-tax profit margins indicate that managers in affiliate station focus on the balance of revenue and expenses, which will benefit for the financial performance of these stations. However, in terms of journalism, these stations might put more efforts in news expenses and improve the quality of news which might bring them more revenue from advertising.

Limitations and Suggestions for Future Studies

Compared with former studies, this study provides new insights about changing trends of competition and related influence in the past ten years. Chan-Olmsted (1991) found that there was "a steady increase of concentration in the syndication industry" during the 1990s. This study found that the competition among local broadcast stations maintained the same in the top 80 markets

while the competition has increased steadily in the rest of the small markets. This study also supported to the S-C-P model, and used the variables of cash flow and pre-tax profit margins to measure financial performance, which were seldom mentioned in previous research.

The study is intended to update Lacy's financial commitment model (1992) and test the relationship between competition and financial performance. Lacy's (1992) conceptual model proposed that the media would commit more money on news production, when the competition increased in markets. This study found that the percentage of news expenses out of operational expenses is positively associated with competition in market. However, when we compare the change of national average, it was found that the news expenses decrease, and competition level increases. One possible interpretation of these findings is because the development of technology, cameras and other media equipment have become lighter and cheaper. To a local station, it might hire multimedia reporters who know news photography and video editing to reduce their expenses on hiring video crews specifically. Local stations can reduce expenses of buying equipment and hiring staff without hindering news quality.

This study provided to the industry with references and insights that can be used by managers in local stations. This study describes the big picture of the changing trend in market structure. Managers would learn the changing trend of the broadcast industry from this study and find evidence to support their decisions. For example, when competition increases in markets, local stations can reduce their expenses and improve their staff efficiency to maintain or increase their profit margins.

As all with data analysis, some limitations were present in the research design of this study. One of the flaws was that the sample years were not evenly distributed. This study selected the years of 2005, 2010, 2012 and 2013 to understand the trends of revenue and profits. Among these

four years, the revenue in 2010 and 2012 was impacted by the political events. Political events impacted financial performance, and, while this study could not control its impact, which weakened the argument of this study. Another limitation was that the data that was analyzed in this study were placed into 16 groups, and the markets in groups were not evenly divided. Analysis of aggregated data might lose some details about each station in DMA markets. However, the way to group the data is matched with the source of financial data, which is provided by the *Television Financial Report: Industry Business Report*. Only if we group the HHI index into 16 groups, could we test the correlation between financial performance and competition.

This study contributes research on the relationship between competition and financial performance in broadcast industry, which is blank in this field, and updated Lacy's financial commitment model based on current market environment. Future studies can focus on the research and measurements on market conduct. The market conduct, which is one of the element in S-C-P model, provides details on companies' reactions to face more intense competition. If future research can combine the change of competition intensity with companies' strategies and the profits, managers in the television industry can get more practical suggestions. Scholars can also develop other ways to measure financial commitment because a lower news budget or news expenses might not indicate lower efforts that was required to create news production in the era.

This study might provide new insights for managers of local stations and scholars and help them to know the big picture of increasing competition and market structure. With learning the trend of competition in the past few years, we can tell that new technologies, such as the creation of social media and the design of easy-to-use editing software, have changed the industry. New changes are occurring every day and both scholars and businesses need to prepare for them.

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APPENDIX A

The List of Market Number and Market Name in 2005, 2010 and 2012

Table 6
The List of Market Number and Market Name in 2005

Market Number	Market Name
1	NEW YORK
2	LOS ANGELES
3	CHICAGO
4	PHILADEPHIA
5	BOSTON
6	SAN FRANCISCO-OAKLAND- SAN JOSE
7	DALLAS-FT.WORTH
8	WASHINGTON
9	ATLANTA
10	HOUSTON
11	DETROIT
12	TAMPA-ST.PETERSBURGE
13	SEATTLE-TACOMA
14	PHOENIX
15	MINNEAPOLIS-ST.PAUL
16	CLEVELAND
17	MIAMI-FT.LAUDERDALE
18	DENVER
19	SACRAMENTO-STOCKTON-MODESTO
20	ORLANDO-DAYTONA BEACH-MELBOURNE
21	ST.LOUIS
22	PITTSBURGH
23	PORTLAND
24	BALTIMORE
25	INDIANAPOLIS
26	SAN DIEGO
27	CHARLOTTE
28	HARTFORD-NEW HAVEN
29	RALEIGH-DURHAM
30	NASHVILLE
31	KANSAS CITY
32	COLUMBUS
33	MILWAUKEE
34	CINCINNATI
35	GREENVILLE-SPARTANBURG-ASHEVILLE-ANDERSON

Market Number	Market Name
36	SALT LAKE CITY
37	SAN ANTONIO
38	WEST PALM BEACH-FT.PIERCE
39	GRAND RAPIDS-KALAMAZOO-BATTLE CREEK
40	BIRMINGHAM
41	HARRISBURG-LANCASTER-LEBEANON-YORK
42	NORFOLK-PORTSMOUTH-NEWPORT NEWS
43	NEW ORLEANS
44	MEMPHIS
45	OKLAHOMA
46	ALBUQUERQUE-SANTA FE
47	GREENSBORO-HIGH POINT-WINSTON SALEM
48	LAS VEGAS
49	BUFFALO
50	LOUISVILLE
51	PROVIDENCE-NEW BEDFORD
52	JACKSONVILLE
53	AUSTIN
54	WILKES BARRE-SCRANTON
55	ALBANY-SCHENECTADY-TROY
56	FRESNO-VISALIA
57	LITTLE ROCK-PINE BLUFF
58	KNOXVILLE
59	DAYTON
60	RICHMOND-PETERSBURG
61	TULSA
62	MOBILE-PENSACOLA
63	LEXINGTON
64	CHARLESTON-HUNTINGTON
65	FLINT-SAGINAW-BAY CITY
66	FT.MYERS-NAPLES
67	WICHITA-HUTCHINSON
68	ROANOKE-LYNCHBURG
69	GREEN BAY-APPLETON
70	TOLEDO
71	TUCSON
72	HONOLULU
73	DES MOINES-AMES
74	PORTLAND-AUBURN
75	OMAHA
76	SYRACUSE
77	SPRINGFIELD
78	SPOKANE
79	ROCHESTER
80	PADUCAH-CAPE DIRARDEAU-HARRISBURG-MT.VERNON

