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Who Sits on the Board of Publicly Traded Newspaper Companies?: Ties to Financial Institutions and Leading Advertisers

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The study analyzed the composition of boards of directors of 13 publicly traded newspaper companies to examine the extent of director appointment from financial institutions or leading advertisers. The results revealed substantial ties to financial institutions and leading advertisers ingrained in newspaper companies. As in other U.S. corporations, the ratios of financial institutions and leading advertisers on the board were significantly associated with the firm's capital dependency. The results confirmed the view that interlocks are associated with inter-firm resource dependence.

Corporate interlocks, in which a person affiliated with one firm sits on the board of directors of another company, are a prevalent feature of U.S. corporations. A study of 456 of the Fortune 500 manufacturing firms found that more than 70% of the firms had at least one officer who also sat on the board of a financial institution.[1] The situation in the newspaper business is not much different. Research showed that the boards of newspaper companies consisted heavily of officers from finance and law firms. Of the 131 outside directors of 17 companies, only 13 percent had any newspaper background.[2]

The issue of corporate interlocking in the newspaper industry is not novel. Critics have long argued about the possible adverse effects of ties between newspapers and major corporations. Dreier and Weinberg noted that "such ties may have adverse journalistic consequences. Some of these may be subtle – unconscious self-censorship, for example. In other cases, the consequences have been manifest – reporters pressured, stories unassigned, or killed when written…The concern centers on the flow of information and vitality of journalism… "[3]

Although there has been much research on corporate interlocks among other U.S. companies,[4] few studies have been conducted to identify these ties in the news media, where the implications have far greater impact, considering the potentially adverse effect on journalistic quality. Furthermore, interlocks with leading advertisers and publicly traded newspapers have received little attention, despite the frequently voiced concern about the influence of advertisers on editorial content. Since advertising is a unique source of capital in the media business, other disciplines have not investigated advertiser ties. Examining news media connections to leading advertisers may uncover interlocking ties to financial resources, which would be especially important given that these advertisers fuel the media business.

In particular, the question of when and under what circumstances news media companies maintain or attempt to create those ties remains unclear. The literature is full of anecdotal evidence about the consequences of interlocks and other media-corporate ties.[5] Media critics often bring up the potential conflicts of interest from corporations and advertisers,[6] but few studies have examined the antecedents of such ties. Cross-sectional studies are available,[7] but limitations in the methodology prevent clear answers on what factors caused the

ties. Interlocking networks change over time, depending on different economic situations.

Questions regarding causes of corporate ties can only be properly addressed through a

longitudinal approach.

The purpose of this study is to examine the composition of boards of directors in

publicly traded newspaper companies to determine the factors affecting appointment of

representatives from financial institutions or leading advertisers to the newspaper companies'

boards. Much of the mass communication literature has taken board composition as a given,

seeking to examine its implications rather than its determinants. This paper addresses some of

the financial factors that have led to differences in interlocking ties in newspaper business.

Theoretical Background on Corporate Interlocking

Studies of interlocking boards of directors in the United States have long flourished in

sociology, political science, and economics. With the explosion of research on inter-

organizational relations, it has become even more prominent in the 1990s.[8] Corporate

interlocks have been investigated outside the United States, confirming it as one of the prevalent

features of capitalism across cultures.[9]

Interlocks are established as a means to facilitate inter-firm collusion and cooperation.[10]

They reflect attempts by organizations to co-opt sources of environmental uncertainty[11]; they

occur as an avenue of career advancement[12]; they promote upper class cohesion[13]; and they are

a source of information about business practices.[14] The causes and consequences of this

phenomenon have been the source of extensive debate, and various theoretical approaches

have been used to examine the phenomenon.

One popular approach is resource dependency, in which organizations use co-optation to reduce environmental uncertainty. Selznick's seminal work defined co-optation as "the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence."[15] Burt also stated that corporate interlocks were a co-optive mechanism.[16] This approach supports the view that interlocks are associated with inter-firm resource dependence, and that interlocking boards of directors is a strategic device to cope with resource constraints.

The hypothesis that a corporation invites onto its board of directors a representative of a bank to which the firm is heavily indebted has been tested by many scholars.[17] Findings on bank interlocks have been mixed but tend to support the view that interlocks are associated with interfirm resource dependence.[18] Having bank representatives on companies' boards not only creates permanent supervision of the companies' affairs, but also protects the ownership interests of banks. The resource dependence perspective puts emphasis on the relationship between organizations.

Interlocking as a strategic alliance not only reduces environmental uncertainty, but also provides information, which influences company strategies and structures. Useem was the first to explicitly discuss the non-control oriented, informational effects of corporate interlocks. Interlocks enable top managers to achieve an optimal "business scan" of the latest business practices as well as the overall business environment.[19] Interlocking indicates "the connection between two firms and, thus, is viewed as a sign of common interest between two organizations."[20] Davis and Powell agreed with the informational perspective by advocating corporate interlocks as a mechanism for the "diffusion of information."[21] From this perspective,

board ties enable companies to acquire firsthand knowledge about another firm's capabilities, activities, and plans through their interaction with top management.[22]

Interlocks as a communication node or information conduit have been examined by specifying the social networks through which a variety of policies and practices are spread across firms. Researchers have shown that firms' board composition influenced the behavior of firms such as "greenmail" payments,[23] "golden parachutes,"[24] and the adoption of "poison pills."[25] Corporate interlocks influence a wide range of organizational behavior by encapsulating practices and strategies of transformation. For example, Stearns and Mizruchi found that the types of financial institutions represented on firms' boards were associated with the amounts and types of financing the firms obtained.[26]

Newspaper Companies' Interlocking to Financial Sources

Whether publicly held newspaper companies operate like many other U.S. corporations has generated extensive debate among scholars.[27] Berkowitz stated that there are "tradeoffs between journalistic judgment and the imperatives from the business side of a media organization."[28] Corporate newspapers tend to emphasize profits,[29] as top editors and newsroom managers at 18 newspapers agreed.[30]

Picard analyzed ownership data of 17 publicly traded newspaper companies and found that the primary owners of major newspaper companies were institutional investors including commercial banks, state pensions, and other government investment funds. The study stressed their potential influence on the decision-making process, particularly involving short-term, profit-driven decisions. In addition, he pointed out another potential threat by directors: "It is

expected that such directors would have attitudes and approaches similar to institutional

investors and that the interests of these investors would be protected and promoted by the

directors making decisions."[31]

