NEWSPAPER REINVESTMENT STRATEGIES

by

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(Under the Direction of Hugh J. Martin)

ABSTRACT

This study examines effects of reinvestment levels within newspaper divisions and diversified divisions on short and long-run financial performance at publicly-held U.S. newspaper firms from 1996 to 2005. The literature suggests that reinvestment leads to improvement in market performance. However, these studies looked primarily at short-term operational expenses. This study found that above average reinvestment levels in capital expenses in both newspaper and diversified divisions is negatively related to short-run financial strength. Some evidence suggests that heavy reinvestment in newspaper divisions leads to long-run financial strength. Firms that reinvested more in diversified segments were more diversified during the decade. The same firms that reinvested heavily in newspaper divisions also reinvested heavily in diversification.

INDEX WORDS: Newspaper management, Capital expense, Diversification, Reinvestment

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Chapter 1: Introduction

Of all the ethical things a newspaper can do for its readers, staying in business is at the top of the list. Balanced reporting, complete and accurate coverage, and a clean division of advertising and editorial interests are all important priorities for any news organization that prides itself on outstanding journalism. But if number one on the list – stay afloat – is not satisfied, newspapers fail to deliver the news.

The number of papers has been declining for decades. Surviving newspapers faced limited competition in local markets for advertising and news (Rosse, 1975). As a result, the companies that owned them enjoyed profit margins that could exceed 20 percent (Fink, 1996) – a high return on any investment. However, competition began increasing in many markets as new forms of media began to attract readers and advertisers (Lacy & Martin, 2004, Reid & King, 2000). Investors in publicly owned newspaper companies have recently voiced anxiety about declining prospects for growth. For example, investors dissatisfied with Knight Ridder's 19 percent profit margin forced the breakup and sale of the company (Carlson, 2006), once regarded as a pillar of the industry (Kunkel, 2006).

As a smaller proportion of the population reads newspapers, profits will shrink as well (Lacy & Martin, 2004). Newspaper managers, who ultimately work for investors in their companies, must find ways to balance demands from those investors with their mission of producing news and other information that citizens need to keep democracy functioning.

Investors, like newspaper employees, care about the financial health of the newspaper. Financial health depends on a newspaper's ability to attract readers that advertisers want to

reach. This is because about 85% of newspaper revenue comes from the sale of advertising, and only 15% from sales to readers (Picard & Rimmer, 1999). Financial health therefore depends on producing content that readers can utilize (Lacy, 2000).

Financially healthy newspapers also have resources that potentially can be used to produce high-quality journalism, expand production capacity, improve operations with new technology, and evolve with changing customer habits and tastes (Picard, 2004). However, such firms can instead use their profits in other ways, such as increasing investor returns, or expanding operations by acquiring other firms.

One way to view these choices is short-run versus long-run. Investors may prefer high short-run returns, thereby reducing spending on items such as news coverage or new technologies (Picard, 1994). However, this short-run strategy may accelerate declines in readership and advertising as competition increases (Lacy & Martin, 2004). Or, investors may prefer a long-run strategy of reinvestment that reduces immediate returns, but improves a newspaper's long-run market position (Blankenburg & Friend, 1994). This, in turn, may result in long-term profits and returns to investors, while guaranteeing the newspaper's commitment to its community (Lacy, Coulson & Martin, 2004). This thesis examines these choices and their effects on the financial health of publicly owned newspaper companies in the United States.

Firms must attract investors who desire sustained profit growth, and efforts to provide that growth have forced many newspaper managers to cut costs (Picard, 2004). Scholars argue when cuts are deep enough to substantially affect news quality, they will damage the newspapers' long-term economic interests (Litman & Bridges, 1984, Lacy, 1989, Lacy, 1992, Lacy & Martin, 2004, Meyer, 2004, Picard, 2004). Cuts can be made to newsroom expenses, such as reducing the number of reporters. These cuts affect the short-run operations of

newspapers. The effects of newsroom reinvestment strategies have been addressed by many previous studies (Lacy, 1990, Lacy, Shaver & St. Cyr, 1996, Blanchard & Lacy, 2003). The financial commitment model argues quality information is a strong asset for newspapers facing competition because quality makes substitutes less attractive (Litman & Bridges, 1986, Lacy, 1989, Lacy, 1992). Financial commitment literature has looked primarily at short-run operational reinvestment strategies. Few studies have taken a long-run view.

This thesis will extend existing literature by looking at long-run reinvestment strategies. Capital expenses will be used as the measure for reinvestment because they indicate a firm's commitment to compete in a market in the long-run. Capital expenses measure "big ticket" items like buildings or printing presses, assets acquired to increase production capacity. They do not directly affect a newspaper's operations or its quality. Capital expenses signal a firm's direction, or strategy to compete in a market. They indicate the firm's decision to conduct business in a product market in the long-run. Picard (1995) noted that historically low levels of capital expenditures weakened the asset bases, and ultimately the financial health, of newspaper firms in the early 1990's.

Arguments against significant cost cuts also state that managers should not allow corporate interests to trump social responsibility (Picard, 2004, Meyer, 2004). Picard (2004) argues long-term financial health is bolstered when newspapers are viewed with "record and distinction" (p 63). Meyer (2004) argues providing a high quality product in a market creates social influence within that market, which in turn leads to economic influence by attracting advertisers. "An influential newspaper will have more readers, be more trusted by those readers, and be worth more to advertisers" (Meyer, 2004, p. 67).

This thesis will test these arguments at the level of companies that own newspapers. The thesis will use a measure created by Blankenburg (1995). The measure creates an index of the balance between profit and reinvestment. Blankenburg's measure will be modified for this study. The adapted measure will be used to compare the behavior and performance of the nation's publicly held newspaper firms from 1996 to 2005. The information found in newspapers helps to keep citizens free and informed. The firms that produce newspapers need to be financially strong to keep performing that function. Therefore, this thesis will identify companies by how much they reinvested in capital expenses in their newspaper and diversified business segments, and compare long-term changes in financial health at companies with differing levels of reinvestment.

The last decade has been a trying time for newspaper managers and investors. Balancing priorities has been no easy task. Therefore, a study of the ways that managers addressed the long-term needs of the newspapers, and short-term needs of their investors, will help both groups better understand how to shape the long-term financial health of their institutions.

Chapter 2: Literature Review

Newspaper owners and managers have always had to balance profits and public service. Both theory and empirical research suggest leaning too far in the direction of profit can damage a newspaper's performance, and perhaps threaten its survival.

Quality and Market Performance

Newspapers operate simultaneously in two product markets, the market for news and the market for advertising (Lacy & Simon, 1997). Newspapers publish news content that attracts readers. Newspapers then sell access to those readers to advertisers, who are trying to reach potential customers. Newspaper competition is explained by the theory of monopolistic competition, where firms can limit the impact of competition by differentiating their products to appeal to readers' preferences (Lacy & Martin, 2004). The process of differentiation distinguishes a particular newspaper from possible substitutes – other weeklies or dailies that may be published in the market, papers that may spill into the market from nearby areas, and other forms of media (Lacy & Martin, 2004). The degree to which competitors serve needs that readers satisfy with the newspaper determines how much substitution is possible. This in turn creates the degree of competition the newspaper encounters (Lacy & Martin, 2004). Differentiation, in the form of improvements in product quality, can lead to greater reader satisfaction, reducing the negative effects of competition (Lacy & Martin, 2004).

However, improvements in quality are costly (Lacy & Martin, 2004). Media scholars have also debated the best way to measure a newspaper's quality. Studies examined the priorities

of editors (Bogart, 1977), the content that was published (Lacy & Fico, 1977), and counted Pulitzer Prizes (Logan & Sutter, 2004). Gladney (1990) found local coverage and accuracy were the most important to editors' perceptions of newspaper quality. Lacy and Martin (1998) found indirect evidence that low quality led to faster erosion of circulation at one newspaper firm. Blankenburg and Friend (1994) found news-editorial investments led to improvements in market share.

Litman and Bridges (1986) conducted the first empirical study examining links between the quality of newspaper content and financial commitment. They found the "common thread" linking high-quality papers in previous studies was a commitment of resources, and that competition and financial commitment were positively related (Litman & Bridges, 1986). Lacy (1989) developed a model showing how newspaper quality and demand interact in a competitive market. If more than one newspaper is available, the papers face cross-elasticity of demand (Lacy, 1989). An increase in the quality of one paper leads to a decrease in the demand for its competitor (Lacy, 1989). If quality at one paper drops below what readers consider an acceptable minimum, demand becomes elastic and readers switch to the other newspaper (Lacy, 1989).

Subsequently, Lacy (1991) developed a model describing the links between competition, quality, and a newspaper's market performance. The financial commitment model states that "1) as intensity of competition increases, the amount of money committed to news content increases. 2) As the financial commitment to news increases, content quality, as defined by journalists, increases. 3) As the quality of content increases, the audience's utility from the content increases. 4) As the audience's utility increases, the news organization's performance in the market improves" (Lacy, 1991, p). The concept of market performance, like the notion of quality, can be defined in several different ways (Lacy, 2000). Diversity and service are social dimensions of

market performance (Lacy, 2000). In the economic terms of Lacy's model, market performance means market share. It should be noted that the model does not argue market share guarantees profitability. Profits depend on, among other factors, managers' abilities to capitalize on market share (Lacy, 2000).

The financial commitment model is consistent with the microeconomic theory of monopolistic competition. This theory states that differentiation reduces elasticity of demand, giving the firm limited power to raise prices above the level that would exist in a perfectly competitive market (Lacy & Martin, 2004). In perfect competition, where many firms compete with no entry barriers and provide identical products, no firm can raise prices because if it does, consumers immediately switch to another firm's identical product. Lacy and Martin (2004) argued content differentiation must address one or more of five specific needs, or it will not be successful. The needs are surveillance, entertainment, decision-making, community interaction, and self-understanding (Lacy & Martin, 2004). Lacy (1992, 2000) said that the model can be applied to other media besides newspapers.

Empirical tests have found support for the financial commitment model. Lacy (1990) found a link between the amount of competition and the number of wire services a paper carried. Another study that examined newspaper corporations found that as the number of papers in competitive markets a firm owned increased, profit margins for the firm declined and newsroom expenses increased (Lacy, Shaver & St. Cyr, 1996). Blanchard and Lacy (2003) found that the size of newsrooms, a predicator of quality, was higher in markets with strong circulation presence from other newspapers. Financial commitment studies have looked primarily at ways resources are committed to operations. These studies examined the effects of short-term reinvestment strategies by studying the effects of decisions to alter the amount of spending. A

long term study would focus on decisions that change the firm's capacity to deploy resources, or to operate in particular markets. This study uses capital expenses to study long-run strategies to increase or decrease the ability to deploy resources. By considering these strategies at the firm level, this study takes as broad approach as possible to determine the "direction" of firms. Meyer (2004) developed another argument about how newspapers can differentiate content to attract readers and advertisers. Hal Jurgensmeyer, a former Knight-Ridder executive, told Meyer (2004) that newspapers are "in the influence business" (p. 67). "A newspaper, in the Jurgensmeyer model, produces two kinds of influence: societal influence, which is not for sale, and commercial influence, or influence on the consumer's decision to buy, which is for sale. The beauty of this model is that it provides economic justification for excellence in journalism" (Meyer, 2004, p 67). Meyer (2004) defines trust as a "scarce good" (p. 74) that can be thought of as a natural monopoly, since people are likely to stick with a trusted source of information rather than invest time and money into exploring new sources. Meyer's (2004) societal influence model uses improvements in quality as the catalyst for building trust, or credibility. This credibility leads to circulation, which leads to profitability (Meyer, 2004). It should be noted that the societal influence model goes a step further than the financial commitment model, which ends with benefits to a newspaper's market position (Meyer, 2004, Lacy, 1992). Profitability and market position are not the same thing, but they are related to financial health. Meyer and Zhang (2003) used a Knight Ridder survey of readers in 21 counties where 26 of the firm's newspapers circulated, and found that the papers that enjoyed public perception as trustworthy had a better record of retaining circulation.

Strategic choices

Product differentiation is costly, so managers must make trade-offs when determining how much to invest in the content of their newspapers. Striking this balance becomes increasingly difficult as competition increases, and managers must decide between short-term profits and long-term market performance (Lacy & Martin, 2004). Competition from other forms of media means newspapers will lose readers and advertisers, resulting in lower profits. But managers can influence the magnitude of the losses (Lacy & Martin, 2004):

> As readership declines and cost per thousand increases, advertisers will be more likely to switch to imperfect substitutes. If ad linage declines, newspapers that want to maintain profit margins will either have to increase ad prices to maintain revenue or cut newsroom and other expenses to control costs. In the former case, the probability of advertisers seeking substitutes increases. In the latter, quality declines will cause readers to leave, increasing cost per thousand. As cost per thousand increases, businesses are more likely to substitute other forms of advertising (Lacy & Martin, 2004, p. 33).