Market Number	Market Name
81	SHEREVEPORT
82	CHAMPAIGN-SPRINGFIELD-DECATUR
83	COLUMBIA
84	HUNTSVILLE-DECATUR
85	MADISON
86	CHATTANOOGA
87	SOUTH BEND-ELKHART
88	CEDAR RAPIDS-WATERLOO-DUBUQUE
89	JACKSON
90	BURLINGTON-PLATTSBURGE
91	TRI-CITIES
92	HARLINGEN-WESLACO-BROWNSVILLE-MCALLEN
93	COLORADO SPRINGS-PUEBLO
94	WACO-TEMPLE-BRYAN
95	DAVENPORT-ROCK ISLAND-MOLINE
96	BATON BOUGE
97	SAVANNAH
98	JOHNSTOWN-ALTOONA
99	EL PASO
100	EVANSVILLE
101	CHARLESTON
102	YOUNGSTOWN
103	LINCOLN&HASTINGS-KEARNEY
104	FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS
105	GREENVILLE-NEW BERN-WASHINGTON
106	FT.WAYNE
107	MYRTLE BEACH-FLORENCE
108	SPRINGFIELD-HOLYOKE
109	TALLAHASSEE-THOMASVILLE
110	LANSING
111	TYLER-LONGVIEW
112	RENO
113	TRAVERSE CITY-CADILLAC
114	SIOUX FALLS
115	AUGUSTA-AIKEN
116	MONTGOMERY
117	PEORIA-BLOOMINGTON
118	FARGO-VALLEY CITY
119	BOISE
120	MACON
121	EUGENE
122	SANTA BARBARA-SANTA MARIA-SAN LUIS OBISPO
123	LA CROSSE-EAU CLAIRE
124	LAFAYETTE
125	MONTEREY-SALINAS

Market Number	Market Name
126	YAKIMA-PASCO-RICHLAND-KENNEWICK
127	COLUMBUS
128	BAKERSFIELD
129	CORPUS
130	CHICO-REDDING
131	AMARILLO
132	COLUMBUS-TUPELO-WEST POINT
133	ROCKFORD
134	WAUSAU-RHINELANDER
135	MONROE-EL DORADO
136	TOPEKA
137	DULUTH-SUPERIOR
138	COLUMBIA-JEFFERSON CITY
139	WILMINGTON
140	BEAUMONT-PORT ARTHUR
141	MEDFORD-KLAMATH FALLS
142	ERIE
143	SIOUX CITY
144	WICHITA FALL&LAWTON
145	JOPLIN-PITTSBURG
146	LUBBOCK
147	ALBANY
148	SALISBURY
149	BLUEFIELD-BECKLEY-OAK HILL
150	TERRE HAUTE
151	BANGOR
152	ROCHESTER-MASON CITY-AUSTIN
153	PALM SPRINGS
154	WHEELING-STEUBENVILLE
155	ANCHORAGE
156	BINGHAMTON
157	PANAMA CITY
158	BILOXI-GULFPORT
159	ODESSA-MIDLAND
160	MINOT-BISMARCK-DICKINSON
161	SHERMAN-ADA
162	GAINESVILLE
163	IDAHO FALLS-POCATELLO
164	ABILENE-SWEETWATER
165	CLARKSBURG-WESTON
166	UTICA
167	HATTIESBURG-LAUREL
168	MISSOULA
169	QUINCY-HANNIBAL-KEOKUK
170	YUMA-EL CENTRO

Market Number	Market Name
171	BILLINGS
172	DOTHAN
173	ELMIRA
174	JACKSON
175	LAKE CHARLES
176	ALEANDRIA
177	RAPID CITY
178	WATERTOWN
179	JONESBORO
180	MARQUETTE
181	HARRISONBURG
182	GREENWOOD-GREENVILLE
183	BOWLING GREEN
184	MERIDIAN
185	LIMA
186	CHARLOTTESVILLE
187	GRAND JUNCTION-MONTROSE
188	LAREDO
189	GREAT FALLS
190	PARKERSBURG
191	LAFAYETTE
192	TWIN FALLS
193	BUTTE-BOZEMAN
194	EUREKA
195	CHEYENNE-SCOTTSBLUFF
196	BEND
197	SAN ANGELO
198	CASPER-RIVERTON
199	OTTUMWA-KIRKSVILLE
200	MANKATO
201	ST.JOSEPH
202	ZANESVILLE
203	FAIRBANKS
204	PRESQUE ISLE
205	VICTORIA
206	HELENA
207	JUNEAU
208	ALPENA
209	NORTH PLATTE
210	GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2006