Compared to the enormous amount of research on interlocking directorates in other

disciplines, little attention has been paid to this phenomenon in the mass media industry. Dreier

and Weinberg conducted a descriptive analysis on interlocking and found that newspapers were

closely tied to the largest American corporations. For example, the Times Mirror Company

had more than two dozen interlocks with *Fortune* 1,300 companies, and Dow Jones showed a

similar number of interlocks with the nation's largest firms. This study revealed several incidents

related to interlocking of directors in which journalistic integrity was sacrificed or outweighed by

the mutual interest formed by interlocking.[32] Winter's analysis of Canadian newspapers also

uncovered many interlocks, especially to banking institutions.[33]

Studies based on a cross-sectional design have yielded conflicting results. A cross-

sectional study[34] based on 1987 financial data found a significant partial correlation[35] between

financial dependency and the rate of financiers on the board among 50 media corporations. A

significant correlation was also observed between advertising sales and representation of 100

leading advertisers on the board.[36] An and Jin's study analyzing 17 publicly traded newspaper

companies, however, did not find a significant relationship between the composition of boards

of directors and financial dependency.[37]

Studies of the relationship between interlocking and capital dependency using non-

media corporations have also produced conflicting results. Some studies found that less solvent

firms were more likely to be interlocked with financial institutions,[38] while others found a firm's

debt ratio was negatively related to financial interlocking.[39] The ambiguous nature of the findings may be a reflection of the cross-sectional approach where the cause of the association is uncertain.

Cross-sectional data are measured only at a discrete time and thus are forced into what Palmer, Friedland, and Singh called "initiation logic."[40] That is, an assumption of cross-sectional approaches is that a firm's number of interlocks at a particular point is a result of factors peculiar to the firm at that time rather than the situation faced by the firm when the interlock was created. Appointments to boards of directors are affected by earlier financial situations so that earlier financial situation, not the current one, should be used as a predictor variable. This calls for a longitudinal rather than a cross-sectional design.

A longitudinal design also makes it possible to examine variations in the context within which relations take place. The economic environment places objective boundaries on corporate choices by determining the types of available options.[41] *The New York Times*, for example, can more easily obtain financing and advertising sources than can a small independent newspaper company. However, market conditions still determine the ease and the price at which *The New York Times* secures financing and advertising sources. Therefore, in making strategic decisions, corporations would consider not only their own performance and capital structure, but also the general economic environment as well.

Arguing the limitations of cross-sectional studies, Mizruchi and Stearns presented a longitudinal study of the financial interlock ties among 22 large U.S. manufacturing firms. This study showed that declining solvency, declining profit rates, and the corresponding increase in demand for capital were associated with the subsequent appointment of new directors from

financial institutions.[42] This finding confirms the view that firms with more financial dependency

are likely to appoint representatives of financial institutions to their boards.[43]

Hypotheses

Previous studies showed that corporations appoint representatives of financial

institutions to their board of directors as their use of debt increases.[44] Interviews with bankers

have confirmed that bankers often join a board when a company is more financially

dependent.[45] Appointments of bankers to a firm's board tend to follow periods of declining

performance.[46] Mizruchi stated that interlocks followed resource dependence flows.[47] That is,

increasing financial dependency drives interlocking in order to reduce environmental uncertainty

and create valuable communication networks necessary to the survival of the company.

Financial dependency can be inferred from companies' capital structure, such as the

volume of a company's external debt relative to its equity.[48] The more debt, the higher the

dependence on outside sources. To check a firm's financial dependence, debt-to-equity ratio

and long-term debt need to be evaluated together.[49] Long-term debt refers to the total

obligation due after a one-year period. Firms increase long-term debt to receive tax benefit[50] or

to finance profitable growth, both of which may be cases of sound corporate strategy.[51]

However, companies with high long-term debt will incur a risk of having too little working

capital overwhelmed with interest payments.

Debt-to-equity ratio is the ratio of total debt (including long-term and short-term

obligations) to equity, which is a measure of solvency. Financial analysts often use this ratio to

evaluate the riskiness of a firm[52] and to measure how much money a company should safely be

able to borrow over long periods of time. A high debt-to-equity ratio indicates that the

company may have been overleveraged, constraining company's ability to further finance.

Other studies had used long-term debt and debt-to-equity ratio to measure different dimensions

of financial dependency.[53]

Another variable related to firm's financial dependency is the degree of pubic

ownership. Blankenburg and Ozanish stated that "companies with strong insider control, even

though publicly traded, will resemble the traditional closely held companies."[54] Studies found

that the proportion of outside ownership was related to financial performance of the newspaper

companies.[55] The more public the newspaper company, the greater the need and pressure to

manage the company in a profit-oriented way. Therefore, more interlocking with financial

institutions will be observed. This study used the level of insider control, percent of voting stock

held by officers and directors of the company, as a measure of financial dependency. The first

hypothesis involves the relationship between financial dependency (long-term debt, debt-to-

equity ratio, insider control) and interlocking ratio.

> H1: The less financially independent a newspaper company becomes, the higher the
> ratio of board members from financial institutions to total board members will be.

Most of the income for any news media is derived from commercial advertisers.

Advertising represents the largest revenue source for newspaper companies, accounting for 70

to 80% of total revenue.[56] Competition for acquiring advertising dollars has been greatly

increased, accelerated by the decreasing advertising dollars going to newspapers as well as

declining readership.[57] Just as representatives of financial institutions sit on the board of U.S.

companies as a strategic alliance, representatives of leading advertisers on the board of

newspaper companies may reduce environmental uncertainty by revealing the latest information about the business practices and overall business environment.

Therefore, interlocking with representatives of major advertisers could be seen as a means of stabilizing this source of revenue. As firms' capital dependency increases, its need for reducing environmental uncertainty will be reflected by composition of the board. The second hypothesis relates company's financial dependency to the ratio of board members from leading advertisers.

> H2: The less financially independent a newspaper company becomes, the higher the ratio of board members from leading advertisers to total board members will be.

Ties to leading advertisers can be viewed as vertical interdependence, which is a direct result of the relationships between a buyer and seller. Newspapers sell advertising space, and advertisers buy it. This vertical interdependence leads to vertical interlocking, reflecting the uniqueness of the media industry. However, it is difficult to access data on direct interdependence of buyer-seller relationships, for example, between a steel company and an automobile manufacturer, or *The New York Times* and Coca Cola.[58] Most firms do not disclose information on the transactions for proprietary reasons so that researchers have investigated the aggregate financial dependence of a firm to its interlocking.[59] Aggregate advertising sales can serve as an alternative measure to indicate vertical interdependence.