Newspapers that pursue these options will earn higher profits in the short-run. But by reducing quality or increasing prices, newspapers accelerate the loss of readers and advertisers, damaging the newspaper's market position in the long-run.

Another option is to maintain or improve quality, which results in lower short-term profits, but improves the newspaper's market position in the long-run**.**

Picard (2004) noted profits can be used to "provide reasonable returns to owners, to support reinvestment that improves newspapers, and to achieve financial strength that allows some independent choice and action" (p 56). He described four different strategies managers can adopt to address these obligations: 1) a cost/price competition strategy, 2) a quality strategy, 3) a quality leadership strategy, and 4) a quality-profitability strategy.

The first strategy is "cost/price competition" (Picard, 2004, p. 62) and is used by firms that believe the newspaper industry is mature. Lacy (2000) defined mature industries as having

"many sellers [with]… profits that are close to normal, and they do not attract large amounts of new investment capital," (p. 5). Rosenstiel and Mitchell (2004) characterized a mature industry as "one that may survive but is in long-term decline" (p. 84). The cost/price strategy maximizes profits by cutting costs and producing newspapers of average quality (Picard, 2004). Managers might choose to adopt this strategy if they believe that differentiation cannot generate desired profits, leaving cost-cutting as the way to achieve profit goals. Porter (cited in Meyer, 2004) described this strategy as "harvesting market position" (p. 68). This short-run strategy relies on consumers' habits and brand loyalty to attract customers for a period after quality declines. Newspapers will "take-the-money-and-run" (Meyer, 2004, p 69). In theory, capital expense levels would plummet with this strategy. A firm planning to exit the industry would not reinvest in significant and costly assets meant to expand production.

Picard's (2004) "quality management" (p.62) strategy takes a long-term approach to company value by "saving money through attempts to keep quality at a level that meets but does not exceed reader expectations" (p.62). Firms that employ this long-run strategy do not engage in cost-cutting or price competition to maximize short-run profits (Picard, 2004). This strategy would probably result in average capital spending, but would not require above average investment in technologies meant to improve production capacity or production quality.

The third strategy -- "quality profitability" (p.62) -- requires a quality level acceptable to readers and advertisers (Picard, 2004, p. 63) so demand does not become elastic (Lacy, 1989). Firms do not engage in cost-cutting (Picard, 2004), but only re-invest the minimum required to retain market share. Firms focus on generating profits by making investments in quality, but the newspaper "does not sacrifice profitability through excess quality and engages in strategies to improve and manage that quality" (Picard, 2004, p 62). If the market is static, firms can maintain

market position. Firms maximize profits with this short-run strategy (Picard, 2004). This strategy might result in average or below average capital spending. Firms would not sacrifice profits to invest in improvements to production capacity. They might be inclined to minimize capital expenses by holding off on significant reinvestment unless absolutely necessary.

The fourth strategy is "quality leadership" (Picard, 2004, p.63). Newspapers make significant reinvestments so they are “seen as papers of record and distinction, and as having significant social and political influence. To do so they will sacrifice some short term profits to ultimately maximize company value” (p. 63). This strategy creates long-term growth, but the significant reinvestment comes at the expense of short-term profit. This long-run strategy maximizes the firm's value over time (Picard, 2004). This is the only strategy that would require above average reinvestment in capital expenses. To ultimately maximize company value, a firm would need to expand production capacity in underserved markets. The strategy also calls on firms to sacrifice short-term profits to increase the long-run value of the firm. This could be achieved through long-run investments in assets that are capitalized over time.

Following the quality leadership strategy (Picard, 2004), firms develop reputations as credible sources of information. These newspapers fit Meyer's (2004) societal influence model. "If the influence model is valid, then newspaper companies that yield to investor pressure to convert the influence increment into cash are making a mistake. The best way to ensure their future would be to conserve their influence and then learn how to carry it into new forms of media" (Meyer, 2004, p. 72).

Diversification

Along with improvements in quality of the core product, newspaper, managers can select from a range of alternatives if they choose to reinvest. One alternative is the acquisition of other businesses to diversify the firm. Picard and Rimmer (1999) studied effects of the 1990-1991 U.S. recession on publicly owned newspaper firms. They found larger newspaper companies made deeper cuts, and took longer to recover. However, firms with higher degrees of non-newspaper diversification had higher return on sales before, during and after the recession. (Picard & Rimmer, 1999). Diversification may produce revenue streams that balance declines in newspaper revenues (Picard and Rimmer, 1999). Being dependent on a single source of revenue is risky (Picard, 2004), and many newspaper firms have taken on debt to venture into new lines of business with the goal of spreading risk (Picard, 2004).

Kolo & Vogt (2003) and Jung (2003) found that diversification often does not work to improve financial performance as theory predicts. Some media firms find it difficult to operate in unfamiliar businesses of firms they acquire, becoming less efficient as they lose focus (Kolo & Vogt, 2003).

The argument for diversification states media companies that add product lines with earnings that have a negative correlation to their core business will be able to hedge against economic downturns (Picard, 2004). For newspapers, this means diversification into business segments that lessen dependence on advertising revenue to reduce the negative effects of a “soft” advertising year.

If newspapers instead diversify into other forms of media that depend on advertising revenue, the diversification gives newspaper firms a better chance of being included in audience members’ "media mix” (Lacy & Martin, 2004, pp. 21). This form of diversification can provide

new outlets to put content in front of users “in ways they want and need” (Lacy & Martin, 2004, pp. 21). In this case, diversification serves as a method of differentiation – it alters the core product to reach wider or different audiences.

Meyer (2004) lists two strategic options for newspapers: 1) to differentiate and 2) to diversify. The first is to "redirect strategy toward segments that are least vulnerable to substitution" (p. 80). This calls for newspapers to differentiate their products to make them less vulnerable to substitution from other forms of media. This form of differentiation requires reinvestment, which could take the form of capital reinvestment if there is a need to increase production capacity. The second strategy is to "enter the substitute industry" (p. 80). This is a call to diversify, which requires resource allocation, including capital expenditures, into business segments other than the core product

Pressures for profit

There is nothing new about demands from newspaper owners for profit, or about the scholarly debate over profit pressures. Meyer and Wearden (1984) disputed arguments by scholars like Bagdikian (1980) that public ownership would bring on unhealthy pressure to increase profits. "The phenomenon of public ownership is new, and large institutions do not change direction suddenly," (Meyer & Wearden, 1984, p.575). A half-decade later, Busterna (1989) found that managers at corporate-owned newspapers were more concerned about profits than managers at family owned papers. Demers (1999) surveyed 223 editors and found that corporate owned papers earned higher profits, but did not place greater emphasis on profits than their owner-manager counterparts. Demers (1999) argued corporate managers enjoy greater financial security than owner-managers, are less subject to advertiser pressures, do not benefit

directly from higher profits like owner-managers, and have resources to improve quality. Private companies must still answer to investors if they are financed by outside sources, like a bank (Bogart, 2004).

Fink (1996) noted "a rising tide of shareholder expectation." . The source of these rising expectations has an economic explanation that traces back nearly a century.
Newspapers have for decades been declining in number and circulation (NAA Factbook, 2005). In 1987, there were 112 markets with more than one daily newspaper (Bogart, 2004). In 2002, there were 45, of which only 19 had head-to-head competition between publishers (Bogart, 2004). If one newspaper has most of the circulation in the market, its long-run average production costs will be lower than newspapers circulating to smaller segments of the market (Lacy & Simon, 1997). These economies of scale limit direct competition by giving large newspapers the ability to sell advertising and subscriptions for less than smaller papers (Lacy & Simon, 1997). Companies that own newspapers also contributed to the decline in competition by closing editions that were less profitable (Picard in Greco, 2000). Martin (2002, 2003) found firms were increasingly buying competing daily newspapers in geographically adjacent markets, a practice known as clustering. One third of all dailies were part of a cluster by 1999 (Martin, 2002). These studies found evidence clustering may increase operating efficiency (Martin, 2003), and that it reduces intracounty competition between dailies (Martin, 2002).

Indirect competition persists in many newspaper markets. The umbrella model describes layers of competition, with large regional dailies at the top, dailies in satellite cities in the next layer, non-metro dailies in a third layer, and weeklies and shoppers in a fourth layer (Rosse, 1978). More recent evidence suggests changes in technology and the rise of group ownership in lower layers of the umbrella model may be increasing competition for advertising in this model

(Bridges, Litman, & Bridges, 2002). Still, newspapers have some market power when readers and advertisers did not have direct substitutes, so prices and profits remain relatively high (Lacy & Martin, 2004, Benjamison, 1984).

The lack of direct competition made newspapers valuable to investors because of their high cash flow (Picard, 2004). Newspaper companies took advantage of this by going public to fund expansion through acquisitions beginning in the 1960s (Picard, 2004). A wave of consolidation that swept the industry in the 1970s and 1980s allowed firms to enjoy regional and even national operational efficiencies across markets (Picard, 2004).

Blankenburg and Ozanich (1993) studied managers' priorities at publicly owned firms and found that higher degrees of public ownership resulted in higher concerns for short-term return on equity. The study was replicated and extended in 1996, and competition was added as a variable. Short-term profitability, consistency in return, and earnings predictability were found to be important to managers at large newspaper corporations (Lacy, Shaver & St. Cyr, 1996). The study also found that competition is related to lower earnings predictability but that the effects of public control were slightly more powerful than the effects of competition (Lacy, Shaver & St. Cyr, 1996). Picard later argued:

> "The development of public ownership and large newspaper groups created additional economic pressures that had not been previously experienced by newspaper owners. Many large companies became increasingly dependent upon stock market and financial institutions for capital, forcing themselves to seek steadily growing revenues, stable profits, and growth in share prices" (Picard, 2004, p. 57).

As pressures for profit grew and newspapers increasingly operated in less-than-competitive markets, the need to differentiate, or improve quality, was not pressing.

Increasing Competition

As new forms of media gave advertisers new ways to reach consumers newspapers commanded a smaller share of advertising expenditures. Charles Kinter (1945) perceived an economic problem for newspapers in the first half of the twentieth century. As the cost of labor and supplies continued to rise, “advertising revenues which might have gone to newspapers have been siphoned off by competing media” (Kinter, 1945, p. 43). (His strategic recommendations were "important cost-reducing equipment" and "good public relations within the community" (Kinter, 1945, p. 63).)

U.S. daily newspaper (Monday through Saturday) household penetration among adults fell from 66.9% in 1980, to 62.4% in 1990, to 55.1% in 2000 (Newspaper Association of America). The trend continued in the first part of this decade, falling to 49.9% by 2006 (Newspaper Association of America). Circulation began declining in the late 1980s (Picard, 2002). In 1990, daily circulation was 62.3 million, and in 2005 it was 53.3 million (Newspaper Association of America). An October 2006 report from the Audit Bureau of Circulations (Sass, 2006) showed continued decreases during the previous six months; total circulation at all United States dailies dropped 2.8% compared to the same period in 2005.

Lacy (2000) proposed that "development of new media products often contributes to shifts in individual media mixes" (p). Media serve five basic functions for users: (1) surveillance, (2) diversion, (3) social-cultural interaction, (4) decision making, and (5) self-understanding (Lacy & Simon, 1993, Lacy, 2000). As new media technologies are made available, users adopt them if the new product is perceived to meet some of those needs better than an old product. Adoption and utility depend on individual perceptions of the quality of a medium (Lacy, 2000). If we roll up individual adoptions of new media and look at national trends, it is apparent that

some new technologies compete successfully, for consumers' attention. For example, cable television penetration grew from 19.9% of U.S. households in 1980 to 68.0% in 2000 (U.S. Census Bureau). In 1992, 4.4% of U.S. households had an internet connection. By 2000, that number grew to 40.9% (U.S. Census Bureau). As new technologies gained acceptance from consumers, audiences for all media, including newspapers, began to fragment.

Newspaper readers view some emerging media as better substitutes than others. The same holds true for advertisers. Lacy and Simon (1993) listed four functions that advertisements perform: (1) product awareness, (2) price, (3) quality, and (4) identity. Advertisers will be willing to alter their media mixes if new media offer the same or better utility at a lower cost (Lacy & Martin, 2004). A 2005 study of media substitutability among local advertisers found that radio, newspaper, direct mail, yellow pages and cable television were the five mediums perceived as best for local advertising effectiveness (Reid, King, Martin & Soh, 2005). The study ranked newspapers as the most effective form of advertising, but stated that "daily newspapers are viewed as replaceable by other media" (p. 50). Common measures like "cost per thousand" (cpm) are used among media buyers to place orders and track the performance of advertising across mediums (Lacy & Martin, 2004). This allows side-by-side comparisons of value for advertisers. The value, or degree of substitutability of a new medium, often depends on the perceptions of the advertiser. However, certain characteristics make some forms of media better substitutes than others (Lacy & Martin, 2004). Circulation and subscriber numbers are used by advertisers to compare the potential size of audiences. Complex systems of measuring audiences, by Nielsen for broadcast and cable television and by Arbitron for radio, make estimations of audiences exposed to advertising easily accessible to advertisers. The cost associated with gathering this information is assumed by the stations, not the advertisers.