Table 7
The List of Market Number and Market Name in 2010

Market Number	Market Name
1	NEW YORK
2	LOS ANGELES
3	CHICAGO
4	PHILADEPHIA
5	DALLAS-FT.WORTH
6	SAN FRANCISCO-OAKLAND- SAN JOSE
7	BOSTON
8	ATLANTA
9	WASHINGTON
10	HOUSTON
11	DETROIT
12	PHOENIX
13	SEATTLE-TACOMA
14	TAMPA-ST.PETERSBURGE
15	MINNEAPOLIS-ST.PAUL
16	DENVER
17	MIAMI-FT.LAUDERDALE
18	CLEVELAND
19	ORLANDO-DAYTONA BEACH-MELBOURNE
20	SACRAMENTO-STOCKTON-MODESTO
21	ST.LOUIS
22	PORTLAND
23	PITTSBURGH
24	CHARLOTTE
25	INDIANAPOLIS
26	RALEIGH-DURHAM
27	BALTIMORE
28	SAN DIEGO
29	NASHVILLE
30	HARTFORD-NEW HAVEN
31	SALT LAKE CITY
32	KANSAS CITY
33	CINCINNATI
34	COLUMBUS
35	MILWAUKEE
36	GREENVILLE-SPARTANBURG-ASHEVILLE-ANDERSON
37	SAN ANTONIO
38	WEST PALM BEACH-FT.PIERCE
39	HARRISBURG-LANCASTER-LEBEANON-YORK
40	BIRMINGHAM
41	GRAND RAPIDS-KALAMAZOO-BATTLE CREEK
42	LAS VEGAS

Market Number	Market Name
43	NORFOLK-PORTSMOUTH-NEWPORT NEWS
44	ALBUQUERQUE-SANTA FE
45	OKLAHOMA
46	GREENSBORO-HIGH POINT-WINSTON SALEM
47	JACKSONVILLE
48	AUSTIN
49	LOUISVILLE
50	MEMPHIS
51	NEW ORLEANS
52	BUFFALO
53	PROVIDENCE-NEW BEDFORD
54	WILKES BARRE-SCRANTON
55	FRESNO-VISALIA
56	LITTLE ROCK-PINE BLUFF
57	ALBANY-SCHENECTADY-TROY
58	RICHMOND-PETERSBURG
59	KNOXVILLE
60	MOBILE-PENSACOLA
61	TULSA
62	LEXINGTON
63	CHARLESTON-HUNTINGTON
64	FT.MYERS-NAPLES
65	DAYTON
66	TUCSON
67	ROANOKE-LYNCHBURG
68	FLINT-SAGINAW-BAY CITY
69	WICHITA-HUTCHINSON
70	GREEN BAY-APPLETON
71	HONOLULU
72	DES MOINES-AMES
73	TOLEDO
74	SPRINGFIELD
75	SPOKANE
76	OMAHA
77	PORTLAND-AUBURN
78	PADUCAH-CAPE DIRARDEAU-HARRISBURG-MT.VERNON
79	COLUMBIA
80	ROCHESTER
81	HUNTSVILLE-DECATUR
82	SHEREVEPORT
83	SYRACUSE
84	CHAMPAIGN-SPRINGFIELD-DECATUR
85	MADISON
86	CHATTANOOGA
87	HARLINGEN-WESLACO-BROWNSVILLE-MCALLEN

Market Number	Market Name
88	CEDAR RAPIDS-WATERLOO-DUBUQUE
89	WACO-TEMPLE-BRYAN
90	JACKSON
91	SOUTH BEND-ELKHART
92	COLORADO SPRINGS-PUEBLO
93	TRI-CITIES
94	BURLINGTON-PLATTSBURGE
95	BATON BOUGE
96	SAVANNAH
97	CHARLESTON
98	EL PASO
99	DAVENPORT-ROCK ISLAND-MOLINE
100	FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS
101	JOHNSTOWN-ALTOONA
102	EVANSVILLE
103	GREENVILLE-NEW BERN-WASHINGTON
104	MYRTLE BEACH-FLORENCE
105	LINCOLN&HASTINGS-KEARNEY
106	TALLAHASSEE-THOMASVILLE
107	FT.WAYNE
108	RENO
109	TYLER-LONGVIEW
110	YOUNGSTOWN
111	SPRINGFIELD-HOLYOKE
112	BOISE
113	SIOUX FALLS
114	AUGUSTA-AIKEN
115	LANSING
116	PEORIA-BLOOMINGTON
117	TRAVERSE CITY-CADILLAC
118	MONTGOMERY
119	EUGENE
120	SANTA BARBARA-SANTA MARIA-SAN LUIS OBISPO
121	FARGO-VALLEY CITY
122	MACON
123	LAFAYETTE
124	MONTEREY-SALINAS
125	BAKERSFIELD
126	YAKIMA-PASCO-RICHLAND-KENNEWICK
127	LA CROSSE-EAU CLAIRE
128	COLUMBUS
129	CORPUS
130	CHICO-REDDING
131	AMARILLO
132	WILMINGTON

Market Number	Market Name
133	COLUMBUS-TUPELO-WEST POINT
134	ROCKFORD
135	WAUSAU-RHINELANDER
136	TOPEKA
137	COLUMBIA-JEFFERSON CITY
138	MONROE-EL DORADO
139	DULUTH-SUPERIOR
140	MEDFORD-KLAMATH FALLS
141	BEAUMONT-PORT ARTHUR
142	PALM SPRINGS
143	LUBBOCK
144	SALISBURY
145	ALBANY
146	ERIE
147	JOPLIN-PITTSBURG
148	SIOUX CITY
149	WICHITA FALL&LAWTON
150	ANCHORAGE
151	PANAMA CITY
152	TERRE HAUTE
153	ROCHESTER-MASON CITY-AUSTIN
154	BANGOR
155	ODESSA-MIDLAND
156	BLUEFIELD-BECKLEY-OAK HILL
157	BINGHAMTON
158	MINOT-BISMARCK-DICKINSON
159	WHEELING-STEUBENVILLE
160	GAINESVILLE
161	SHERMAN-ADA
162	IDAHO FALLS-POCATELLO
163	BILOXI-GULFPORT
164	YUMA-EL CENTRO
165	ABILENE-SWEETWATER
166	MISSOULA
167	HATTIESBURG-LAUREL
168	CLARKSBURG-WESTON
169	BILLINGS
170	UTICA
171	QUINCY-HANNIBAL-KEOKUK
172	DOTHAN
173	JACKSON
174	RAPID CITY
175	LAKE CHARLES
176	ELMIRA
177	WATERTOWN