The volume of exchange is crucial in determining inter-organizational power dependency relations.[60] The degree of interdependence is a function of the extent to which they exchange scarce resources.[61] Differential allocation of advertising money to each newspaper company creates different degrees of the company's dependency on the advertisers. An increased

dependence on advertising as a revenue source indicates enlarged dependency on the source.

That is, as a newspaper company becomes more dependent on advertisers as its main sources

of income, the ratio of advertiser's representatives to the total number of directors would

increase in order to maintain the cash flow and secure an important communication network.[62]

The third hypothesis addresses advertising dependency (the ratio of ad revenue to total revenue)

and the ratio of advertising directors to total directors.

> H3: The more a newspaper company becomes dependent on advertising sales, the
> higher the representation of leading advertisers on the board will be.

Data and Measurement

This study examined board composition of 13 publicly traded newspaper companies

from 1988 to 2000: A.H. Belo Corp.; Dow Jones & Co.; E.W. Scripps.; Gannett Co.; Knight-

Ridder, Inc.; Lee Enterprises, Inc.; McClatchy Newspapers, Inc.; Media General, Inc.; The

New York Times Co.; Pulitzer Publishing Co.; The Times Mirror Co.; Tribune Co.; and

Washington Post Co. These are publicly traded newspaper companies whose core business is

newspaper publishing and who went public before 1989. Because this study focuses on

longitudinal data, those who went public after 1989 were not included.[63] This sample of

companies accounts for 45% of the daily circulation in the United States.

The dependent variables are the ratios of representatives from financial institutions and

leading advertisers on the company's board. Financial interlocking was defined as directors

whose principal affiliations at the time of appointment were with financial institutions. Financial

institutions include banks, insurance companies, investment companies, and diversified financial

companies. Government organizations involving economic decisions, such as Federal Reserve

Bank and Securities and Exchanges Commission, were included because ties to those

institutions provide valuable financial information as a function of interlocking. The ratio was

calculated by dividing the number of directors from financial institutions by the total number of

board members.

Leading advertiser representatives were defined as directors whose principal affiliations

at the time of appointment were with any of the 100 leading advertisers. The names of the top

100 leading advertisers varied from year to year. Since most of these diversified companies

operate TV, cable, and radio stations as well as newspapers and magazines, the list of 100

leading advertisers across media was used instead of 100 leading newspaper advertisers to

measure their reliance on the advertising resource in general. Financial ties and advertiser ties

were considered as separate variables in that some companies, American Express for example,

were counted as both a financial institution and as a leading advertiser.

Two control variables were assumed to affect the extent to which newspaper

companies add financial institutions or leading advertisers to their boards: scarcity of capital and

total level of advertising spending. The magnitude of interdependence is a function not only of

the volume of the transaction but also of the criticality and availability of the resources[64] so that

the general market situation, including total advertising expenditure and scarcity of capital, needs

to be controlled.

We expect financial institutions or advertiser appointments to increase as the uncertainty

surrounding the availability of capital increases. Interest rates serve as a rough, but best

available, indicator of capital scarcity.[65] They are high when capital is in short supply and low

when capital is plentiful. Interest rates were measured as the average prime rate for a given year. The aggregate spending on advertising should indicate advertisers' demand for their ad space, which directly relates to revenue for newspaper companies. The magnitude of vertical interdependence is a function of importance of exchanges involved.[66] Increased ad spending industry-wide necessitates strategic alliances with the advertisers to secure the crucial capital.

For each company-year, we collected general financial data on total assets, long-term debt, debt-to-equity ratio, advertising revenue, and total revenue. Total assets define corporate size. Long-term debt and debt-to-equity ratio are good indicators of a firm's dependence on external debt obligations. Ratio of advertising revenue to total revenue was used to indicate companies' dependence on advertising.

Information about companies' financial conditions was obtained from annual reports and 10-K forms filed with the U.S. Securities and Exchange Commission. *Moody's* and *Standard and Poor's Directory of Executives* were used to obtain data about the principal affiliations of outside directors. In addition, *Leading National Advertisers'* (LNA) *Multi-Media Report* and *Advertising Age* magazine were used to collect data on the names of 100 leading advertisers and the total U.S. advertising spending for a given year.

Analysis and Results

The data set consists of a 13-year time series for 13 newspaper companies. The most efficient approach is a pooled cross-sectional time series regression technique.[67] The pooled cross-sectional time series analysis can be a very robust research design by incorporating both space and time into the analysis.[68] The main caution is that parameter estimation may be

confounded by correlations within cases over time and between cases measured at the same time.[69] Major statistical concerns were autocorrelation and heteroscedasticity.

Heteroscedasticity is likely to arise when comparing different companies. We expect this problem to be minimal because we are analyzing a relatively homogeneous group – newspaper companies. However, a big company such as Gannett may have a consistently higher ratio of financial institutions or leading advertisers on their board than smaller companies such as Pulitzer or Lee. [70] This unique company effect is likely to produce heteroscedastic errors because it is not plausible to assume that the variance over the full pool is constant.[71] To correct for heterogeneity bias, we included dummy variables for 12 of the 13 companies, excluding a reference category.[72] The omitted category comprises observations from Pulitzer. These fit separate intercepts for each company.[73]

Since the ratio of financial institutions or leading advertisers is rather inertial, the ratio in a given year is likely to be heavily dependent on the ratio of prior years. This autocorrelation error can produce biased regression coefficients. Tests indicated some degree of serial correlation.[74] To correct for autocorrelation between time points, a lagged value of the dependent variable was used as a predictor in the regression equation. Inclusion of a lagged dependent variable not only corrects for autocorrelation between time points, but also yields valuable substantive information about the dynamics of the model.[75] After these specifications,[76] models are amenable to ordinary least square estimation. We also looked for outliers or other unduly influential data points by examining the residual statistics, but all cases behaved well,[77] confirming that our findings are stable and robust.

The analysis used a lag interval of two years for the lag-dependent variable and other independent variables on financial conditions. Therefore, in the model, ratio of financial institutions and leading advertisers at Time 3 was predicted from financial conditions at Time 1, two years earlier. A lag interval of two years seemed reasonable based on the way annual reports are filed. Annual reports for the previous fiscal year (Time 2) are filed with the SEC in the spring, along with the appointment of board of directors for the upcoming year (Time 3). That is, the Time 2 financial situation is filed at the same time as the Time 3 board composition. Therefore, the decision making of the Time 3 board does not primarily reflect the Time 2 financial condition; rather, the decision making reflects the already published financial report of Time 1.