Reid and King (2000) found national advertising agency managers "perceived substitutability"(p.292) between cable television, radio, newspapers, magazines, and broadcast television. One advertising manager interviewed in the study said, "media are interchangeable, not in that they are all the same, but in the fact that it's audience delivery, message exposure, and cost which drive the typical national ad schedule...It's what is being delivered by the medium that counts, and that what is the right audience" (Reid & King, 2000, p. 300). Buying ads in different media is viewed as a process of adding value through negotiation (Reid and King, 2000). Newspapers have been viewed as expensive by advertisers in recent years because cost per thousand has increased due to declining circulation (Lacy and Martin, 2004).

So then, what has been the cost of increasing competition for newspapers? Picard (2002) found that real expenditures for newspaper advertising did not decline in the second half of the 20th century. In 2000, "newspapers received two and half times more advertising income in real terms than they did in 1950" (Picard, 2002, p. 31). When new technologies became available, like television or the Internet, advertisers increased expenditures (Picard, 2002). This created new competition for readers' attention. Circulation revenue, on the other, has been flat since the 1980s because newspapers have not raised their real subscription prices (Picard, 2002). This caused greater reliance on advertising to support newspapers (Picard, 2002).

The newspaper industry was the top advertising revenue producing medium until 2001 (NAA Fact Book, 2002), when it was replaced by direct mail. Newspapers still took in a significant share of advertising revenue in 2004, $48 Billion, or 18.3% of all advertising revenue in the U.S., second only to direct mail (NAA Fact Book, 2005).

The expectations that newspapers will increasingly lose ground as advertisers switch to new media, eventually reducing historically high profit levels, lead some to paint a bleak picture

of the industry's future that is often echoed by Wall Street analysts in the popular press (Saba, 2005).

All of this leaves newspapers with a stark choice (Lacy & Martin, 2004). Managers must ask, "Do we stay in the newspaper business after it becomes impossible to maintain profit margins above 20 percent? How soon a company faces that question will depend on its short-run content and pricing strategies" (Lacy & Martin, 2004, p.34).

Concern about the Balance

Meyer (2004) said that he knows of no newspaper company that intentionally harvests market position. However, reductions in quality initiate loss of value to readers and advertisers that is slow to materialize, while cost-saving cuts have "a quick effect on revenue that is instantly visible" (Meyer, 2004, p. 74).

Picard (1995) commented that reinvestment levels at newspaper firms were low after the 1990-1991 recession. Picard (1995) observed a significant decline in total assets, adjusted for inflation, at newspaper firms. This decline was caused by slowdowns in acquisitions and capital investments to offset the depreciation of assets like printing presses (Picard, 1995). "Managers need to begin addressing the problem immediately, because it will require concerted efforts and years to correct," said Picard (1995, p. 14).

Martin's (1998) study of 15-publicly held newspaper companies showed that from 1984 to 1994 profits remained high enough to be considered excessive when compared with returns from other publishing industries. "These companies may be able to afford improvements in the quality of their product," concluded Martin (p. 513).

Some scholars argue newspaper managers are already striking a balance in favor of profit (Picard, 2004; Meyer & Wearden, 2001). Blankenburg (1995) views the balance as a moral question. "Arguably, newspaper profits do become evil, or at least morally dubious, if they expand because journalistic resources have been diminished" (Blankenburg 1995, p. 151). Lasorsa (1991) found the number of daily newspapers was correlated with the number of issues that citizens give serious attention to. Vermeer (1995) found the number of newspapers correlated with the level of knowledge citizens possess about political candidates during elections.

Picard (2004) made his opinion clear in his study, "Commercialism in Newspaper Quality:"

> The rising chorus of complaints both within and outside cannot easily be dismissed. These problems have not occurred because the leadership of newspaper companies deliberately set out to commercialize their firms in a way that harmed quality. It has occurred because the firms and their managers have proceeded down a highway of commercialism that had no speed limits and with no clear destination in sight. They have now reached a fork in the highway. One road continues down the path of unrestricted commercialism and unbridled corporate self-interest. The other has limits set by the needs of quality, public service and responsibilities that extend beyond the shareholders (Picard, 2004, p 64).

The link between competition, quality, circulation, and market performance has been demonstrated with past research. However, relationships between different levels of reinvestment at newspaper companies—into the core product and diversified segments -- and long-term financial health have not received as much attention. Meyer (2004) asserts that investment by newspaper firms at the expense of short-term profits will lead to long-term profitability. Picard (2004) said that firms that choose the quality leadership strategy of significant reinvestment will achieve long-run financial benefits. By adopting long-run strategies, firms sacrifice short-term

profits to maximize their value, extend their life spans, and most importantly to media scholars, to produce essential journalism. This thesis examines the nation's publicly owned newspaper firms to see whether those that reinvested at higher levels did, in fact, enjoy better long-term financial health.

Research Questions

1. Does significant reinvestment into the newspaper division lead to long-run financial health?
2. Does significant reinvestment into non-newspaper divisions lead to long-run financial health?

Blankenburg (1995) compared news-editorial expenses at all three newspapers to an expense norm provided by Inland for papers in that circulation class. He did the same with profits earned at all three newspapers (Blankenburg, 1995). The ratio of expenses to the expense norm, divided by the ratio of profits to the profit norm, formed the moral index (Blankenburg, 1995):

$$\frac{\text{News-editorial expenditures / News-editorial expenditures norm}}{\text{Profit / Profit norm}}$$

This study modifies the index from Blankenburg's study to examine the broad strategies firms employed as they found themselves battling for readers among new competition in the late 1990s and early 2000s. The effects of varying capital expense reinvestment levels can be studied by examining long-term changes in each company's financial health. Companies with higher levels of reinvestment are generally expected to have better long-term financial health.

Companies may reinvest in newspapers they own. But they can also use their profits to diversify. This study will therefore examine the long-term financial effects of different levels of reinvestment into the core product, and into diversified business segments. Diversification can be measured with a Herfindahl-Hirschman Index (HHI). This index is used by the United States Department of Justice to measure market diversity in anti-trust cases (from the DOJ homepage, http://www.usdoj.gov/atr/public/testimony/hhi.htm, on the WWW). The index is based on the size of each company's share of a product market as a percentage. Market shares are squared and summed to create the index:

$$HHI = \sum(S_i^2)$$

Where S is each firm's proportion of the product market. The measure can be adapted to determine diversification levels of newspaper companies if S is measured as the proportion of total revenue from each business unit in the company.

Examining the results of a reinvestment index and a diversity index will help us better understand strategies that newspaper firms employ to balance conflicting demands. "For all newspapers, the task is to balance realities with journalistic values, with the understanding that these two factors influence each other in the long run" (Lacy, Shaver, & St. Cyr, 1996, p. 339).

Chapter 3: Hypotheses

The literature review suggests reinvestment has multiple effects. Reinvestment is expensive, and will reduce short-run profits (Picard, 2004). Logic suggests reinvestment would likely start with revenue generated by the core product, the newspaper.

The financial commitment model argues increased spending on news quality improves the performance of individual newspapers in competitive markets (Lacy & Martin, 2004). Picard (2004) argues managers can set quality levels by adopting different reinvestment strategies, and that reinvestment in capital expenses strengthens the asset base of a firm (Picard, 1995). Financial measures gathered from Compustat for each firm from 1996 to 2005 will be used to gauge the effects of different levels of reinvestment.

H1. Newspaper division reinvestment index scores are:

(A): Negatively related to the entire firm's short-run financial strength.

(B): Positively related to the entire firm's long-run financial strength.

Establishing new lines of business requires initial and sustained investment. Logic implies that this cost requires a sacrifice to short-term profits. The financial commitment model applies to media other than newspapers (Lacy, 1991, 2000). If a newspaper company owns other businesses, and reinvests to improve production capacity in these diversified segments, then the firm should enjoy long-term financial health.

H2: Non-newspaper segments reinvestment index scores are:

(A): Negatively related to the entire firm's short-run financial strength.

(B): Positively related to the entire firm's long-run financial strength.

Firms may choose to reinvest profits into newspaper divisions, or into diversified lines of business. Companies that invest more than their industry peers in non-newspaper businesses are more likely to acquire other firms. The non-newspaper index does not separate media and non-media businesses in the indices. This means that the index itself is not a measure of diversification, or of divisions in truly separate businesses from advertising supported media. The third hypothesis, which tests for a relationship between diversification and non-newspaper reinvestment index scores, is intended to see if these non-newspaper segments are truly diversified segments or mainly just differentiated from the core business. The diversity index measures a company's degree of diversification. This diversification score will be smaller as a firm's level of diversification increases:

H3: Diversified segments moral index scores and diversification scores for the entire firm are negatively related.

Companies can hedge against declining newspaper revenues by expanding operations in product markets that are growing. This may require companies to redirect financing that would otherwise be invested in newspapers. On the other hand, if a diversified firm decides to reinvest in newspapers, it would likely do so at the expense of non-newspaper lines of business.

H4: Newspaper division reinvestment index scores and non-newspaper reinvestment index scores are negatively related.

Chapter 4: Method

This study creates capital expense reinvestment indices for newspaper firms and their diversified business segments. It uses a source of secondary data – Compustat – a Standard & Poor's database that includes financial information for thousands of companies. Compustat data is adjusted to reduce accounting discrepancies so it can be used to make comparisons between firms. The database was especially useful for this study because it includes finances by business segment for each firm.

Data was available for the following 17 publicly-owned newspaper firms: Belo, EW Scripps, Journal Communications, Lee, McClatchy, News Communications, Pulitzer, Tribune, Dow Jones, Gannett, Knight Ridder, Liberty Publishing, Media General, New York Times Company, Times Mirror, and Washington Post Company. Firms were initially identified using the NAICS (North American Industry Classification System) code 511110 for newspaper companies. To be included in the study, a firm had to have this NAICS code, be publicly-owned, operate in the United States, and receive more revenue from its newspaper division than any other segment during the first year of the study. The 16 firms represent a census of firms that fit those parameters.

Annual reinvestment indices were computed for each company from 1996 to 2005. This included an index for each company's newspaper division, which included all business operations for three of the firms. A second index was computed for all non-newspaper operations at the remaining companies. The measures used to create the reinvestment indices were not the same as those used by Blankenburg because his study examined operational reinvestment

strategies at individual newspapers. Blankenburg used newsroom expenses as the measure for expense, and profit margin for the measure of profit:

$$\frac{\text{Newsroom Expense / Expense Norm}}{\text{Profit Margin / Profit Norm}} = \text{Moral Index}$$

Figures for spending at individual newspapers were not available for the current study. This study is concerned with strategies enacted at higher levels of management, on the corporate level. Therefore, capital expenses were used to measure reinvestment because they signal a firm's long-term direction, or strategy.

Capital expenditures represent the acquisition of assets meant to improve or expand a business in the long-term, and are separate from day-to-day variable cost expenses such as labor and supplies. They serve to maintain, improve or increase production capacity. Capital reinvestment levels determine thresholds for production levels. Since they indicate long-term vision, capital expenses are a good measure for this study.

This study used operating profit to measure earnings The operating profit measure selected from Compustat was earnings before interest and taxes, commonly referred to as EBIT.

Blankenburg used norms for profit and expenses provided by Inland in his index. The norms corresponded to average revenues and spending of papers in the same circulation class as the three he described. The current study required norms that were measured at the level of different business units – newspaper and non-newspaper. Therefore, profit and expense norms were calculated as averages for all firms in the study. Separate norms were calculated for each year of the study for newspaper divisions, and for non-newspaper business segments.

For example, the newspaper expense norm for 1998 was $51.76 million, representing average capital expenses for all newspaper divisions. The newspaper profit norm for 1998 was

$240.65 million, the average of the newspaper divisions' profits for the year. For a firm to be considered moral, its expense/profit ratio had to be above the norm, or above 1.0.

For example, in 1998 Times Mirror's newspaper division had capital expenses of $107.48million, and profits of $413.82 million. The newspaper division's reinvestment index was:

$$\frac{107.48 / 51.76}{413.82 / 240.65} = 1.21 \text{ reinvestment index}$$

From this it can be seen the index corrects for industry norms by converting each firm's capital spending into a percentage of average spending for all firms. Times Mirror spent 107% more than the average. A similar correction is made for profits, which were 71% above average. This means the index can be interpreted as showing newspaper division capital expenses larger than profits after correcting for the norms. This index used in this study measures firms' commitment to reinvestment in relation to industry peers.