Market Number	Market Name
178	HARRISONBURG
179	ALEANDRIA
180	MARQUETTE
181	JONESBORO
182	BOWLING GREEN
183	CHARLOTTESVILLE
184	GRAND JUNCTION-MONTROSE
185	MERIDIAN
186	LIMA
187	GREENWOOD-GREENVILLE
188	LAREDO
189	BEND
190	BUTTE-BOZEMAN
191	LAFAYETTE
192	GREAT FALLS
193	TWIN FALLS
194	PARKERSBURG
195	EUREKA
196	CASPER-RIVERTON
197	CHEYENNE-SCOTTSBLUFF
198	SAN ANGELO
199	MANKATO
200	OTTUMWA-KIRKSVILLE
201	ST.JOSEPH
202	FAIRBANKS
203	ZANESVILLE
204	VICTORIA
205	PRESQUE ISLE
206	HELENA
207	JUNEAU
208	ALPENA
209	NORTH PLATTE
210	GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2011

Table 8
The List of Market Number and Market Name in 2012

Market Number	Market Name
1	NEW YORK
2	LOS ANGELES
3	CHICAGO
4	PHILADEPHIA
5	DALLAS-FT.WORTH
6	SAN FRANCISCO-OAKLAND- SAN JOSE
7	BOSTON
8	WASHINGTON
9	ATLANTA
10	HOUSTON
11	DETROIT
12	SEATTLE-TACOMA
13	PHOENIX
14	TAMPA-ST.PETERSBURGE
15	MINNEAPOLIS-ST.PAUL
16	MIAMI-FT.LAUDERDALE
17	DENVER
18	CLEVELAND
19	ORLANDO-DAYTONA BEACH-MELBOURNE
20	SACRAMENTO-STOCKTON-MODESTO
21	ST.LOUIS
22	PORTLAND
23	PITTSBURGH
24	RALEIGH-DURHAM
25	CHARLOTTE
26	INDIANAPOLIS
27	BALTIMORE
28	SAN DIEGO
29	NASHVILLE
30	HARTFORD-NEW HAVEN
31	KANSAS CITY
32	COLUMBUS
33	SALT LAKE CITY
34	MILWAUKEE
35	CINCINNATI
36	SAN ANTONIO
37	GREENVILLE-SPARTANBURG-ASHEVILLE-ANDERSON
38	WEST PALM BEACH-FT.PIERCE
39	GRAND RAPIDS-KALAMAZOO-BATTLE CREEK
40	LAS VEGAS
41	OKLAHOMA

Market Number	Market Name
42	BIRMINGHAM
43	HARRISBURG-LANCASTER-LEBEANON-YORK
44	NORFOLK-PORTSMOUTH-NEWPORT NEWS
45	AUSTIN
46	GREENSBORO-HIGH POINT-WINSTON SALEM
47	ALBUQUERQUE-SANTA FE
48	LOUISVILLE
49	MEMPHIS
50	JACKSONVILLE
51	NEW ORLEANS
52	BUFFALO
53	PROVIDENCE-NEW BEDFORD
54	WILKES BARRE-SCRANTON
55	FRESNO-VISALIA
56	LITTLE ROCK-PINE BLUFF
57	RICHMOND-PETERSBURG
58	ALBANY-SCHENECTADY-TROY
59	TULSA
60	MOBILE-PENSACOLA
61	KNOXVILLE
62	FT.MYERS-NAPLES
63	DAYTON
64	LEXINGTON
65	CHARLESTON-HUNTINGTON
66	WICHITA-HUTCHINSON
67	FLINT-SAGINAW-BAY CITY
68	ROANOKE-LYNCHBURG
69	GREEN BAY-APPLETON
70	TUCSON
71	HONOLULU
72	DES MOINES-AMES
73	SPOKANE
74	SPRINGFIELD
75	OMAHA
76	TOLEDO
77	COLUMBIA
78	ROCHESTER
79	HUNTSVILLE-DECATUR
80	PORTLAND-AUBURN
81	PADUCAH-CAPE GIRARDEAU-HARRISBURG-MT.VERNON
82	SHEREVEPORT
83	CHAMPAIGN-SPRINGFIELD-DECATUR
84	SYRACUSE
85	MADISON
86	HARLINGEN-WESLACO-BROWNSVILLE-MCALLEN

Market Number	Market Name
87	CHATTANOOGA
88	WACO-TEMPLE-BRYAN
89	COLORADO SPRINGS-PUEBLO
90	CEDAR RAPIDS-WATERLOO-DUBUQUE
91	EL PASO
92	SAVANNAH
93	JACKSON
94	BATON BOUGE
95	SOUTH BEND-ELKHART
96	TRI-CITIES
97	BURLINGTON-PLATTSBURGE
98	CHARLESTON
99	DAVENPORT-ROCK ISLAND-MOLINE
100	GREENVILLE-NEW BERN-WASHINGTON
101	FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS
102	JOHNSTOWN-ALTOONA
103	MYRTLE BEACH-FLORENCE
104	EVANSVILLE
105	LINCOLN&HASTINGS-KEARNEY
106	TALLAHASSEE-THOMASVILLE
107	TYLER-LONGVIEW
108	RENO
109	FT.WAYNE
110	YOUNGSTOWN
111	BOISE
112	SIOUX FALLS (MITCHELL)
113	AUGUSTA-AIKEN
114	SPRINGFIELD-HOLYOKE
115	LANSING
116	PEORIA-BLOOMINGTON
117	FARGO-VALLEY CITY
118	MONTGOMERY
119	TRAVERSE CITY-CADILLAC
120	MACON
121	EUGENE
122	SANTA BARBARA-SANTA MARIA- SAN LUIS OBISPO
123	YAKIMA-PASCO-RICHLAND-KENNEWICK
124	LAFAYETTE
125	MONTEREY-SALINAS
126	BAKERSFIELD
127	COLUMBUS
128	LA CROSSE-EAU CLAIRE
129	CORPUS
130	AMARILLO
131	CHICO-REDDING