Tables 1 and 2 show financial institutions and leading advertisers who had board representation of at least one year on publicly-traded newspaper companies from 1988 to 2000 financial year. Times Mirror and Knight Ridder had relatively high representation of financial institutions during this period: 57.9%, 46%, respectively, as shown in Table 3. McClatchy and A.H. Belo had relatively low ratios of financial institutions at 13.4% and 17.3%, respectively.

With respect to advertiser representation, New York Times, on average, had the highest representation of 100 leading advertisers (31.6%), followed by Tribune (28.7%) as shown in Table 3. Their average advertising revenue was accordingly in the high range. In contrast, McClatchy (1.8%) and Media General (4.2%) had low percentages of leading advertisers on their boards, and this appears to correlate with their low advertising revenues. By the same token, those without interlocks to any of the 100 leading advertisers (E.W. Scripps, Lee, and Pulitzer) also had relatively low levels of advertising revenue.

Results of the regression on the representation of financial institutions showed unique company effects. Company dummy variables allowed each company to have a different intercept to reflect firm specific interlocking directorship. The model specifies a dynamic process that is uniform across all companies, but shifted upward or downward at all times by a constant (the dummy variable coefficient) in each.[78] Times Mirror and Knight Ridder tended to have more interlocking directorates of financial institutions as shown in Table 4. Coefficients of Times Mirror and Knight Ridder were very large, reflecting their engrained interlocking ties to financial institutions over this period.[79] As expected, lagged dependent variable was a significant predictor. These two blocks of variables, lagged dependent variable and company effects, explained 71% of the total variance, indicating that board affiliation with financial institutions was rather inertial and company specific.

General economic context did not add much explanatory power. Relative strengths of interest rate and total U.S. ad spending were minimal. By contrast, firm specific variables substantially increased R^2 from .71 to .73. Among them, debt-to-equity ratio was a significant factor affecting the ratio of directors from financial institutions (ß=.181). As hypothesized, the less financially independent the company was, the higher the representation of financial institutions on the board in the following year. Other financial variables were not significant and the coefficients were noticeably small.

With regard to the representation of leading advertisers, total U.S. ad spending, total assets, and long-term debt were significant factors as shown in Table 4. In contrast to the minimal effect of total U.S. ad spending on the ratio of financial institutions (ß=.032), the significant effect of total U.S. ad spending on the ratio of leading advertisers (ß=.155) highlights

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the dynamic relation between advertising market and newspaper companies: More leading

advertisers served on the newspaper companies' boards with increased ad dollars in the

market. Furthermore, considering the negligible effect of total assets on the representation of

financial institution (ß=.095), the sizable effect of total assets on the representation of leading

advertisers (ß=-.511) underscores the unique characteristics of media industry fueled by

advertising. Decreased assets led companies to increase strategic alliance with advertisers. In

addition, increased long-term debt was associated with a higher ratio of leading advertisers in

the following year (ß=.179). Altogether, the block of firm specific variables significantly

increased the explained variance from 82% to 85%.

As in the representation of financial institutions, the appointment of leading advertisers

was very company-specific and affected by the past ratio. As shown in Table 4, the first block

explained 82% of the total variance. New York Times and Tribune displayed very large

coefficients, indicating their high level of advertiser ties over this period.[80] Although it didn't turn

out to be statistically significant, the coefficient of lagged dependent variable (ß=.139) indicates

that the current board composition tended to be positively affected by the past ratio.

The regression model predicting the ratio of directors from leading advertisers had

substantially higher R^2 than the one predicting the ratio of directors from financial institutions

(85% vs. 73%). Inclusion of advertising related variables, especially total U.S. ad spending,

appears to add the substantial explanatory power to the model predicting ratio of directors from

leading advertisers. Although total ad spending serves as an indicator of general market

condition for the media industry, it was interesting to note that total ad spending was only

directly associated with the change of directors from leading advertisers, not with financial

institutions.

Discussion

This study examined whether publicly held newspaper companies behave like many

other U.S. corporations, which have been found to have ingrained connections with financial

sources through their boards of directors. The results of our longitudinal analysis confirmed that

the newspaper industry shares this feature with other U.S. corporations. Newspaper

companies tended to have more directors from either financial institutions or leading advertisers

when their financial dependency increased. The findings are consistent with the view that

corporations with decreasing solvency are likely to appoint representatives of financial

institutions to their boards.[81] This strategic alliance resonates closely with resource-based

strategy.

It was interesting to note the different effects of long-term debt and debt-to-equity ratio.

Companies tended to have more directors from financial institutions when companies' reliance

on external financial sources increased relative to internal sources, as indicated by debt-to-

equity ratio. As the solvency decreases, companies become more vulnerable to its capital

suppliers, necessitating strategic alliance with financial institutions. However, how much debt the

company carried over a long period was not related to the ratio of financial directors; rather, the

long-term debt was positively associated with the ratio of directors from leading advertisers.

Considering that long-term debt generally increases when a company expands or

diversifies, appointment of leading advertisers appears to work as a safety net to secure cash

flow. That is, as the long-term debt increases, companies become short of working capital due to heavy interest payments, which in turn, may create greater desire to secure cash flow. The different effects of long-term debt and debt-to-equity ratio highlights two different sources of capital in media industry, financing and advertising. Further research would benefit by conducting qualitative in-depth interviews with newspaper executives to see how differently management handles and utilizes two different sources of capital.

Large firms, such as Times Mirror and Knight-Ridder, tended to maintain a high level of interlocking with financial institutions. On average, more than 45% of the Knight-Ridder board and nearly 60% of the Times Mirror board were composed of directors who were affiliated with financial institutions. Although insider ownership was not a significant factor predicting the ratio of financial institutions in the two regressions, average insider ownership over this period provides valuable insight. On average, insider ownership of Knight-Ridder was 3.9% and that of Times Mirror was 7.2%, which were remarkably low compared to 71% of Pulitzer. As previous studies indicated,[82] the operation of these companies with high outside ownership is more susceptible to the strict scrutiny of the financial yardstick of Wall Street, which may lead to a more business-oriented management.

Although this study does not examine the consequence of interlocking directorships, newspaper companies' interlocking with financial institutions leads us to concern over a climate where short-term profits become the first priority. Scholars have contended that newspaper concentration itself led to loss of diversity in news.[83] Given that big newspaper chains control many dailies and weeklies, Winter stated, "…Interlocks contradict a pluralistic view of society

and questions the true nature of power elite relationships, the status quo, and the role of the consciousness industry in sharing in and maintaining these."[84]

Critics have often argued that news media maintain frequent ties to big business, especially major advertisers. This study confirmed such ties. New York Times, for instance, kept interlocking board members with IBM, American Express, Campbell Soup Co, Bristol-Myers Squibb Co, Sears, and Johnson & Johnson. The interlocking ratio was positively associated with the companies' financial conditions, such as total assets, long-term debt, and total U.S. advertising expenditure. This clearly shows the uniqueness of the media industry, promptly responding to the key source of capital, advertising. The significant effect of total U.S. ad spending indicates that realizing increased demands on ad space, newspaper companies may seek out the strategic alliance with major advertisers who can function as a valuable liaison to the capital.