The purpose of the non-newspaper segments reinvestment indices was to measure a firm's commitment to reinvesting in segments other than its newspapers. For the non-newspaper index, profit norms were calculated by averaging operating profits of all business segments other than newspaper divisions. Capital expenses were averaged for each diversified business segment to create the company expense norms. The non-newspaper segment data for 1998 is shown as an example below.

Table 1: 1998 Non-newspaper segments

COMPANY NAME	SEGMENT NAME	Capital Expenses	Operating Profit
BELO CORP	OTHER	16.898	-5.212
BELO CORP	BROADCASTING	55.035	138.679
DOW JONES	INFORMATION SYSTEMS SERVICES	n.a.	-33.227
DOW JONES	ELECTRONIC PUBLISHING	38.719	65.921
EW Scripps	BROADCASTING	33.454	92.966
EW Scripps	CATEGORY TELEVISION	7.936	-6.635
EW Scripps	LICENSING & OTHER MEDIA	1.041	9.77
GANNETT CO	CABLE & SECURITY	22.366	57.688
GANNETT CO	BROADCASTING	25.548	343.512
JOURNAL COMMUNICATIONS	DIRECT MARKETING	1.299	-0.365
JOURNAL COMMUNICATIONS	TELECOMMUNICATIONS	10.159	24.092
JOURNAL COMMUNICATIONS	PRINTING	14.749	-5.297
JOURNAL COMMUNICATIONS	BROADCAST	3.988	34.015
JOURNAL COMMUNICATIONS	NORTHSTAR	1.783	1.307
JOURNAL COMMUNICATIONS	ADD	2.839	5.154
JOURNAL COMMUNICATIONS	IPC	11.237	-11.268
KNIGHT-RIDDER	ONLINE	n.a.	-21.175
LEE ENTERPRISES	BROADCASTING	6.825	24.948
MEDIA GENERAL	NEWSPRINT	10.043	12.1
MEDIA GENERAL	CABLE TELEVISION	16.022	34.6
MEDIA GENERAL	BROADCAST TELEVISION	10.061	42
NEW YORK TIMES CO	MAGAZINES	0.631	22.11
NEW YORK TIMES CO	BROADCASTING	4.331	45.12
TRIBUNE CO	NEW MEDIA-EDUCATION	10.91	43.232
TRIBUNE CO	BROADCASTING & ENTERTAINMENT	44.055	317.355
WASHINGTON POST	OTHER	27.524	-66.942
WASHINGTON POST	MAGAZINE PUBLISHING	3.666	44.524
WASHINGTON POST	BROADCASTING	14.492	171.194
WASHINGTON POST	CABLE TELEVISION	80.795	65.022
TIMES MIRROR COMPANY	PROFESSIONAL INFORMATION	22.635	78.133
TIMES MIRROR COMPANY	MAGAZINE PUBLISHING	1.651	14.84
	TOTALS	500.692	1538.161
	NORMS	16.151	49.618

The segment names are provided to Compustat by the firms, so it is no surprise that they vary. This created one weakness in the study. Companies are inconsistent in the ways they name, organize and report segments. Compustat does not adjust its figures for segments the way it smoothes out data for the entire firm. So, the task of figuring out which business segments represented the core newspaper division, and which represented diversified divisions was left to the author. Most firms stick to names like Newspaper and Broadcast. Some names were more difficult to decipher, like Publishing. Some firms included shoppers and magazines in their publishing group, while others broke them out as diversified segments. Some set aside the

online edition of their newspapers as a separate business segment, while others included it with the newspaper division. The NAICS codes that Compustat provided for each division came in handy for determining where segments belonged, as well as corporate literature that detailed the properties owned.

Data for segments named "corporate", "eliminations", and "inter-segment eliminations" was not included in the study. These segments were excluded because they did not represent expenses or profits associated with any business operations. Inter-segment eliminations are used when revenues are originally assigned to more than one segment, so they are just an accounting adjustment. Corporate expenses (there were no corporate operational profits) would contribute to the financial strength of a firm – and to its ability to diversify effectively. However, corporate segments were not designated by any NAICS code, making comparison between firms difficult. The addition of corporate segments into the non-newspaper indices would have altered the standard for all firms, even those that chose not to report a corporate segment.

To compute each firm's non-newspaper index score, the capital expenses and profits for all business divisions other than newspapers were totaled. This total was then applied to the ratio of non-newspaper expense and profit norms for that year. For example, Times Mirror had two diversified segments in 1998, Professional Information and Magazine Publishing, with total capital expenses of $24.28 million and total operating profit of $92.97 million. So:

$$\frac{24.28/16.15}{92.97/49.62} = 0.80 \text{ reinvestment index}$$

Times Mirror spent 50 percent more than the industry average but profited 80 percent more than average. Comparing Times Mirror's 1998 newspaper division index of 1.21 to its diversified index of 0.80, we see that the firm reinvested at levels slightly higher than industry norms in its newspaper division but less than industry norms in non-newspaper segments.

Table 2 shows the norms used to create the moral indices for each firm each year.

Table 2: Expense and profit norms for newspaper and non-newspaper indices

Newspaper Division		
Year	Expense Norm	Profit Norm
1996	44.2082	165.0101
1997	47.7776	221.5436
1998	51.7621	240.6465
1999	51.3287	257.3082
2000	54.2777	286.0436
2001	49.6667	232.4919
2002	49.8332	291.3635
2003	47.4849	290.7393
2004	60.2369	308.6425
2005	70.2338	329.4892
Average	52.6810	262.3278

Non-newspaper Division		
Year	Expense Norm	Profit Norm
1996	19.7209	53.8452
1997	23.6782	57.6499
1998	16.1514	49.6181
1999	13.8922	47.8729
2000	16.1587	49.2119
2001	16.0639	36.2154
2002	14.1924	74.3451
2003	13.8996	82.7520
2004	16.9500	98.2190
2005	21.1607	94.8760
Average	17.1868	64.4605

Note: Figures in Millions of Dollars

Complete data for computing moral indices was available for eight of the 16 firms in the study. These were EW Scripps, Journal Communications, McClatchy, Tribune, Gannett, Media General, New York Times and Washington Post. Three other firms that existed in 1996 did not exist by the end of the study. Times-Mirror merged with Tribune Co. in 1999. Pulitzer merged with Lee in 2004. The Liberty Publishing Group was sold to Pinnacle Investment Group, LLC, in 2005. All indices were calculated for each year until each of these firms merged or went out of business. The averages for these firms span only the years they existed.

The data for some years was missing for four other firms; Belo, Lee, Dow Jones and Knight Ridder. Belo had three years of missing data from its newspaper division. Knight Ridder was missing data for non-newspaper divisions for six years. In most cases, only one piece of data would be missing. For example, capital expenditures would be missing, but operating profits would be available. In cases like this, norms were computed using all available data. Missing data, however, did prevent calculation of a firm's reinvestment index score for that year. The averages used to test the hypotheses were calculated using scores from the remaining years.

In some cases, there was a negative number for a firm's reinvesment index because the firm lost money that year. Negative operating profit measures were not removed from the computation of profit norms for each year; as they served to adjust the norm down to reflect segments that reported losses. Despite some losses, the profit norm for all firms never dipped below zero.

However, negative scores on an index create an issue for calculating the overall average score for all indices. Negative indices are below 1.0, and would indicate a lack of investment. However, negative indices do not mean that the firm failed to reinvest in relation to its peers. In fact, they could indicate the contrary: Firms that invested to the point of sacrificing profitability would have a negative index.

Because of the complexity that negative indices presented to the computation of averages for all of a firm's indices during the study, negative results were excluded from the computation of firm averages.

The Herfindahl-Hirschman Index (HHI) measure was adopted to compute a diversity index for each firm. This index was calculated by first determining the percentage of total company revenue that came from each business segment. The percentage was squared, and summing the resulting numbers created the index score. This meant each firms' diversity index took into account the relative size and distribution of revenue streams. The index approached zero if a firm consisted of a large number of segments of equal size. For example, the most diversified firm in 1997 was the Washington Post Company:

Table 2: 1997 Washington Post Company Diversity Index

BUSINESS SEGMENT	NET SALES	SHARE	SHARE^2
NEWSPAPER PUBLISHING	812.896	0.415537	0.172671
OTHER	157.399	0.080459	0.006474
MAGAZINE PUBLISHING	389.853	0.199286	0.039715
TELEVISION BROADCASTING	338.373	0.17297	0.029919
CABLE TELEVISION	257.732	0.131748	0.017357
TOTAL	1956.253	HHI	0.266136

As the number of business segments in a firm decreased, or the disparity in size between those segments increased, or both, the index approached 1.0. This indicated a less diversified firm. The least diversified firms in 1997 were, not surprisingly, newspaper companies with only one line of business. These included McClatchy, News Communications, and Liberty Media, so their diversity index was 1.0. Besides these three, New York Times Company exhibited the lowest diversity in 1997. It had the highest diversity index other than 1.0, 0.80.

Diversification levels were used to test Hypothesis 3, which stated that diversity and diversified moral index scores are positively related. Pearson correlations were calculated to test the strength of this relationship, as well as those predicted by the other hypotheses.

Measures of financial performance

Six market performance measures were used to gauge the effects of reinvestment strategies. Values for each measure were pulled from Compustat's industrial database for each year from 1996 to 2005. The measures are for the firm level. Compustat reports firm-level financial data that is adjusted to compensate for differences in accounting practices. The measures were chosen with the purpose of giving a "big picture" of the financial strength and market performance of the firms. Choosing the measures was difficult because financial strength is a slippery concept, especially when deciphering between short-run and long-run strength. There are hundreds of measures to choose from, and even the most expert analysts struggle to

make sense of them all. Compustat provides data manuals to detail how it calculates these measures, and to provide formulas for calculating more advanced financial indicators.

The six measures selected for this study included (1) the current ratio, (2) return on sales, (3) sales per $100 market value, (4) the price/earnings ratio, (5) growth of total assets, and (6) growth of net sales.

To test the first two hypotheses, short-term measures and long-term measures were needed. Two measures were selected because they specifically dealt with short-run and long-run outlook. They are the current ratio, which measures short-run strength, and the price/earnings ratio, which measures long-run strength. The remaining measures were considered in two ways, one way that demonstrated short-run performance, and another for long-run. The 10-year average was used to gauge short-run performance. The percent change from the first year, 1996, and the last year, 2005, was used to gauge long-run performance. A 10-year average is 10 single years averaged together, while the percent change shows a trend. After a brief description of each measure, the specific tests conducted for hypotheses 1 and 2 will be outlined. An online financial glossary, investopedia, was utilized to help understand the measures.

Total assets represent current assets plus long-term assets (Compustat). Assets add to the value of a firm or benefit the firm's operations (www.investopedia.com). Current assets are generally consumed within a year (www.investopedia.com). Long-term assets, or fixed assets like equipment, retain value year after year (www.investopedia.com). This measure was chosen to see if the trend in declining total assets observed in the 1980s and early 1990s by Picard (1995) continued. Picard (1995) used constant dollars to measure assets, a measure that is adjusted for inflation. One weakness of this thesis is that growth rates of total assets are not measured in constant dollars, so the measure does not account for inflation. For the short-run

measure, an average growth rate of total assets was calculated. The long-run measure was a percent change in total assets from 1996 to 2005. Positive growth of total assets will be considered good short-run and good long-run financial strength.

The current ratio is defined by Compustat as current assets divided by current liabilities. It is an effective measure of short-term financial strength because it represents a company's liquidity. A healthy current ratio, above 1.0, shows the firm is able to repay short-term liabilities with short-term assets, like cash (www.investopedia.com). If the ratio is under 1.0, it shows a company could not pay its short-term debts if they came due (www.investopedia.com). The current ratio is also useful at gauging the efficiency of a firm's operating cycle, "or its ability to turn its product into cash" (http://www.investopedia.com/terms/c/currentratio.asp). Since operating conditions are different for each industry, the current ratio is useful to compare firms within the same industry to see which are more efficient and in a better position to meet short-term challenges. Higher current ratios will be considered good short-run financial strength.

Net sales is defined by Compustat as sales minus refunds and returns. The sale of advertising and subscriptions is the main source of revenue for newspaper companies. Firms may grow their sales by improving operations, improving circulations, or by making acquisitions. This measure is a good one for the study because it tests a firm's ability to grow revenue. For the short-run measure, an average growth rate of net sales was calculated. The long-run measure was a percent change in net sales from 1996 to 2005. Positive growth of net sales is considered to be an indicator of good short-run and long-run financial health.