Market Number	Market Name
132	WILMINGTON
133	COLUMBUS-TUPELO-WEST POINT
134	WAUSAU-RHINELANDER
135	ROCKFORD
136	TOPEKA
137	MONROE-EL DORADO
138	COLUMBIA-JEFFERSON CITY
139	DULUTH-SUPERIOR
140	MEDFORD-KLAMATH FALLS
141	BEAUMONT-PORT ARTHUR
142	LUBBOCK
143	WICHITA FALL&LAWTON
144	SALISBURY
145	ANCHORAGE
146	ERIE
147	SIOUX CITY
148	PALM SPRINGS
149	JOPLIN-PITTSBURG
150	ALBANY
151	MINOT-BISMARCK-DICKINSON
152	ODESSA-MIDLAND
153	ROCHESTER-MASON CITY-AUSTIN
154	TERRE HAUTE
155	BANGOR
156	BLUEFIELD-BECKLEY-OAK HILL
157	BINGHAMTON
158	WHEELING-STEUBENVILLE
159	PANAMA CITY
160	BILOXI-GULFPORT
161	SHERMAN-ADA
162	IDAHO FALLS-POCATELLO
163	GAINESVILLE
164	ABILENE-SWEETWATER
165	YUMA-EL CENTRO
166	MISSOULA
167	HATTIESBURG-LAUREL
168	BILLINGS
169	DOTHAN
170	CLARKSBURG-WESTON
171	QUINCY-HANNIBAL-KEOKUK
172	UTICA
173	RAPID CITY
174	ELMIRA
175	LAKE CHARLES
176	JACKSON

Market Number	Market Name
177	WATERTOWN
178	HARRISONBURG
179	ALEXANDRIA
180	MARQUETTE
181	JONESBORO
182	BOWLING GREEN
183	CHARLOTTESVILLE
184	LAREDO
185	GRAND JUNCTION-MONTROSE
186	MERIDIAN
187	BUTTE-BOZEMAN
188	GREENWOOD-GREENVILLE
189	LAFAYETTE
190	GREAT FALLS
191	TWIN FALLS
192	BEND
193	PARKERSBURG
194	EUREKA
195	CHEYENNE-SCOTTSBLUFF
196	SAN ANGELO
197	CASPER-RIVERTON
198	MANKATO
199	LIMA
200	OTTUMWA-KIRKSVILLE
201	ST.JOSEPH
202	FAIRBANKS
203	ZANESVILLE
204	VICTORIA
205	PRESQUE ISLE
206	HELENA
207	JUNEAU
208	ALPENA
209	NORTH PLATTE
210	GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2013

APPENDIX B

The List of Market Names in Market Groups in 2005, 2010 and 2012

Table 9

The List of Market Names in Market Groups in 2005

Market Groups	Market Name
Market 1-10	NEW YORK, LOS ANGELES, CHICAGO, PHILADEPHIA, BOSTON, SAN FRANCISCO-OAKLAND- SAN JOSE, DALLAS-FT.WORTH, DALLAS-FT.WORTH, WASHINGTON, HOUSTON
Market 11-20	DETROIT, TAMPA-ST.PETERSBURGE, SEATTLE-TACOMA, PHOENIX, MINNEAPOLIS-ST.PAUL, CLEVELAND, DENVER, SACRAMENTO-STOCKTON-MODESTO, ORLANDO-DAYTONA BEACH-MELBOURNE
Market 21-30	ST.LOUIS, PITTSBURGH, PORTLAND, BALTIMORE, INDIANAPOLIS, SAN DIEGO, CHARLOTTE, HARTFORD-NEW HAVEN, RALEIGH-DURHAM, NASHVILLE
Market 31-40	KANSAS CITY, COLUMBUS, COLUMBUS, MILWAUKEE, CINCINNATI, GREENVILLE-SPARTANBURG-ASHEVILL, ANDERSON, SALT LAKE CITY, SAN ANTONIO, GRAND RAPIDS-KALAMAZOO-BATTLE CREEK, BIRMINGHAM
Market 41-50	HARRISBURG-LANCASTER-LEBEANON-YORK, NORFOLK-PORTSMOUTH-NEWPORT NEWS, MEMPHIS, OKLAHOMA, ALBUQUERQUE-SANTA FE, GREENSBORO-HIGH POINT-WINSTON SALEM, LAS VEGAS, BUFFALO, LOUISVILLE
Market 51-60	PROVIDENCE-NEW BEDFORD, JACKSONVILLE, AUSTIN, WILKES BARRE-SCRANTON, ALBANY-SCHENECTADY-TROY, FRESNO-VISALIA, LITTLE ROCK-PINE BLUFF, KNOXVILLE, DAYTON, RICHMOND-PETERSBURG
Market 61-70	TULSA, MOBILE-PENSACOLA, LEXINGTON, CHARLESTON-HUNTINGTON, FLINT-SAGINAW-BAY CITY,