However, an alternative explanation for the representation of leading advertisers on the board is possible. Those directors from leading advertisers are recruited not only as the newspaper companies attempt to secure the key source of capital, but also they are successful businessmen managing big companies. Qualitative interviews with newspaper board members would help clarify the cause of the affiliation. Nonetheless, the differential effects of total U.S. ad spending on representation of financial institutions and leading advertisers should be noted. Total U.S. ad spending was not a significant factor influencing the ratio of financial institutions, whereas it significantly predicted the ratio of leading advertisers. That is, having the increased money spent on advertising, the relative value of those affiliated with major advertisers

increased, and media companies' augmented courtship may have created an increased strategic alliance.

The relationship between advertisers and news media led to another potential concern about influence on the news content. A survey of editors at daily newspapers found that about 90 percent reported that advertisers attempted to influence the content of stories appearing in their papers.[85] Weaver and Wilhoit found that 34% of the journalists surveyed thought that forces outside their organization, such as powerful advertisers, were a great hindrance to their autonomy.[86] The current study provides evidence of advertiser ties in major newspaper companies; however, how those ties affect daily news decisions needs further investigation.

Although this study quantified newspaper interlocking with financial institutions and leading advertisers, this mapping does not provide the whole picture of the behavioral motives of the companies. In-depth interviews with newspaper executives could add further insight on the content of interlock ties, such as the value of direct communication between directors in reducing environmental ambiguity. This study only examined direct ties between newspaper companies and financial resources. Because indirect ties between companies can strongly condition the effects of direct ties between companies,[87] future studies should examine the moderating effects of indirect ties to financial institutions and leading advertisers.

The code of ethics of the Society of Professional Journalists reads, "Journalists should avoid conflicts of interest, real or perceived; remain free of association and activities that may compromise integrity or damage credibility." As Dreier and Weinberg sharply pointed out two decades ago,[88] there seems to a double standard in that what is forbidden for reporters is permissible for publishers and, in fact, encouraged for boards of directors. Newspapers are a

business, but they are a different kind of business, one that serves the public interest. Evidence

of newspaper interlocks with financial institutions and leading advertisers prompts us to revisit

the long-time concern over a tug-of-war between the public ownership and journalism concerns

of newspapers.

Table 1
Representation of Financial Institutions from 1988 to 2000

Company	Financial Institutions on the Board
A.H. Belo	Goldman Sachs & Co., Asso. Co. of North America, Federal Reserve Bank, Nations Bank Texas Co., Scudder Kemper Investments.
Dow Jones	Bankers Trust New York Co., BancOne Co., Bank Of East Asia, Capital Income Builder, Chemical Banking Co., Seligman Mutual Fund Investment Co., American Express, Hartford Financial Services Group.
E.W. Scripps	First National Cincinnati Co., Union Central Life Insurance Co., First Boston Co., Investment Advisor & Manager Family Trust and Estates, Ohio National Financial Services, Great American Financial Resources, Inc.
Gannett	American Security Bank, Bank of Hawaii, Prudential Global Genesis Fund, National Security Bank of Chicago, Larchmont Federal Savings & Loan Asso., Crestar Financial Services, Goldman Sachs & Co., Prudential Mutual Funds.
Knight Ridder	Vanguard Group of Investment Co., Citibank, State Street Capital Fund, Goldman, Sachs & Co, First American Bank Shares, Southern National Bank, Northern Trust Bank of Florida, Dreyfus Third Century Fund, J.P. Morgan, Employees Stock Purchase Plan, Barclays Bank, BankAmerica Co., MAS Funds.
Lee	New America Fund, Michum Management Co., Stifel Financial Co., Pacific Stock Exchange, Inc., Boatmans Bancshares and Sigma-Aldrich Co., Pitney Bowes, Inc, Cairnwood Cooperative, Park Avenue Equity Partners.
McClatchy	Matson Navigation Co., Alpine Partners, PacTel Co. California Chamber of Commerce.
Media General	Goldmans Sachs & Co, Crestar Financial Co., First Florida Banks, Wachovia Bank & Trust Company, Davenport &Co, Federal Reserve Bank.
New York Times	American Express, New York Life Insurance, First Boston Inc., Ameribanc, Inc., Bankers Life of Iowa Insurance, Morgan Guarantee Trustee Co., Federal Reserve Bank, Metropolitan Life Insurance, Chase Manhattan Bank.
Pulitzer	Commerce Bank, A.G. Edwards & Sons.
Times Mirror	Chandis Security Company, Federal Reserve Bank, PVT Investor, Industrial Bank First Interstate Bankcorp, Paden & Rygel, Securities and Exchanges Commission, and Chandler Trusts.
Tribune	First National Bank of Chicago, Prudential-Bache Global Fund, Lake Shore National Bank, Fifth Third Bankcorp., First Chicago NBD Co, Schlumberger Information Solution, Washington Mutual Inc., and Morgan Stanley Dean Witter.
Washington Post	General Electric Investment Co., Southeast Banking Co., Bankers Trust New York Co., Prudential Insurance Co. of America., Bank of New York, Ruanne Cunniff & Co., Riggs

National Bank of Washington, D.C., and Morgan Stanley & Co.

Table 2
Representation of 100 Leading Advertisers from 1988 to 2000

Company	Leading Advertisers on the Board
A.H. Belo	Kimberly Clark, PepsiCo, Circuit City
Dow Jones	J. C. Penny, American Express, Sprint, SBC Communications
E.W. Scripps	None
Gannett	UAL Co., Kellogg, S C Johnson & Son, Coca Cola, American Express
Knight Ridder	Seagrams Co., AT & T.
Lee	None
McClatchy	SBC Communications.
Media General	RJR Nabisco.
New York Times	IBM, American Express, Bristol-Meyers, Consolidated Edison, United Telecommunication, Campbell Soup, Sears, Seagrams Co., Schering Plough Co., Johnson & Johnson.
Pulitzer	None
Times Mirror	Proctor & Gamble, Nestle.
Tribune	PepsiCo, UAL Co.., K-Mart, PepsiCo, Sara Lee, McDonalds, Helene Curtis, Sears.
Washington Post	Coca Cola, H.J. Heinz, Johnson & Johnson, General Electric.