Profit margin, or return on sales, is defined by Compustat as pre-tax income divided by total sales. Investopedia states "This measure is helpful to management, providing insight into how much profit is being produced per dollar of sales. As with many ratios, it is best to compare

a company's ROS over time to look for trends, and compare it to other companies in the industry. An increasing ROS indicates the company is growing more efficient, while a decreasing ROS could signal looming financial troubles" (www.investopedia.com). Martin (1998) used return on sales to measure newspaper profits. Generally, high return on sales indicates short-term financial strength. However, the literature review suggests that excessive profits can have a negative effect on long-term financial strength. This thesis analyzes 10 years of return on sales data, making long-term trends available. An upward trend in return on sales is considered an indicator of good financial health, while a negative trend is considered an indicator of poor financial health.

Sales per $100 of market value cuts through firm size to measure the value of the firm from an investor's viewpoint. Measured in Compustat as "net sales/ (price x common shares outstanding)" (Compustat Data Manual #2, on the WWW), it takes into consideration the price, or value of the company's stock. The ratio shows how much investors are willing to pay for every dollar of sales. A smaller number for sales per $100 market value shows the stock is viewed positively on Wall Street. Lower sales per $100 market value will be considered an indicator of good short-run and long-run financial health.

The Price to Earnings Ratio (P/E) measures investor predictions of the company's long-term earnings. Compustat's formula for the measure is stock "price at fiscal year close / earnings per share (basic) excluding extra items" (Compustat Data Manual #2, on the WWW). The ratio is for the year that just ended, not the current year or a projection. If a firm's P/E is high, investors were willing to pay a higher price for smaller earnings because they believe the firm's earning will grow in the future. The measure can be used to compare companies to see which are viewed as good long-term investments on Wall Street. Higher P/E ratios are considered indicators of good long-run financial health.

All six measures, when observed together, should give a "30,000 foot view" of a firm's financial health.

The following financial measures will be used to test Hypotheses 1 and 2 predicting relationships between reinvestment and financial health:

(A): Short-run financial strength is considered to be:

1. Positively correlated with the current ratio.
2. Positively correlated to average ROS.
3. Negatively correlated with average annual sales per $100 market value.
4. Positively correlated with average total assets growth rate.
5. Positively correlated with average net sales growth rate.

(B): Long-run financial strength is considered to be:

1. Positively correlated with the P/E.
2. Positively correlated to the percent change in ROS.
3. Negatively correlated with percent change in sales per $100 market value.
4. Positively correlated with percent change of total assets.
5. Positively correlated with percent change of net sales.

Chapter 5: Results

Newspaper division indices, non-newspaper indices, and diversity indices for each firm for each year are in Table 18, located in the appendix.

Newspaper Division Reinvestment Index Scores

Table 5: Newspaper division reinvestment index scores summary[1]

Firm	Newspaper Division Reinvestment Index
JOURNAL COMM	3.35
DOW JONES	2.87
WPO	1.56
NYT	1.43
PULITZER	1.18
TIMES MIRROR	1.17
TRIBUNE	1.06
MCCLATCHY	0.98
BELO	0.93
KNIGHT RIDDER	0.90
LEE	0.84
LIBERTY	0.74
EW SCRIPPS	0.70
GANNETT	0.70
MEDIA GENERAL	0.51
Firm Average	1.26
Standard Deviation	0.81
Note: Table 5 reinvestment index scores are 10-year averages of reinvestment indexes from 1996 to 2005.	

The 10-year averages of each firm's newspaper division reinvestment index scores show seven firms scored above a 1.0 and eight scored below 1.0. [2]

The 10-year average for all firms' newspaper divisions was 1.26, suggesting firms favoring reinvestment did so at higher percentages than firms favoring profits. The standard

[1] Moral index scores could not be computed for the following firms on the following years because of missing data: Dow Jones, 1999, 2000; Knight Ridder, 2000, 2001; Lee, 1996

[2] News Communications was removed because it had a negative score.

deviation of 0.81 confirms this. All eight firms below 1.0 are within a standard deviation of the 10-year average. However, two of the firms above 1.0 are more than one standard deviation from the 10-year average. These are Journal Communications at 3.35 and Dow Jones at 2.87. This means Journal Communications average capital expenditures that were almost 300 percent larger than profits after correcting for industry norms. Dow Jones averaged capital expenditures about 200 percent larger than profits after correcting for industry norms. These results suggest some managers choose to reinvest at relatively high rates compared with profits.

However, at companies where profits are larger than reinvestments, managers may have less freedom of choice. For example, Media General's newspaper division had a 10-year average of .51 on the index, meaning reinvestment was only half as large as profits after correcting for industry norms. But this is a much smaller difference than at Journal Communications and Dow Jones.

Non-newspaper Segments Reinvestment Index Scores

Table 6: Non-newspaper segments reinvestment index score summary[3]

Firm	Non-newspaper Segments Reinvestment Index
KNIGHT RIDDER	7.34
JOURNAL COMM	1.98
WPO	1.86
DOW JONES	1.68
MEDIA GENERAL	1.59
TIMES MIRROR	1.29
BELO	1.03
LEE	0.93
EW SCRIPPS	0.89
NYT	0.80
GANNETT	0.42
TRIBUNE	0.39
PULITZER	0.38
Firm Average	1.10
Standard Deviation	0.57
Note: Table 6 reinvestment index scores are 10-year averages of reinvestment indexes from 1996 to 2005.	

Knight Ridder had the highest 10-year average on the diversified segments measure at 7.34. However, this average is misleading because Compustat was missing data for all but three years. The 1996 index score of 21.58 pulls the average up dramatically.[4] Therefore, Knight Ridder will be excluded from this and from the diversified segments financial performance analysis, for which data appears in Table 8.

Table 7 shows six of the remaining firms had a 10-year average reinvestment index score of 1.0 or higher and six scored below 1.0. The overall average for firms' diversified segments was 1.10, with a standard deviation of 0.57. Journal Communications and the Washington Post are more than one standard deviation above the 10-year overall average, and Dow Jones is right

[3] Moral Index scores were not computed for the following firms on the following years because of missing data: Belo, 2004, 2005; Dow Jones, 1997, 1999, 2000; Journal Communications, 2001; Knight Ridder, 1997-2002; New York Times, 2000.

[4] Knight Ridder spent more than $14 million on capital expenses for its "Business Information Services" segment that year, and only made $1.8 million in profits. Therefore Knight Ridder's high score of 21.58 may be skewed by a segment in its infancy, where heavy losses are permissible, or one that was performing miserably. The segment did exist for at least two years prior to 1996, and it disappeared by 1997.

at it. This suggests these three companies are making notable capital investments in non-newspaper businesses. However, three companies below 1.0 -- Gannett, Tribune and Pulitzer -- are more than one standard deviation below the mean. For these firms, the 10-year average for reinvestment is less than half the size of the 10-year average for profit after correcting for industry norms. This suggests these companies view their non-newspaper segments primarily as profit centers.

Diversification Index Scores

Table 7: Diversification index scores summary

FIRM	Diversification Index
JOURNAL COMM	0.24
WPO	0.25
EW SCRIPPS	0.36
MEDIA GENERAL	0.48
BELO	0.49
TRIBUNE	0.53
TIMES MIRROR	0.58
DOW JONES	0.63
GANNETT	0.76
NYT	0.85
LEE	0.89
PULITZER	0.89
KNIGHT RIDDER	0.95
MCCLATCHY	1.00
NEWS COMM	1.00
LIBERTY	1.00
Note: Table 7 diversity index scores are 10-year averages of indexes from 1996 to 2005.	
Note: Table 7 is sorted with the most diverse on top to least diverse on bottom.	

Table 7 has 10-year averages showing only three companies were not at all diversified – McClatchy, Liberty Group and News Communication. Of the remaining firms that did diversify, the 10 year average diversity index score was 0.61, with a standard deviation of 0.24. Four

companies have a diversity index of at least one standard deviation above the average, indicating most of their revenue comes from their newspaper division. Three of these, Pulitzer, Lee and Knight Ridder had divested their non-newspaper segments by the end of the 10 years. Three firms – Journal Communications, Washington Post and EW Scripps – had diversity index scores more than one standard deviation below average. These firms are significantly more diversified than the others. The six remaining firms are within one standard deviation of the average diversity index score. Of these firms, Gannett was the least diversified and Media General was the most diversified.

Financial Performance Measures for Newspaper Division Reinvestment Indices

In order to test hypothesis 1, which examines the effects of different levels of reinvestment in the newspaper division on firms' short-run and long-run financial strength, descriptive tables were created that group the firms by those that scored a 1.0 or higher and those that scored below a 1.0 on the newspaper division index. The hypothesis predicted that a firm's reinvestment index score would be negatively related to short-run financial performance and positively related to long-run financial performance.

Table 8 shows the short-run financial performance measures for the firms in the study. The table divides firms into those that scored 1.0 or higher and those that scored below 1.0 in the newspaper division reinvestment index. Averages are for the 10 years from 1996 to 2005.

Table 8: Newspaper division indices and short-term financial strength measures

Firm	Reinv. Index (Newspaper)	Current Ratio Avg.	Current Ratio % Change	ROS Avg.	Sales per $100 Avg.	Net Sales Growth Avg.	Total Assets Growth Avg.
Journal Comm.	3.35	1.31	-33.47%	13.60%	64.07	2.70%	7.84%
Dow Jones & Co.	2.87	0.54	-58.45%	6.29%	48.03	-1.94%	-2.37%
Washington Post	1.56	0.89	-13.30%	17.49%	41.62	7.60%	10.46%
New York Times	1.43	0.74	-15.80%	14.69%	53.08	3.65%	3.12%
Pulitzer Publishing	1.18	5.95	140.64%	14.02%	38.46	0.45%	15.13%
Times Mirror	1.17	1.15	-4.84%	11.41%	70.24	-3.11%	1.28%
Tribune Co.	1.06	1.27	-21.67%	23.96%	40.83	10.38%	18.01%
Average	1.80	1.69	-0.98%	14.50%	50.90	2.82%	7.64%
McClatchy	0.98	1.03	6.99%	16.94%	50.16	9.06%	15.21%
A.H. Belo Corp.	0.93	1.52	-25.20%	13.40%	60.04	8.60%	20.20%
Knight-Ridder	0.90	1.10	20.78%	16.64%	65.34	0.98%	5.27%
Lee Enterprises	0.84	1.43	-22.83%	20.47%	35.74	7.96%	25.34%
Liberty Group	0.74	1.00	-38.97%	-1.55%	n.a.	9.55%	32.47%
E.W. Scripps Co.	0.70	0.97	77.85%	19.41%	32.40	9.91%	15.21%
Gannett Co.	0.70	1.20	25.08%	26.51%	34.25	6.72%	10.04%
Media General	0.51	1.38	47.56%	11.64%	72.27	3.06%	9.08%
Average	0.79	1.20	11.41%	15.43%	43.77	6.98%	16.60%

The current ratio measure shows that the group of firms with index scores above 1.0 was more liquid, with a score of 1.69. Pulitzer's score of 5.95 is an outlier. If removed from the analysis, the average current ratio of firms above 1.0 on the moral index drops to 0.98. The three firms with the highest current ratios, other than Pulitzer, were Belo, Lee, and Media General. All three had moral index scores below 1.0. Three firms with reinvestment index scores above a 1.0 – Dow Jones, Washington Post, and New York Times – had the lowest current ratios. These firms had average current ratios below 1.0, indicating that they carried more current liabilities than current assets during the decade. The group of firms that scored above 1.0 on the reinvestment index averaged a slight decline in current ratio over the decade, while those that scored below a 1.0 showed an 11% improvement.

Firms that scored above a 1.0 had annual profit margins that averaged 14.50% over the 10 year period. Those with reinvestment index scores less than 1.0 averaged a profit margin of 15.43%. The average annual sales per $100 market value was lower for firms below 1.0, at 43.8,

than for firms above 1.0, at 50.9. This means the firms below 1.0 were more attractive to investors. The average annual ROS and sales per $100 market value measure give support for the hypothesis. However, firms that scored above 1.0 on the newspaper reinvestment index averaged a lower net sales growth rate and total assets growth rates than firms that scored below a 1.0.

These measures give support the hypothesis. Higher annual return on sales, lower sales per $100, and higher growth rates were all observed in the group of firms that scored below a 1.0 on the reinvestment scale. The current ratio measure gives partial support. The average current ratio measure was thrown-off by the abnormal performance of Pulitzer, a firm that went out of business during the decade. Overall, the descriptive table indicates that firms that reinvested less in their newspaper divisions demonstrated better short-term financial strength.

Table 9 shows the long-run financial strength for firms, again grouped by those that scored a 1.0 or higher on the newspaper division reinvestment index, and those that scored below a 1.0. Averages are for the 10-year period from 1996 to 2005. Percent changes, shown in the table as "% Dif." show the difference between 1996 and 2005 values.