	FT.MYERS-NAPLES, WICHITA-HUTCHINSON, ROANOKE-LYNCHBURG, GREEN BAY-APPLETON, TOLEDO
Market Groups	**Market Name**
Market 71-80	TUCSON, HONOLULU, DES MOINES-AMES, PORTLAND-AUBURN, OMAHA, SYRACUSE, SPRINGFIELD, SPOKANE, ROCHESTER, PADUCAH-CAPE DIRARDEAU-HARRISBURG-MT.VERNON
Market 81-90	SHEREVEPORT, CHAMPAIGN-SPRINGFIELD-DECATUR, COLUMBIA, HUNTSVILLE-DECATUR, MADISON, CHATTANOOGA, SOUTH BEND-ELKHART, CEDAR RAPIDS-WATERLOO-DUBUQUE, JACKSON, BURLINGTON-PLATTSBURGE
Market 91-100	TRI-CITIES, HARLINGEN-WESLACO-BROWNSVILLE-MCALLEN, COLORADO SPRINGS-PUEBLO, WACO-TEMPLE-BRYAN, DAVENPORT-ROCK ISLAND-MOLINE, DAVENPORT-ROCK ISLAND-MOLINE, BATON BOUGE, SAVANNAH, JOHNSTOWN-ALTOONA, EL PASO, EVANSVILLE
Market 101-110	CHARLESTON, YOUNGSTOWN, LINCOLN&HASTINGS-KEARNEY, FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS, GREENVILLE-NEW BERN-WASHINGTON, FT.WAYNE, MYRTLE BEACH-FLORENCE, SPRINGFIELD-HOLYOKE, TALLAHASSEE-THOMASVILLE, LANSING
Market 111-120	TYLER-LONGVIEW, RENO, TRAVERSE CITY-CADILLAC, SIOUX FALLS, AUGUSTA-AIKEN, MONTGOMERY, PEORIA-BLOOMINGTON, FARGO-VALLEY CITY, BOISE, MACON
Market 121-130	EUGENE, SANTA BARBARA-SANTA MARIA-SAN LUIS OBISPO, LA CROSSE-EAU CLAIRE, LAFAYETTE, MONTEREY-SALINAS, YAKIMA-PASCO-RICHLAND-

	KENNEWICK, COLUMBUS, BAKERSFIELD, CORPUS, CHICO-REDDING
Market Groups	**Market Name**
Market 131-150	AMARILLO, COLUMBUS-TUPELO-WEST POINT, ROCKFORD, WAUSAU-RHINELANDER, MONROE-EL DORADO, TOPEKA, DULUTH-SUPERIOR, COLUMBIA-JEFFERSON CITY, WILMINGTON, BEAUMONT-PORT ARTHUR, MEDFORD-KLAMATH FALLS, ERIE, SIOUX CITY, WICHITA FALL&LAWTON, JOPLIN-PITTSBURG, LUBBOCK, ALBANY, SALISBURY, BLUEFIELD-BECKLEY-OAK HILL, TERRE HAUTE
Market 151-175	BANGOR, ROCHESTER-MASON CITY-AUSTIN, PALM SPRINGS, WHEELING-STEUBENVILLE, ANCHORAGE, BINGHAMTON, PANAMA CITY, ODESSA-MIDLAND, MINOT-BISMARCK-DICKINSON, SHERMAN-ADA, GAINESVILLE, IDAHO FALLS-POCATELLO, ABILENE-SWEETWATER, CLARKSBURG-WESTON, UTICA, HATTIESBURG-LAUREL, MISSOULA, QUINCY-HANNIBAL-KEOKUK, YUMA-EL CENTRO, BILLINGS, DOTHAN, ELMIRA, JACKSON, LAKE CHARLES
Market 176+	ALEANDRIA, RAPID CITY, WATERTOWN, JONESBORO, MARQUETTE, HARRISONBURG, GREENWOOD-GREENVILLE, BOWLING GREEN, MERIDIAN, LIMA CHARLOTTESVILLE, GRAND JUNCTION-MONTROSE, LAREDO, GREAT FALLS, PARKERSBURG, LAFAYETTE, TWIN FALLS, BUTTE-BOZEMAN, EUREKA, CHEYENNE-SCOTTSBLUFF, BEND, SAN ANGELO, CASPER-RIVERTON, OTTUMWA-KIRKSVILLE, MANKATO, ST. JOSEPH, ZANESVILLE, FAIRBANKS, PRESQUE ISLE, VICTORIA, HELENA, JUNEAU, ALPENA, NORTH PLATTE, GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2006

Table 10

The list of market names in market groups in 2010

Market Groups	Market Name
Market 1-10	NEW YORK, LOS ANGELES, CHICAGO, PHILADEPHIA, DALLAS-FT.WORTH, SAN FRANCISCO-OAKLAND- SAN JOSE, BOSTON, WASHINGTON, ATLANTA, HOUSTON
Market 11-20	DETROIT, SEATTLE-TACOMA, PHOENIX, TAMPA-ST.PETERSBURGE, MINNEAPOLIS-ST.PAUL, MIAMI-FT.LAUDERDALE, DENVER, CLEVELAND, ORLANDO-DAYTONA BEACH-MELBOURNE, SACRAMENTO-STOCKTON-MODESTO
Market 21-30	ST.LOUIS, PORTLAND, PITTSBURGH, RALEIGH-DURHAM, CHARLOTTE, INDIANAPOLIS, BALTIMORE, SAN DIEGO, NASHVILLE, HARTFORD-NEW HAVEN
Market 31-40	KANSAS CITY, COLUMBUS, SALT LAKE CITY, MILWAUKEE, CINCINNATI, SAN ANTONIO, GREENVILLE-SPARTANBURG-ASHEVILLE-ANDERSON, WEST PALM BEACH-FT.PIERCE, GRAND RAPIDS-KALAMAZOO-BATTLE CREEK, LAS VEGAS
Market 41-50	OKLAHOMA, BIRMINGHAM, HARRISBURG-LANCASTER-LEBEANON-YORK, NORFOLK-PORTSMOUTH-NEWPORT NEWS, AUSTIN, GREENSBORO-HIGH POINT-WINSTON SALEM, ALBUQUERQUE-SANTA FE, LOUISVILLE, MEMPHIS, JACKSONVILLE
Market 51-60	NEW ORLEANS, BUFFALO, PROVIDENCE-NEW BEDFORD, WILKES BARRE-SCRANTON, FRESNO-VISALIA, LITTLE ROCK-PINE BLUFF, RICHMOND-PETERSBURG, ALBANY-SCHENECTADY-TROY, TULSA, MOBILE-PENSACOLA