Table 3
Descriptive Statistics on Board Composition from 1988 to 2000

Company	Total Asset (Average) unit: 000,000	Total Ad Revenue (Average) unit:000,000	% of Financial Institution Avg. (Min, Max)	% of Leading Advertisers Avg. (Min, Max)
A.H. Belo	1,772	565	17.3 (8.3, 26.7)	7.9 (0.0, 23.1)
Dow Jones	2,087	750	25.4 (11.8, 35.7)	10.7 (5.0, 21.4)
E.W. Scripps	4,682	684	39.4 (27.3, 55.6)	0.0 (0.0, 0.0)
Gannett	5,764	1,243	33.1 (21.4, 57.1)	18.0 (0.0 30.0)
Knight Ridder	3,025	1,716	46.0 (25.0, 62.5)	8.7 (5.6, 13.3)
Lee	526	230	23.0 (10.0, 36.4)	0.0 (0.0, 0.0)
McClatchy	967	464	13.4 (7.1, 28.6)	1.8 (0.0, 8.3)
Media General	1,276	398	34.8 (22.2, 44.4)	4.2 (0.0, 11.1)
New York Times	2,913	1,744	43.8 (21.4, 57.1)	31.6 (21.4, 46.2)
Pulitzer	2,188	203	21.7 (21.0, 22.2)	0.0 (0.0, 0.0)
Timers Mirror	3,980	2,128	57.9 (43.8, 72.7)	5.0 (0.0, 14.3)
Tribune	4,682	942	22.1 (0.0, 41.7)	28.7 (16.7, 40.0)
Washington Post	1,910	1,073	30.5 (0.0, 46.2)	25.0 (20.0, 30.8)

Table 4

Hierarchical Regression on the Representation of Financial Institutions and Leading Advertisers

Effects	Representation of Financial Institutions	Representation of Leading Advertisers
Lagged dependent variable:		
Ratio of financial		
Institutions/leading advertisers	.250*	.139
Company Effects:		
Washington Post	.139	.533***
Times Mirror	.457**	.313**
New York Times	.222	.787***
Gannett	.126	.567***
Knight Ridder	.368**	.275**
Lee	-.034	-.029
A.H. Belo	-.126	.218**
Media General	.088	.118
McClatchy	-.067	.035
Tribune	-.078	.765***
E.W. Scripps	.202	.099
Dow Jones	.112	.321**
R^2	.712	.820
Economic Context variables:		
Interest rate	.017	-.040
Total U.S. ad spending	.032	.155**
R^2	.713	.822
Firm specific variables:		
Total assets	.095	-.511***
Debt-to-equity ratio	.181*	-.021
Long-term debt	-.086	.179*
Ratio of ad revenue to total revenue	.015	.020
Insider Control	-.009	-.049
Total R^2	.730	.853

Notes:
1. Dependent variables: 1) Representation of financial institutions: ratio of financial institutions to total number of directors, 2) Representation of leading advertisers: ratio of leading advertisers to total number of directors.
2. All independent variables were a lag of two years
3. * $p < .05$ ** $p < .01$ *** $p < .000$

NOTES

[1] Mark Mizruchi, Blyden B. Potts, and David W. Allison, "Interlocking Directorates and Business Transactions: New Evidence on an Old Question" (paper presented at the Annual Meeting of American Sociology Association, Miami Beach, FL 1993).

[2] Seven companies have no outside directors with a newspaper background: Gilbert Cranberg, Randall Bezanson, and John Soloski, *Taking Stock: Journalism and the Publicly Traded Newspaper Company* (Ames, Iowa: Iowa State Univ. Press, 2001), 42.

[3] Peter Dreier and Steve Weinberg, "Interlocking Directorates," *Columbia Journalism Review* 18 (1979): 51-68, 53.

[4] For example, Mizruchi and Stearns investigated 22 major manufacturing industries including automobile, household products, and steel companies: Mark D. Mizruchi and Linda Brewster Stearns, "A Longitudinal Study of the Formation of Interlocking Directorates," *Administrative Science Quarterly,* 33 (1988): 194-210. Powell, Koput, and Smith-Doerr examined interlocking of biotechnology industry: Walter W. Powell, Kenneth W. Koput, and Laurel Smith-Doerr, "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology," *Administrative Science Quarterly,* 41 (1996): 116-145.

[5] For example, *the New York Times* coverage of the debate over health care reform was in favor of the large health care corporations and other proposals for reform were harshly criticized. At that time, four members of the *Time's* board of directors also sat on the boards of major insurance companies and two were on the boards of pharmaceutical companies: Jeff Cohen and Norman Solomon, *Through the Media Looking Glass* (Monroe, ME: Common Courage Press, 1995), 78.

[6] For example, in 1998, ABC News dropped a 20/20 investigative report about pedophilia and lax security at Walt Disney World. In 1990, NBC's *Today* show broadcast consumer boycotts, but failed to point out that the largest boycott at the time was aimed at General Electric. In fact, one source interviewed for the story was warned by the program's producer not to mention the GE boycott: David Croteau and William Hoynes, *The Business of Media: Corporate Media and the Public Interest (*Thousand Oaks, CA: Pine Forge Press, 2001), 178.

[7] Soontae An and Hyun Seung Jin, "The Representation of Financial Institutions on the Boards of Directors of Publicly traded Newspaper Companies" (paper presented at the Annual Convention of the Association for Education in Journalism and Mass Communication, Baltimore, MD,1998); Kyun-Tae Han, "Composition of Board of Directors of Major Media Corporations," *Journal of Media Economics* 1 (Fall 1988): 85-100.

[8] Mark Mizruchi, "What Do Interlocks Do? An Analysis, Critique, and Assessment of Research on Interlocking Directorates," *Annual Review of Sociology,* 22 (1996): 271-298.

[9] Georgina Murray, "Interlocking Directorates: What Do They Tell About Corporate Power in Australia," *Journal of Australian Political Economy* 47 (June 2001): 5-26; Paul Windolf and Jurgen Beyer, "Co-operative Capitalism: Corporate Networks in Germany and Britain," *The British Journal of Sociology* 47 (1996): 205-27; Magda Bianco and Elena

Pagnoni, " Interlocking Directorates Across Listed Companies in Italy: The Case of Banks," *Banza Nazionale Del Lavorro Quarterly Review* 50 (1997): 203-24; Daniel Maman, " Research Note: Interlocking Ties within Business Groups in Israel-A Longitudinal Analysis, 1974-1987," *Organization Studies* 20 (1999): 323; Richard Whitley, "Eastern Asian Enterprise Structure and the Comparative Analysis of Forms of Business Organization," *Organizational Studies* 11 (1990): 47-74.