Table 9: Newspaper division indices and long-run financial strength measures

Firm	Reinv. Index (Newspaper)	P/E Ratio Avg.	P/E Ratio % Dif.	ROS % Dif.	Sales per $100 % Dif.	Net Sales % Dif.	Total Assets % Dif.
Journal Comm.	3.35	18.63	-24.72%	16.89%	35.15%	22.86%	107.93%
Dow Jones & Co.	2.87	69.95	181.29%	-56.14%	-21.83%	-28.69%	-35.43%
Washington Post	1.56	25.49	40.14%	-27.66%	-4.56%	91.74%	145.12%
New York Times	1.43	25.09	-66.91%	74.77%	24.67%	28.98%	28.06%
Pulitzer Publishing	1.18	39.31	79.60%	-11.52%	-39.81%	-16.93%	102.77%
Times Mirror	1.17	35.78	-40.87%	22.08%	7.09%	-10.93%	10.41%
Tribune Co.	1.06	32.57	-1.81%	0.61%	21.53%	132.60%	293.05%
Average	1.80	35.26	23.82%	2.72%	3.18%	31.38%	93.13%
McClatchy	0.98	22.59	-27.35%	77.80%	-27.28%	90.01%	138.27%
A.H. Belo Corp.	0.93	22.59	13.63%	-22.14%	1.18%	84.55%	193.22%
Knight-Ridder	0.90	16.89	28.20%	-23.75%	-8.78%	8.26%	58.74%
Lee Enterprises	0.84	20.85	22.35%	-32.41%	33.34%	104.79%	553.22%
Liberty Group	0.74	n.a.	n.a.	-204.84%	n.a.	93.59%	335.81%
E.W. Scripps Co.	0.70	28.95	63.43%	-4.00%	-19.40%	124.08%	175.53%
Gannett Co.	0.70	18.82	-27.46%	-2.67%	26.14%	71.88%	147.94%
Media General	0.51	23.33	26.90%	1.13%	-21.09%	19.98%	92.63%
Average	0.79	22.00	14.24%	-26.36%	-2.27%	74.64%	211.92%

The hypothesis predicted that firms with reinvestment index scores above a 1.0 would enjoy better long-run financial strength. The P/E represents stockholder's view of long-run expectations for earnings. The P/E ratio for firms that scored above a 1.0 on the reinvestment index, at 35.3, is higher than the 22.0 P/E of firms that scored below a 1.0. The percent change in the P/E ratio from 1996 to 2005 was almost twice as high, at 23.8 percent, for the firms above 1.0 as it was for those below 1.0, at 14.2 percent. However, four firms with scores above a 1.0 on the reinvestment index showed a negative trend in P/E ratio from 1996 to 2005.

Firms that scored above a 1.0 in the newspaper division reinvestment index experienced a slight increase in ROS from 1996 to 2005. The three percent increase over the decade is important when contrasted with the percent change in profit margins of firms that scored below a 1.0, a 26.4 percent loss over the decade. McClatchy, below the 1.0 cutoff by two hundredths, had ROS that grew by 77.8 percent from 1996 to 2005. Without McClatchy's gain, the other firms in

that scored below 1.0 on the newspaper division reinvestment index experienced a 36 percent loss in ROS over the decade.

The sales per $100 market value percent change from 1996 to 2005 was a 3.2 percent gain for firms above 1.0 on the reinvestment index, and a 2 percent loss for firms below 1.0 on the index. This means that firms that reinvested less became slightly more valuable to investors than firms that reinvested more.

The net sales percent change and the total assets percent change are higher for the group of firms below 1.0 on the reinvestment scale.

When considered together, the measures provide partial support for the hypothesis that a firm's reinvestment in its newspaper division has long-run benefits to financial performance. The P/E ratio and ROS percent change are stronger, on average, for firms above 1.0 on the reinvestment index. On average, firms that reinvested at higher percentages than they profited, when controlling for industry standards, were able maintain and even improve profit margins. Those that reinvested less than they profited showed declining profit margins. All this supports the hypothesis. However, sales per $100 market value, total assets, and net sales measures do not support the hypothesis.

Financial Performance Measures for Non-Newspaper Segment Reinvestment Indices

Hypothesis 2 examines the effects of different levels of reinvestment in non-newspaper segments on firms' short-run and long-run financial strength. The hypothesis predicted that a firm's reinvestment index scores on the diversified index would be negatively related to short-run financial performance and positively related to long-run financial performance.

Table 10 shows the short-run financial measures of firms, grouped by those that scored above a 1.0 on the non-newspaper, or diversified reinvestment index and those that scored below a 1.0.

Table 10: Non-newspaper segments reinvestment indices and short-run financial strength measures

Firm	Reinv. Index (Non-newspaper)	Current Ratio		ROS	Sales per	Net Sales	Total Assets
		Avg.	% Dif.	Avg.	$100 Avg.	Growth Avg.	Growth Avg.
Journal Comm.	1.98	1.31	-33.47%	13.60%	64.07	2.70%	7.84%
Washington Post	1.86	0.89	-13.30%	17.49%	41.62	7.60%	10.46%
Dow Jones & Co.	1.68	0.54	-58.45%	6.29%	48.03	-1.94%	-2.37%
Media General	1.59	1.38	47.56%	11.64%	72.27	3.06%	9.08%
Times Mirror	1.29	1.15	-4.84%	11.41%	70.24	-3.11%	1.28%
A.H. Belo Corp.	1.03	1.52	-25.20%	13.40%	60.04	8.60%	20.20%
Average	1.57	1.13	-14.62%	12.30%	59.38	2.82%	7.75%
Lee Enterprises	0.93	1.43	-22.83%	20.47%	35.74	7.96%	25.34%
E.W. Scripps Co.	0.89	0.97	77.85%	19.41%	32.40	9.91%	15.21%
New York Times	0.80	0.74	-15.80%	14.69%	53.08	3.65%	3.12%
Gannett Co.	0.42	1.20	25.08%	26.51%	34.25	6.72%	10.04%
Tribune Co.	0.39	1.27	-21.67%	23.96%	40.83	10.38%	18.01%
Pulitzer Publishing	0.38	5.95	140.64%	14.02%	38.46	0.45%	15.13%
Average	0.63	1.93	30.54%	19.84%	39.13	6.51%	14.48%

The average current ratio for firms above 1.0 is 1.13, below the average of firms that scored below a 1.0 on the reinvestment index, at 1.93. Pulitzer's average current ratio throws off the average of firms below 1.0 on the moral index, making analysis difficult. Of the firms that scored above a 1.0 on the non-newspaper segments index, Media General was the only firm with a positive percent change from 1996 to 2005. The group above 1.0 averaged a 14.6 percent loss in the current ratio over the decade, while the group below 1.0 on the reinvestment index averaged an increase exceeding 30 percent.

Firms with reinvestment index scores above 1.0 had an average profit margin of 12.3 percent, less than the firms with scores below 1.0, with an average 19.8 percent. The four firms with the highest ROS – Gannett, Tribune, Lee, and Scripps – all scored below a 1.0 on the index,

and all have higher profit margins than any firm that scored above a 1.0. The sales per $100 market value average was 59.4 for the firms above 1.0 on the reinvestment index, and 39.1 for firms below. Investors valued firms that reinvested less, or below the 1.0 threshold, in the short-run. Firms that scored below a 1.0 in non-newspaper division segments grew net sales and total assets at about twice the rate of those that scored above a 1.0.

These measures give partial support for the hypothesis. Firms that reinvested less in capital expenses in their non-newspaper segments enjoyed greater short-term financial strength than those that reinvested more.

Table 11 shows the long-run financial measures of firms, and is grouped by those that scored above a 1.0 on the non-newspaper segment reinvestment index and those that scored below a 1.0.

Table 12: Non-newspaper segments reinvestment indices and long-run financial strength measures

Firm	Reinv. Index (Non-newspaper)	P/E Ratio		ROS	Sales per	Net Sales	Total Assets
		Avg.	% Dif.	% Dif.	$100 % Dif.	% Dif.	% Dif.
Journal Comm.	1.98	18.63	-24.72%	16.89%	35.15%	22.86%	107.93%
Washington Post	1.86	25.49	40.14%	-27.66%	-4.56%	91.74%	145.12%
Dow Jones & Co.	1.68	69.95	181.29%	-56.14%	-21.83%	-28.69%	-35.43%
Media General	1.59	23.33	26.90%	1.13%	-21.09%	19.98%	92.63%
Times Mirror	1.29	35.78	-40.87%	22.08%	7.09%	-10.93%	10.41%
A.H. Belo Corp.	1.03	22.59	13.63%	-22.14%	1.18%	84.55%	193.22%
Average	1.57	32.63	32.73%	-10.97%	-0.68%	29.92%	85.65%
Lee Enterprises	0.93	20.85	22.35%	-32.41%	33.34%	104.79%	553.22%
E.W. Scripps Co.	0.89	28.95	63.43%	-4.00%	-19.40%	124.08%	175.53%
New York Times	0.80	25.09	-66.91%	74.77%	24.67%	28.98%	28.06%
Gannett Co.	0.42	18.82	-27.46%	-2.67%	26.14%	71.88%	147.94%
Tribune Co.	0.39	32.57	-1.81%	0.61%	21.53%	132.60%	293.05%
Pulitzer Publishing	0.38	39.31	79.60%	-11.52%	-39.81%	-16.93%	102.77%
Average	0.63	27.60	11.53%	4.13%	7.74%	74.23%	216.76%

The P/E ratio was higher for firms with reinvestment index scores above 1.0, at 32.6, than those below 1.0, at 27.6. This indicates that firms that reinvested more were more attractive to investors in the long-run. The P/E of firms above 1.0 on the reinvestment scale increased 32.7

percent from 1996 to 2005, about 200 percent more than the gain in P/E showed by the group of firms below 1.0.

Firms that scored below a 1.0 showed more favorable change in profit margin over the decade – a 4.1 percent increase – compared to the 11.0 percent loss of the group with reinvestment scores above 1.0. The sales per $100 market value percent change from 1996 to 2005 was a 0.68 percent decline for the group of firms above 1.0 and 7.7 percent gain for the firms below 1.0 on the reinvestment index. Since stronger firms have lower sales per $100 market value, a slight decrease for firms that reinvested more and an increase for firms that reinvested less supports the hypothesis. However, firms that reinvested less also experienced larger percent increases in both total assets and net sales from 1996 to 2005.

Profit margins were not maintained by the group that invested more, but the group, on average, had a lower sales per $100 market value and a higher P/E ratio. These measures give partial support for the hypothesis.

Correlation Tests

Formal tests of the hypotheses used correlations to examine the strength and direction of relationships between the reinvestment index scores and financial performance measures. Tests of statistical significance were not used because the sample in the study is a census of publicly owned newspaper firms in the United States. However, this means results from the correlations cannot be generalized to privately owned firms.

A hypothesis received support if the correlation was in the predicted direction, and was 0.31 or higher. This was selected as a cutoff because a correlation of 0.31 has an R^2 of 0.10, which is interpreted to mean it accounts for 10 percent of variance.

Hypothesis 1 predicted that newspaper division reinvestment index scores were: (A) negatively related to a firm's short-run financial strength, and (B) positively to a firm's long-run financial strength.

Table 13: Pearson correlations between newspaper indices and financial measures

Financial Measure	Pearson Correlation
Short-run financial measures	
Current ratio 10-year average	-0.10
Current ratio percent change	-0.42
ROS 10-year average	-0.24
Sales per $100 market value 10-year average	0.16
Total assets growth rate 10-year average	-0.48
Net sales growth rate 10-year average	-0.43
Long-run financial measures	
P/E ratio 10-year average	0.43
P/E ratio percent change	0.26
ROS percent change	0.09
Sales per $100 market value percent change	0.18
Total assets percent change	-0.38
Net sales percent change	-0.44

For Hypothesis 1(A), all the relationships are in the predicted direction. Newspaper division reinvestment index scores and short-run financial strength measures were all negatively related. A significant relationship was observed between reinvestment index scores and the current ratio percent change measure (-0.42). As reinvestment levels increased, the current ratio trend from 1996 to 2005 decreased. This means that firms that reinvested more in their newspaper divisions experienced a decline in their assets to liabilities ratio, which demonstrates the ability to repay short-term debts. The average growth rate of net sales was negatively correlated with moral index scores at a significant level (-0.43), as was average growth rate of total assets (-0.48). Firms that reinvested in capital expenses less than the norm grew sales and assets at faster rates. One explanation for this is that firms that reinvested less had more money to spend on acquisitions that caused spikes in sales and assets.

The correlation of -0.24 for the ROS average shows the relationship is in the predicted direction. However, the correlation is below the cutoff of .31, so this is be interpreted as providing partial support for this hypothesis. Overall, Hypothesis 1(A) received strong support.