Market Groups	Market Name
Market 61-70	KNOXVILLE, FT.MYERS-NAPLES, DAYTON, LEXINGTON, CHARLESTON-HUNTINGTON, WICHITA-HUTCHINSON, FLINT-SAGINAW-BAY CITY, ROANOKE-LYNCHBURG, GREEN BAY-APPLETON, TUCSON
Market 71-80	HONOLULU, DES MOINES-AMES, SPOKANE OMAHA, SPRINGFIELD, TOLEDO, COLUMBIA, ROCHESTER, HUNTSVILLE-DECATUR, PORTLAND-AUBURN
Market 81-90	PADUCAH-CAPE DIRARDEAU-HARRISBURG-MT.VERNON, SHERMAN-ADA, CHAMPAIGN-SPRINGFIELD-DECATUR, SYRACUSE, MADISON, HARLINGEN-WESLACO-BROWNSVILLE-MCALLEN, CHATTANOOGA, WACO-TEMPLE-BRYAN, COLORADO SPRINGS-PUEBLO, CEDAR RAPIDS-WATERLOO-DUBUQUE
Market 91-100	EL PASO, SAVANNAH, JACKSON, BATON BOUGE, SOUTH BEND-ELKHART, TRI-CITIES, BURLINGTON-PLATTSBURGE, CHARLESTON, DAVENPORT-ROCK ISLAND-MOLINE, GREENVILLE-NEW BERN-WASHINGTON
Market 101-110	FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS, JOHNSTOWN-ALTOONA, MYRTLE BEACH-FLORENCE, EVANSVILLE, LINCOLN&HASTINGS-KEARNEY, TALLAHASSEE-THOMASVILLE, TYLER-LONGVIEW, RENO, FT.WAYNE, YOUNGSTOWN
Market 111-120	BOISE, SIOUX FALLS, AUGUSTA-AIKEN, SPRINGFIEL-HOLYOKE, LANSING, PEORIA-BLOOMINGTON, FARGO-VALLEY CITY, MONTGOMERY, TRAVERSE CITY-CADILLAC, MACON
Market 121-130	EUGENE, SANTA BARBARA-SANTA MARIA-SAN LUIS OBISPO, YAKIMA-PASCO-RICHLAND-KENNEWICK, LAFAYETTE, MONTEREY-SALINAS, BAKERSFIELD,

	COLUMBUS, LA CROSSE-EAU CLAIRE, CORPUS, AMARILLO
Market Groups	**Market Name**
Market 131-150	CHICO-REDDING, WILMINGTON, COLUMBUS-TUPELO-WEST POINT, WAUSAU-RHINELANDER, ROCKFORD, TOPEKA, MONROE-EL DORADO, COLUMBIA-JEFFERSON CITY, DULUTH-SUPERIOR, MEDFORD-KLAMATH FALLS, BEAUMONT-PORT ARTHUR, LUBBOCK, WICHIT, FALL&LAWTON, SALISBURY, ANCHORAGE, ERIE, SIOUX CITY, PALM SPRINGS, JOPLIN-PITTSBURG, ALBANY
Market 151-175	MINOT-BISMARCK-DICKINSON, ODESSA-MIDLAND, ROCHESTER-MASON CITY-AUSTIN, TERRE HAUTE, BANGOR, BLUEFIELD-BECKLEY-OAK HILL, BINGHAMTON, WHEELING-STEUBENVILLE, PANAMA CITY, BILOXI-GULFPORT, SHEREVEPORT, IDAHO FALLS-POCATELLO, GAINESVILLE, ABILENE-SWEETWATER, YUMA-EL CENTRO, MISSOULA, HATTIESBURG-LAUREL, BILLINGS, DOTHAN, CLARKSBURG-WESTON, QUINCY-HANNIBAL-KEOKUK, UTICA, RAPID CITY, ELMIRA, LAKE CHARLES
Market 176+	JACKSON, WATERTOWN, HARRISONBURG, ALEANDRIA, MARQUETTE, JONESBORO, BOWLING GREEN, CHARLOTTESVILLE, LAREDO, GRAND JUNCTION-MONTROSE, MERIDIAN, BUTTE-BOZEMAN, GREENWOOD-GREENVILLE, LAFAYETTE, GREAT FALLS, TWIN FALLS BEND, PARKERSBURG, EUREKA, CHEYENNE-SCOTTSBLUFF, SAN ANGELO, CASPER-RIVERTON, MANKATO, LIMA, OTTUMWA-KIRKSVILLE, ST.JOSEPH, FAIRBANKS, ZANESVILLE, VICTORIA, PRESQUE ISLE, HELENA, JUNEAU, ALPENA, NORTH PLATTE, GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2011

Table 11

The list of market names in market groups in 2012

Market Groups	Market Name
Market 1-10	NEW YORK, LOS ANGELES, CHICAGO, PHILADEPHIA, DALLAS-FT.WORTH, SAN FRANCISCO-OAKLAND- SAN JOSE, BOSTON, WASHINGTON, ATLANTA, HOUSTON
Market 11-20	DETROIT, SEATTLE-TACOMA, PHOENIX, TAMPA-ST.PETERSBURGE, MINNEAPOLIS-ST.PAUL, MIAMI-FT.LAUDERDALE, DENVER, CLEVELAND, ORLANDO-DAYTONA BEACH-MELBOURNE, SACRAMENTO-STOCKTON-MODESTO
Market 21-30	ST.LOUIS, PORTLAND, PITTSBURGH, RALEIGH-DURHAM, CHARLOTTE, INDIANAPOLIS, BALTIMORE, SAN DIEGO, NASHVILLE, HARTFORD-NEW HAVEN
Market 31-40	KANSAS CITY, COLUMBUS, SALT LAKE CITY, MILWAUKEE, CINCINNATI, SAN ANTONIO, GREENVILLE-SPARTANBURG-ASHEVILLE-ANDERSON, WEST PALM BEACH-FT.PIERCE, GRAND RAPIDS-KALAMAZOO-BATTLE CREEK, LAS VEGAS
Market 41-50	OKLAHOMA, BIRMINGHAM, HARRISBURG-LANCASTER-LEBEANON-YORK, NORFOLK-PORTSMOUTH-NEWPORT NEWS, AUSTIN, GREENSBORO-HIGH POINT-WINSTON SALEM, ALBUQUERQUE-SANTA FE, LOUISVILLE, MEMPHIS, JACKSONVILLE
Market 51-60	NEW ORLEANS, BUFFALO, PROVIDENCE-NEW BEDFORD, WILKES BARRE-SCRANTON, FRESNO-VISALIA, LITTLE ROCK-PINE BLUFF, RICHMOND-PETERSBURG, ALBANY-SCHENECTADY-TROY, TULSA, MOBILE-PENSACOLA