[10] Thomas Koenig, Robert Gogel, and John Sonquist, "Models of the Significance of Interlocking Corporate Directorates," *American Journal of Economics and Sociology* 5 (1979): 173-85; Ronald Burt, *Corporate Profits and Cooptation: Networks of Market Constraints and Directorate Ties in the American Economy* (New York: Academic Press, 1983).

[11] Peter Dooley, "The Interlocking Directorate," *American Economic Review* 59 (1969): 314-323; Jeffrey Pfeffer, "Size and Composition of Corporate Boards of Directors: The Organization and its Environment," *Administrative Science Quarterly* 7 (1972): 218-28; Michael Patrick Allen, "The Structure of Interorganizational Elite Cooptation: Interlocking Corporate Directorates," *American Sociological Review* 39 (1974): 393-406; Jeffrey Pfeffer and Gerald R. Salancik, *The External Control of Organizations* (New York: Harper and Row Publishers, 1978); Mark Mizruchi and Linda Stearns, "A Longitudinal Study of the Formation of Interlocking Directorates," *Administrative Science Quarterly* 33 (June 1988): 194-210; James Lang and Daniel Lockhart, "Increased Environmental Uncertainty and Changes in Board Linkage Patterns," *Academy of Management Journal* 33 (March 1990): 106-28.

[12] Frans N Stokman, Van der Knoop, and FW. Wasseur, "Interlocks in the Netherlands: Stability and Careers in the Period 1960-1980," *Social Networks* 10 (1988):183-208; E.J. Zajac, "Interlocking Directorates as an Inter-Organizational Strategy," *Academy of Management Journal*. 31 (1988):428-38.

[13] Maurice Zeitlin, "Corporate Ownership and Control: The Large Corporations and the Capitalist Class," *American Journal of Sociology* 79 (1976):1073-119; Donald Palmer, "Broken Ties: Interlocking Directorates and Inter-Corporate Coordination," *American Science Quarterly* 28 (1983): 40-55.

[14] Michael Useem, *The Inner Circle: Large Corporations and the Rise of Business Political Activity in the U.S. and U.K.* (New York: Oxford University Press, 1984); Gerald Davis, "Agents Without Principles? The Spread of the Poison Pill through the Intercorporate Network," *Administrative Science Quarterly* 36 (Dec. 1991): 583-631; Pamela Haunschild, "Interorganizational Imitation: the Impact of Interlocks on Corporate Acquisition Activity," *Administrative Science Quarterly* 38 (Dec. 1993): 564-92; Pamela Haunschild and Christine Beckman, "When Do Interlocks Matter?: Alternate Sources of Information and Interlock Influence," *Administrative Science Quarterly* 43 (Dec. 1998): 815-844.

[15] Philip Selznick, *TVA and the Grass Roots: A Study in the Sociology of Formal Organization* (Berkeley: Univ. of California Press, 1949), 13.

[16] Ronald S. Burt, *Corporate Profits and Cooptation: Networks of Market Constraints and Directorate Ties in the American Economy* (New York: Academic Press, 1983), 81-99.

[17] Dooley, "The Interlocking Directorate"; Pfeffer, "Size and Composition of Corporate Boards of Directors: The Organization and its Environment"; Allen, "The Structure of Interorganizational Elite Cooptation: Interlocking Corporate Directorates"; Johannes M. Pennings, *Interlocking Directorates* (San Francisco, CA: Jossey-Bass Publishers, 1980); Burt, "Corporate profits and Cooptation"; Michael D Ornstein, "Interlocking Directorates in Canada: Intercorporate or Class Alliance?" *Administrative Science Quarterly* 29 (1984): 210-31; Donald Palmer, Roger Friedland, and Jitendra V. Singh, "The Ties that Bind: Organizational and Class Bases of Stability in Corporate Interlock Network," *American Sociology Review* 51(1986):781-96; Mizruchi and Stearns, "A longitudinal study"; Lang and Lockhart, "Increased Environmental."

[18] Mizruchi, "What Do Interlocks Do?"

[19] Useem, "The Inner Circle."

[20] Mark Mizruchi, *The American Corporate Network, 1904-1974* (Beverly Hills: Sage Publications, 1982), 34.

[21] Gerald F. Davis and Walter W. Powell, "Organization-Environment Relations" *In Handbook of Industrial and Organizational Psychology.* D.M. Dunnette and H.M. Leaetta (ed.) (Palo Alto, CA: Consulting Psychologists Press, 1992), 341, 315-375. Gerald F. Davis and Walter W. Powell, "Organization-environment Relations" *In Handbook of Industrial and Organizational Psychology.* D.M. Dunnette and H.M. Leaetta (ed.) (Palo Alto, CA: Consulting Psychologists Press, 1992): 341, 315-375.

[22] Ranjay Gulati and James Westphal, "Cooperative or Controlling? The Effects of CEO-Board Relations and the Content of Interlocks on the Formation of Joint Ventures," *Administrative Science Quarterly* 44 (1999): 473-506.

[23] Greenmail occurs when a firm purchases its own stock at a premium from an investor it fears will otherwise seek to acquire it or oust its present management: Rita D. Kosnik, "Greenmail: A Study of Board Performance in Corporate Governance," *Administrative Science Quarterly* 32 (1987): 163-185; Rita D. Kosnik, "Effects of Board Demography and Directors' Incentives on Corporate Greenmail Decisions," *Academy of Management Journal* 33 (1990): 129-150.

[24] A golden parachute is a provision in an employment contract of the top executive to assure him or her a lucrative financial payoff if the firm is acquired in a takeover: James Wade, Charles A. O'Reilly III, Ike Chandratat, "Golden Parachutes: CEOs and the Exercise of Social Influence," *Administrative Science Quarterly* 35 (1990): 587-603; Paul M. Hirsch, "From Ambushes to Golden Parachutes: Corporate Takeovers as Instance of Cultural framing and Institutional Integration," *American Journal Of Sociology* 91 (1986): 800-837.

[25] Poison pills involve the issue of securities by a board of directors in order to make a hostile takeover more difficult by dramatically increasing the potential cost a hostile acquirer would have to pay: Gerald Davis, "Agents Without Principles?: The Spread of the Poison Pill

Takeover Defense Through the Intercorporate Network," *Administrative Science Quarterly* 36 (1991): 583-613.

[26] Linda Stearns and Mark Mizruchi, "Board Composition and Corporate Financing: the Impact of Financial Institution Representation on Borrowing," *Academy of Management Journal* 36 (1993): 603-18.