Hypothesis 1(B) stated that firms that reinvested more in their newspaper divisions would experience better long-run financial strength than those that did not. This hypothesis received partial support. The P/E ratio average and reinvestment index scores were correlated (0.43) in the predicted direction. The P/E ratio percent change correlation was in the predicted direction, but it fell short of providing support for the hypothesis at 0.26. The P/E measures the amount investors are willing to pay for one dollar of earnings. Therefore, the fact that investors were willing to pay more, on average, for firms with higher reinvestment index scores, gives good support for the hypothesis. The positive relationship between percent change of ROS and reinvestment index scores was correctly predicted, but the correlation was weak (0.09). The percent change for sales per $100 market value showed a weak correlation in the opposite direction predicted. The percent change of net sales and total assets showed negative relationships with moral index scores. This finding ran counter to predictions. Hypothesis 1(B) receives mixed support. The average P/E ratio, an indicator of future earnings, was significantly related to reinvestment levels in newspaper divisions. But firms that reinvested more also grew at slower rates.

Hypothesis 2 predicted that non-newspaper segments reinvestment index scores were: (A) negatively related to a firm's short-run financial strength, and (B) positively related to a firm's long-run financial strength.

Table 14: Pearson correlations between non-newspaper indices and financial measures

Financial Measure	Pearson Correlation
Short-run financial measures	
Current ratio 10-year average	-0.42
Current ratio percent change	-0.45
ROS 10-year average	-0.61
Sales per $100 market value 10-year average	0.55
Total assets growth rate 10-year average	-0.44
Net sales growth rate 10-year average	-0.34
Long-run financial measures	
P/E ratio 10-year average	0.12
P/E ratio percent change	0.20
ROS percent change	-0.19
Sales per $100 market value percent change	-0.05
Total assets growth rate percent change	-0.32
Net sales growth rate percent change	-0.31

All the relationships predicted for hypothesis 2(A) were in the correct direction, and were strong enough to provide support for the hypothesis. Firms that reinvested more than industry norms in diversified segments were negatively related (-0.61) to average profit margin over the decade. Sales per $100 market value averages were positively correlated (0.55) with reinvestment index scores. This means that investors saw less value in firms that reinvested more capital expenses for non-newspaper divisions.

Hypothesis 2(B) was not supported. The P/E ratio average and percent difference were predicted in the correct direction, in that they were positively related to reinvestment index scores. However, correlations were not significant. The correlation between ROS percent change and index scores was -0.19; as reinvestment in diversified segments went up, the ability to retain profit margins decreased. However, this correlation was not significant. Again, net sales and total assets percent change showed significant negative correlations with reinvestment index scores

Hypothesis 3 predicted the reinvestment index scores for non-newspaper segments and diversification levels of the firms are positively related.

Table 15: Pearson correlations and firm diversity index scores

Correlations	Firm Diversity Score
Newspaper division reinv. index	-0.39
Non-newspaper segments reinv. index	-0.65

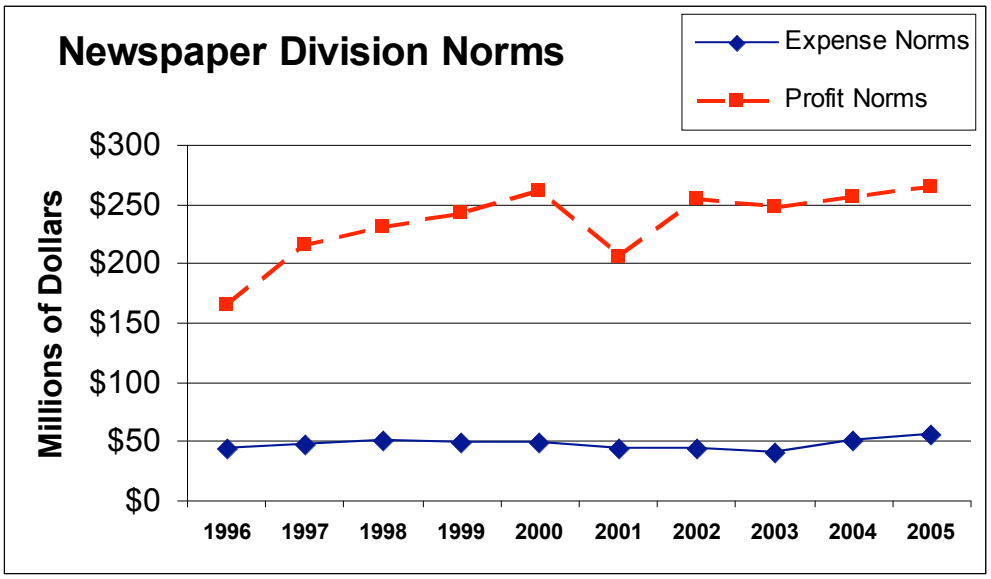
The purpose of testing this hypothesis was to see if reinvestment in non-newspaper capital expenses was correlated with diversification levels, so a positive relationship has a negative sign. Diversification levels are represented by low scores. The strong negative correlation (-0.65) between non-newspaper reinvestment index scores and diversity levels shows clear support for the hypothesis. The firms that spent more on capital expenses in their diversified segments were more diverse during the decade. Interestingly, newspaper division reinvestment index scores and diversity levels are also negatively related (-0.39). Firms that reinvested more in their newspaper divisions were more diverse than firms that reinvested less.

Hypothesis 4 predicted newspaper division reinvestment index scores and non-newspaper reinvestment index scores are negatively related. This prediction was made under the assumption that reinvestment in the newspaper division would create lack of investment in non-newspaper divisions, and vise versa. Firms would have to choose which side – core product or diversified segments – they wanted to reinvest available funds. However, there is a 0.61 correlation between indices (not reported in a table), so Hypothesis 6 was not supported. A positive relationship was demonstrated between newspaper division reinvestment index scores and diversified segments reinvestment index scores. The top three firms for the newspaper and non-newspaper reinvestment indices were Journal Communications, Dow Jones and Washington Post (Knight-Ridder was excluded from the non-newspaper index). Three firms scored below 1.0 in both indices: Gannet, Lee and EW Scripps.

Chapter 6: Discussion:

The decision to reinvest in capital expenses is one that every newspaper manager has to make. Every firm is required to reinvest a minimum to sustain operations. Reinvestment only becomes a strategy when it goes above and beyond – when managers make decisions to reinvest in capital expenditures above normal levels. Likewise, lack of reinvestment becomes a strategy when it comes in far under the industry norm. No newspaper company reported reinvestment levels below one standard deviation of the norm in the newspaper division. However, as Table 16 shows, expense norms remained constant during the decade while profits rose.

Table 16: Newspaper Division norms adjusted for inflation, 1996-2005

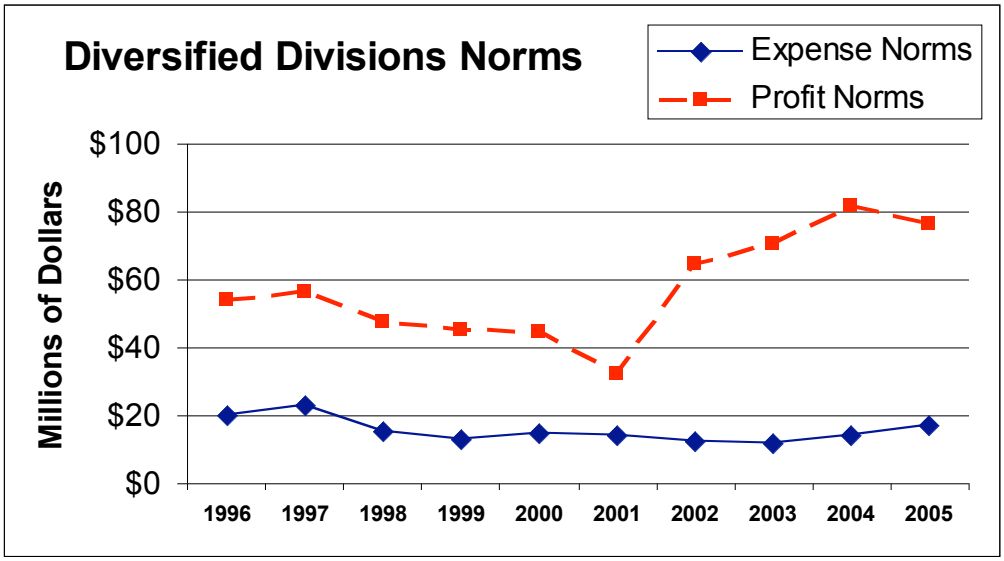


Profit and expense norms were adjusted for inflation. Firms may have had more funds available to reinvest as the decade went on, as profit norms increased, and may have actually decreased reinvestment levels.

Meyer's (2004) assertion that no firm consciously practices the cost/price competition strategy was supported by the fact that no firm had an abnormally low newspaper reinvestment

index score. However, some firms made a conscious decision to reinvest at levels well above normal. Journal Communications and Dow Jones reinvested into their newspaper divisions at levels well above the norm. The diversified segments index had firms that were above one standard deviation above the norm, but not as far above as they were in terms of newspaper reinvestment. This could be because earnings were not as steady in diversified segments for all firms in the study, as Table 17 shows. The same two companies also reinvested in their diversified segments at levels over a standard deviation above average.

Table 17: Diversified divisions norms, adjusted for inflation, 1996-2005



Profit norms declined until 2001, and then experienced a sharp rise that rounded-out in 2005. Expense norms stayed constant during the decade. Reinvestment into diversified segments index was seen at abnormally low levels, more than one standard deviation from the overall average, something not seen in the newspaper division index. Moore's Law, which states that the price of technology will decline over time, may explain why expense norms are flat, or even declining, in both newspaper and diversified divisions. For instance, a new technology recorded as a capital

expense could allow a newspaper to require less office space, preventing the firm from capitalizing the expense of a new building.

Low Reinvestment Index Scores

The firms that invested less than industry norms in both indices were Gannett, Lee, and EW Scripps. Gannett was the lowest of these three in both indices.

Gannett's *USA Today* has the highest circulation of any newspaper at 2.3 million (corporate website), and is distributed nationwide. In addition Gannett owns 107 dailies including 17 in the United Kingdom, 23 television stations, and more than 1,000 non-daily publications worldwide. The firm's newspaper moral index score was 0.70. Its non-newspaper index was 0.42. Gannett had the largest newspaper division in terms of revenue. It obtained enough reach nationally to gain economic efficiencies that may have reduced its need to reinvest with as high a percent of its profit as smaller firms in the sample. Despite its vast holdings, Gannett remains a relatively undiversified firm. Its corporate website celebrates the firm's diversity, but high diversity index scores indicate otherwise. It divested its outdoor advertising division in 1996, its radio holdings in 1997, and its stakes in cable systems in 2000. In the first half of 2000, Gannett acquired over $4.5 billion in newspapers. Over the decade of analysis, Gannett had the highest profit margin of any firm in the sample at 26.51%. It's P/E, the second lowest of the sample, at 18.82, does not indicate a long-term outlook for high earnings. It also indicates that Gannett is a low-risk stock because investors received high earnings in the short-run. Like all firms in the sample, Gannett speaks to its commitment to community service on its corporate website; it also boasts about profitability. "As Gannett progresses through the information age, it continues to serve the readers on Elm Street, the businesses on Main Street

and the investors on Wall Street – across the USA and throughout the world" (Gannett corporate website). Whether Gannett's loyalty is strongest to readers, advertisers, or shareholders is a question this study cannot answer, but Gannett has succeeded in serving all three to some degree.

Lee and EW Scripps, the other two firms that scored below 1.0 in both indices, are very different in their makeup. Lee is primarily a newspaper firm that had broadcast holdings but divested them in 2000 "to focus on its core business" (Lee corporate website).

EW Scripps is the one firm in the sample that may not be considered a newspaper company first. It owns high-growth cable networks like Food Network and Home and Garden Television (HGTV). In addition to newspapers in 18 markets, EW Scripps own broadcast television stations and the online shopper shopzilla.com. EW Scripps was one of the most diversified firms in the study, with a diversity index score of 0.36. Despite focusing its business efforts in diversified segments, EW Scripps invested less in its diversified holdings than the others. Its reinvestment index for the newspaper division at 0.70, even less than the diversified index score of 0.89 demonstrates the firm's priorities.

Gannett, Lee and EW Scripps represent firms that reinvested less, in relation to their incomes, than other firms in the newspaper industry. Whether or not they should be labeled with the cost/price strategy depends on the quality their newspapers exhibited over the decade. Average quality is a characteristic of Picard's cost/price strategy. Whether "average" describes the newspapers of these firms is a question for another study. The firms had three of the four highest profit margins in the study (Lee's was 20.47%, EW Scripps was 19.47%). They may have been maintaining profitability by passing on investments that would improve quality. This would indicate a short-term strategy that maximized profits. A future study could see if firms like

these, that reinvest a percentage of their profits at lower levels than industry norms, enjoy good reputations in the markets they serve.