Market Groups	Market Name
Market 61-70	KNOXVILLE, FT.MYERS-NAPLES, DAYTON, LEXINGTON, CHARLESTON-HUNTINGTON, WICHITA-HUTCHINSON, FLINT-SAGINAW-BAY CITY, ROANOKE-LYNCHBURG, GREEN BAY-APPLETON, TUCSON
Market 71-80	HONOLULU, DES MOINES-AMES, SPOKANE, OMAHA, SPRINGFIELD, TOLEDO, COLUMBIA, ROCHESTER, HUNTSVILLE-DECATUR, PORTLAND-AUBURN
Market 81-90	PADUCAH-CAPE DIRARDEAU-HARRISBURG-MT.VERNON, SHERMAN-ADA, CHAMPAIGN-SPRINGFIELD-DECATUR, SYRACUSE, MADISON, HARLINGEN-WESLAC, BROWNSVILLE-MCALLEN, CHATTANOOGA, WACO-TEMPLE-BRYAN, COLORADO SPRINGS-PUEBLO, CEDAR RAPIDS-WATERLOO-DUBUQUE
Market 91-100	EL PASO, SAVANNAH, JACKSON, BATON BOUGE, SOUTH BEND-ELKHART, TRI-CITIES, BURLINGTON-PLATTSBURGE, CHARLESTON, DAVENPORT-ROCK ISLAND-MOLINE, GREENVILLE-NEW BERN-WASHINGTON
Market 101-110	FT.SMITH-FAYETTEVILLE-SPRINGDALE-RODGERS, JOHNSTOWN-ALTOONA, MYRTLE BEACH-FLORENCE, EVANSVILLE, LINCOLN&HASTINGS-KEARNEY, TALLAHASSEE-THOMASVILLE, TYLER-LONGVIEW, RENO, FT.WAYNE, YOUNGSTOWN
Market 111-120	BOISE, SIOUX FALLS, AUGUSTA-AIKEN, SPRINGFIELD-HOLYOKE, LANSING, PEORIA-BLOOMINGTON, FARGO-VALLEY CITY, MONTGOMERY, TRAVERSE CITY-CADILLAC, MACON
Market 121-130	EUGENE, SANTA BARBARA-SANTA MARIA-SAN LUIS OBISPO, YAKIMA-PASCO-RICHLAND-KENNEWICK, LAFAYETTE, MONTEREY-SALINAS, BAKERSFIELD,

	COLUMBUS, LA CROSSE-EAU CLAIRE, CORPUS, AMARILLO
Market Groups	**Market Name**
Market 131-150	CHICO-REDDING, WILMINGTON, COLUMBUS-TUPELO-WEST POINT, WAUSAU-RHINELANDER, ROCKFORD, TOPEKA, MONROE-EL DORADO, COLUMBIA-JEFFERSON CITY, DULUTH-SUPERIOR, MEDFORD-KLAMATH FALLS, BEAUMONT-PORT ARTHUR, LUBBOCK, WICHIT, FALL&LAWTON, SALISBURY, ANCHORAGE, ERIE, SIOUX CITY, PALM SPRINGS, JOPLIN-PITTSBURG, ALBANY
Market 151-175	MINOT-BISMARCK-DICKINSON, ODESSA-MIDLAND, ROCHESTER-MASON CITY-AUSTIN, TERRE HAUTE, BANGOR, BLUEFIELD-BECKLEY-OAK HILL, BINGHAMTON, WHEELING-STEUBENVILLE, PANAMA CITY, BILOXI-GULFPORT, SHEREVEPORT, IDAHO FALLS-POCATELLO, GAINESVILLE, ABILENE-SWEETWATER, YUMA-EL CENTRO, MISSOULA, HATTIESBURG-LAUREL, BILLINGS, DOTHAN, CLARKSBURG-WESTON, QUINCY-HANNIBAL-KEOKUK, UTICA, RAPID CITY, ELMIRA, LAKE CHARLES
Market 176+	JACKSON, WATERTOWN, HARRISONBURG, ALEANDRIA, MARQUETTE, JONESBORO, BOWLING GREEN, CHARLOTTESVILLE, LAREDO, GRAND JUNCTION-MONTROSE, MERIDIAN, BUTTE-BOZEMAN, GREENWOOD-GREENVILLE, LAFAYETTE, GREAT FALLS, TWIN FALLS BEND, PARKERSBURG, EUREKA, CHEYENNE-SCOTTSBLUFF, SAN ANGELO, CASPER-RIVERTON, MANKATO, LIMA, OTTUMWA-KIRKSVILLE, ST.JOSEPH, FAIRBANKS, ZANESVILLE, VICTORIA, PRESQUE ISLE, HELENA, JUNEAU, ALPENA, NORTH PLATTE, GLENDIVE

Note. Adapt from "A Market-by-Market Review", BOND&PECARO and NAB, 2013