High Reinvestment Index Scores

The firms that demonstrated above-average reinvestment index scores in both newspaper and diversified indices were Dow Jones, Journal Communications, Washington Post Company, and Times Mirror. Dow Jones, Journal Communications and Washington Post had the highest scores in both indices.

Journal Communications' largest source of revenue is its flagship publication, The Milwaukee Journal Sentinel. It also owns 90 small community papers and shoppers, 37 radio stations, nine television stations, a telecommunications services company named Norlight, and a printing company named IPC Services. Journal Communications was the most diversified firm in the study. Forty-four percent of its revenue came from its publication segment (Journal Sentinel and community papers) in 2005.

The Washington Post Company had the third highest newspaper index score, 1.56, and the second highest non-newspaper index score, 1.86. It had the second lowest diversity index score, at 0.25, indicating high diversity. Besides publishing the Washington Post newspaper, the firm operates magazines, television stations, cable systems, electronic information services, and the educational and career service firm named Kaplan. Its average profit margin for the decade, 17.5%, is well above the average for other firms with reinvestment index scores above 1.0 in both indices. The corporate website for the firm describes the firm's management approach: "All our management efforts are directed toward producing publications, programming and educational services of the highest quality…Our major responsibility toward shareholders is to

increase the company's intrinsic value by growing earnings over the long-term. We pay little attention to quarterly results, and we're willing to sacrifice short-term gains for greater returns in the future" (corporate website).

Dow Jones had the second highest newspaper division reinvestment index score, 2.87, and the third highest non-newspaper score, 1.68. Its diversity level, 0.63, was the eighth lowest, indicating average diversification. As publisher of the Wall Street Journal and its international editions, Dow Jones is the "pre-eminent publisher of business and financial news" (corporate website). The firm also operates community newspapers, finance-themed websites, and owns Barron's publishing group. Its return on sales was, by far, the lowest in the sample, at 6.3%.

Picard's quality leadership and quality management strategies require investment in quality that builds a good reputation. A future study could see if companies that reinvested at the greatest levels enjoy good reputation and influence among the readers of their flagship publications – the Milwaukee Sentinel Journal, The Washington Post and The Wall Street Journal.

The range of reinvestment opportunities went from abnormally high to low in the newspaper division, and from high to abnormally low in the diversified divisions. This indicates that firms were not willing to view newspapers purely as profit centers, but some did view diversified segments as such.

Meyer (2004) and Picard (2004) state that reinvestments in quality lead to gains in reputation and influence that are assets to newspapers. Whether the newspapers that reinvested at above normal amounts enjoy good quality and the benefits to reputation and influence is a question a future study could answer. This study did reveal a few things about the effects of above-average reinvestments in the newsroom. Firms that reinvested more in newspaper

divisions were not as profitable in the short-run, but they were, on average, better at retaining their profit margins. They grew assets and sales at a slower, sometimes negative rate, and they were more attractive to investors in the long-run than firms that reinvested less.

One surprising finding was that the firms that reinvested more in their newspapers were also the firms that reinvested more in their non-newspaper divisions. Contrary to the hypothesis, firms seemed to adopt a broad strategy of reinvestment, and stick with it across divisions. The strong positive correlation between indices supports this. The strong negative correlation between diversity levels and non-newspaper division reinvestment index scores also shows that these firms were the most diversified. This relationship makes it possible to interpret the results supporting hypothesis 2 as a way to view the costs and rewards of diversification.

Obviously, diversification is costly. Short-run financial strength measures heavily favored firms that spent less to diversify. The long-run percent difference in profit margin was negative for the group more committed to diversification, and positive for the group that reinvested less. However, higher reinvestment levels were related to higher P/E's, though not significantly. Market measures aside, the intrinsic benefits of diversification should not be overlooked. These firms generate revenue from diverse sources, hedging them against risk and giving them valuable expertise in businesses they deem promising enough to carry them, even in part, into the future. At some point in the past these newspaper companies decided to expand their revenue streams into diverse lines of business.

Abnormally high reinvestment is achieved through financial strength. Either cash is on-hand to fund the reinvestment, or standing with current or future creditors is good enough to obtain financing. This study shows that the strategy to heavily reinvest extends across business segments. It is possible that firms secured profits in one side of their business to fund

reinvestment in the other. If this started in the newspaper business, firms redirected profits from the newspaper business into diversified divisions. Firms that did this, however, kept newspaper reinvestment levels high. They did this at the expense of short-run financial strength. With high levels of reinvestment in non-newspaper segments, these firms made themselves more diversified. As seen in Table 17, diversification appeared to pay off, as profits rose mid-way through the decade. Diversification was costly, and firms that reinvested heavily in non-newspaper divisions were less profitable. However, they did maintain high levels of reinvestment in both newspaper and non-newspaper divisions.

It is possible that these newspapers reinvested heavily in their newspaper divisions to improve quality, and reputation, then extended this reputation into diversified segments that they showed dedication in building up.

Considering the results, several propositions emerge from the ratios and measures:

1. A firm's commitment to reinvest extends across business segments.

The firms with the best track record for reinvesting in their newspapers were also the ones that reinvested more in their diversified segments.

2. Firms that reinvest more in their newspaper divisions have lower profits than those that reinvest less, but also maintain or improved their profit levels with greater success than firms that started with very high margins and have lost significant profitability.

3. Firms that reinvest more in their diversified segments have lower profits than those that reinvest less, and also have a more difficult time maintaining their profitability.

This may indicate that the positive impacts of diversification on profitability take longer to "kick in" than the scope of this thesis. Or it may indicate that diversification does not lead to benefits to profitability. The non-newspaper index included some divisions that were truly

diversified from the newspaper division, and some that were differentiated from the newspaper division. A future study could control for this distinction to see the effects of different types of diversification.

5. Firms that reinvested more in capital expenses grew slower. The net sales growth rate measures and the total assets growth rate measures pointed to this. Mergers and acquisitions are not recorded as capital expenses. Since capital reinvestment levels and growth of assets and sales were negatively related, one could hypothesize that the strategy of above average reinvestment in capital expenses is negatively related with a merger and acquisition strategy. This study found evidence that firms committed to growth through mergers and acquisitions are not becoming more diverse. They may be passing on capital expenses that would increase production capacity in diverse business segments to finance their mergers and acquisitions.

6. Long-term financial outlook is better for firms that reinvest more than their industry peers in their newspaper division. The P/E ratio and newspaper moral index scores were positively related (0.43).

Future studies could analyze the firms on a case-by-case basis to see whether those that reinvested heavily enjoy better brand association, or reputation, with their readers. This would allow them to extend the value of their brands to diversified segments, as perhaps The Washington Post Company, Journal Communications and Dow Jones have done with theirs.

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Appendix:

Table 18: Newspaper Division and Diversified Divisions Moral Index Scores, and HHI Scores, 1996-2005

Newspaper Division Reinvestment Index Scores

Newspaper Company	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
A.H. Belo Corp.	0.66	0.68	0.85	1.13	1.24	1.06	0.90	n.a.	n.a.	n.a.	0.9329
Dow Jones & Co.	1.85	1.92	2.15	n.a	n.a	2.64	5.05	3.05	2.54	3.75	2.8689
E.W. Scripps Co.	0.71	0.90	0.56	0.66	0.76	0.86	0.84	0.87	0.56	0.32	0.7049
Gannett Co.	0.54	0.57	0.69	0.66	0.69	0.77	0.80	0.93	0.72	0.59	0.6961
Journal Comm.	1.49	1.43	1.57	1.81	6.78	9.34	5.84	2.96	1.08	1.21	3.3519
Knight-Ridder	1.06	0.98	1.22	0.74	n.a.	n.a.	0.60	0.72	0.96	0.87	0.8954
Lee Enterprises	n.a.	0.42	0.77	1.07	1.84	0.58	0.70	0.76	0.71	0.67	0.8364
Liberty Group	0.57	0.35	0.57	1.15	1.86	0.55	0.46	0.44	No exist	No exist	0.7440
McClatchy	1.39	0.93	0.90	1.11	1.03	1.00	0.77	0.84	0.90	0.94	0.9812
Media General	0.37	0.55	0.41	0.42	0.66	0.28	0.31	0.37	0.59	1.13	0.5084
New York Times	3.74	1.25	0.53	0.45	0.40	0.81	1.60	1.23	1.57	2.73	1.4306
News Comm.	-0.05	-0.30	-0.33	-0.34	-2.81	-1.11	-0.41	-0.24	-0.29	No exist	-0.6527
Pulitzer Publishing	0.74	1.48	1.12	0.77	1.15	2.51	2.26	1.08	0.69	No exist	1.1793
Times Mirror	0.79	1.01	1.21	1.66	No exist	No exist	No exist	No exist	No exist	No exist	1.1678
Tribune Co.	0.78	0.79	0.81	0.84	1.59	1.71	0.96	0.93	1.21	1.01	1.0636
Washington Post	0.62	3.14	3.32	0.62	1.53	1.80	1.46	0.85	1.00	1.25	1.5574

Diversified Segments Reinvestment Index Scores

Newspaper Company	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
A.H. Belo Corp.	0.80	1.00	1.66	1.21	1.03	0.76	0.73	1.07	n.a.	n.a.	1.0310
Dow Jones & Co.	2.31		3.64	n.a.	n.a.	1.44	1.39	1.01	1.19	0.80	1.6829
E.W. Scripps Co.	0.82	0.57	1.36	1.77	0.79	0.60	0.84	0.99	0.66	0.45	0.8855
Gannett Co.	0.73	0.60	0.37	0.25	0.42	0.19	0.57	0.29	0.27	0.45	0.4151
Journal Com.	1.73	1.30	2.97	3.12	2.51	n.a	1.43	1.76	1.30	1.66	1.9769
Knight-Ridder	21.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.35	0.10	n.a.	7.3412
Lee Enterprises	0.83	0.71	0.84	1.33	No exist	No exist	No exist	No exist	No exist	No exist	0.9281
Media General	1.06	1.78	1.25	2.84	0.66	2.15	1.82	1.77	0.96	1.66	1.5950
NYT	0.34	0.34	0.23	0.59	n.a.	1.39	1.49	0.81	0.92	1.12	0.8033
Pulitzer Publishing	0.37	0.38	No exist	No exist	No exist	No exist	No exist	No exist	No exist	No exist	0.3785
Times Mirror	3.32	0.38	0.80	0.67	No exist	No exist	No exist	No exist	No exist	No exist	1.2915
Tribune Co.	0.38	0.22	0.47	0.42	0.43	0.29	0.42	0.53	0.38	0.38	0.3927
Washington Post	0.75	1.16	1.82	1.47	1.69	2.68	2.22	2.45	2.21	2.18	1.8639

Firm Diversity (HHI) Scores

Newspaper Company	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average
A.H. Belo Corp.	0.51	0.49	0.50	0.50	0.49	0.48	0.48	0.47	0.47	0.50	0.4904
Dow Jones & Co.	0.52	0.53	0.52	0.71	0.75	0.71	0.68	0.67	0.65	0.59	0.6332
E.W. Scripps Co.	0.45	0.45	0.43	0.41	0.39	0.36	0.31	0.26	0.26	0.25	0.3579
Gannett Co.	0.65	0.66	0.68	0.76	0.78	0.81	0.79	0.81	0.80	0.82	0.7574
Journal Comm.	0.32	0.31	0.18	0.18	0.16	0.15	0.25	0.25	0.26	0.29	0.2358
Knight-Ridder	0.75	1.00	0.99	0.98	0.97	0.97	0.96	0.95	0.93	1.00	0.9502
Lee Enterprises	1.00	0.60	0.63	0.64	1.00	1.00	1.00	1.00	1.00	1.00	0.8872
Liberty Group	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	No exist	No exist	1.0000
McClatchy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0000
Media General	0.36	0.36	0.36	0.49	0.56	0.55	0.52	0.54	0.52	0.52	0.4777
New York Times	0.80	0.80	0.83	0.84	0.82	0.87	0.86	0.86	0.91	0.90	0.8497
News Comm.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0000
Pulitzer Publishing	0.51	0.53	1.00	1.00	1.00	1.00	1.00	1.00	1.00	No exist	0.8931
Times Mirror	0.47	0.52	0.62	0.70	No exist	No exist	No exist	No exist	No exist	No exist	0.5776
Tribune Co.	0.45	0.44	0.41	0.41	0.57	0.60	0.59	0.60	0.60	0.61	0.5276
Washington Post	0.27	0.27	0.26	0.25	0.24	0.23	0.23	0.24	0.25	0.27	0.2487