[27] Communication scholars investigated the concentration of ownership effects. Those concerned about public ownership of newspapers tend to believe that newspaper companies would face enormous pressure to be cost effective like many other U.S. corporations and that journalistic quality might be sacrificed to satisfy stockholders' interests in short-term profits: William Blankenburg and Gary Ozanich, "The Effects of Public Ownership on the Financial Performance of Newspaper Corporations" *Journalism and Mass Communication Quarterly* 70 (Spring 1993): 68-75; Philip Meyer and Stanley Wearden, "The Effects of Public Ownership on Newspaper Companies: A Preliminary Inquiry," *Public Opinion Quarterly* 48 (Fall 1984): 564-77; Stephen Lacy, Mary Shaver and Charles St. Cyr, "The Effects of Public Ownership and Newspaper Competition on the Financial Performance of Newspaper Corporations: A Replication and Extension," *Journalism and Mass Communication Quarterly* 73 (Summer 1996): 332-41; David Demers, "Corporate Structure and Emphasis on Profits and Product Quality at U.S. Daily Newspapers," *Journalism and Mass Communication Quarterly* 68 (Spring-Summer 1991):15-26.

[28] Dan Berkowitz, "Work Roles and News Selection in Local TV: Examining the business-Journalism Dialectic," *Journal of Broadcasting & Electronic Media*, 37 (winter): 67, 67-81.

[29] David Demers and Debra Merskin, "Corporate News Structure and the Managerial Revolution," *Journal of Media Economics,* 13 (2): 103-121.

[30] Peter Gade, *Newspapers at the Millennium: Another Look at Demers' Managerial Revolution Hypothesis*. (paper presented at the mid-year Association for Education in Journalism and Mass Communication conference, Denver, Co., 2000).

[31] Robert G. Picard, "Institutional Ownership of Publicly Traded U.S. Newspaper Companies," *The Journal of Media Economics* 7 (Winter 1994): 49-64, 63.

[32] They pointed out the double standard by which many newspapers prohibit their reporters from developing any ties to outside organizations for the sake of objectivity. However, no such precautions are taken for the more influential board of directors: Dreier and Weinberg, "Interlocking Directorates."

[33] James P. Winter, "Interlocking Directorships and Economic Power," *In Press Concentration and Monopoly* (ed.) Robert Picard, James Winter, Maxwell McCombs, and Stephen Lacy (New Jersey: Ablex, 1988): 105-115.

[34] Han, "Composition of Board of Directors of Major Media Corporations."

[35] The study controlled for the firm size.

[36] The study approximated advertising revenue based on industry-wise formula; it used the proportion of advertising to total revenue as 100 percent for broadcasters, 80 percent for newspapers, 50 percent for magazines, and 30 percent for cable networks, instead of actual advertising sales.

[37] An and Jin, "The Representation of Financial Institutions on the Boards of Directors of Publicly-traded Newspaper Companies."

[38] Dooley, "Interlocking Directorate."; Pfeffer, "Size and Composition of Corporate Boards of Directors."

[39] Allen, "The Structure of Interorganizational Elite Cooptation."

[40] Palmer, Friedland, and Singh, "The Ties that Bind."

[41] Burt, *Corporate Profits and Cooptation*; Linda Stearns and Mark Mizruchi, "Broken-tie Re-constitution and the Functions of Interorganizational Interlocks: A Reexamination," *Administrative Science Quarterly* 31 (1986): 522-38.

[42] Mizruchi and Stearns, "A Longitudinal Study of the Formation of Interlocking Directorates."

[43] Dooley, "Interlocking Directorates."; Pfeffer, "Size and Composition of Corporate Boards of Directors."

[44] Pfeffer, "Size and Composition of Corporate Boards of Directors."; Allen, "The Structure of Inter-organizational Elite Cooptation."; Pennings, *Interlocking Directorates*; 1980; Edward Herman, *Corporate Control, Corporate Power: a Twentieth Century Fund Study* (Cambridge; New York: Cambridge University Press, 1981).

[45] Jack Richardson, "Directorship Interlocks and Corporate Profitability," *Administrative Science Quarterly* 32 (Sept. 1987): 367-86.

[46] Richardson, 1987; Mizruchi and Stearns, 1988.

[47] Mizruchi, "What Do Interlocks Do?"

[48] Pennings, *Interlocking Directorates*, 110.

[49] Pennings, *Interlocking Directorates*, 111.

[50] Franco Modigliani and Merton Miller, "Taxes and the Cost of Capital: A Correction." *American Economic Review*, 53 (1963), 433-443.

[51] Mizruchi and Stearns, "A longitudinal Study of the Formation of Interlocking Directorates."

[52] Pennings, *Interlocking Directorates*, 110.

[53] Mizruchi and Stearns, "A longitudinal Study of the Formation of Interlocking Directorates"; Han, "Composition of Board of Directors of Major Media Corporations."

[54] Blankenburg and Ozanich, "The Effects of Public Ownership on the Financial Performance of Newspaper Corporations," 71.

[55] For example, companies with low insider controls tended to show increased returns to stockholders: Blankenburg and Ozanich, "The Effects of Public Ownership on the Financial Performance of Newspaper Corporations"; Lacy, Shaver and St. Cyr, "The Effects of Public Ownership and Newspaper Competition on the Financial Performance of Newspaper Corporations: A Replication and Extension."

[56] Cranberg, Bezanson, and Soloski, *Taking Stock*, 24.

[57] In 1981, nearly 28 percent of total advertising expenditure were for newspaper ads; by 1999, newspapers' slice of the ad pie had dropped to just over 22 percent with the advent of new media: Cranberg, Bezanson, and Soloski, *Taking Stock*, 25.

[58] In contrast, horizontal interdependence occurs between organizations that compete with each other in marketing similar goods and service: Pennings, *Interlocking Directorates*, 52.

[59] Pennings, *Interlocking Directorates*, 53.

[60] Burt, *Corporate Profits and Cooptation*, 135-163.

[61] Allen, "The Structure of Interorganizational Elite Cooptation: Interlocking Corporate Directorates."

[62] Vertical interdependence helps firm's increase in control over other organizations. Also, such interlocks perform an intelligence function by expediting the disseminating of information: Pennings, *Interlocking Directorates,* 26.

[63] Hollinger International went public in 1994; Central newspapers went public in 1989 and then was acquired by Gannett in 2000; Journal Register went public in 1997; Gray Communications went public in 1995: Cranberg, Bezanson, and Soloski, *Taking Stock*, 27-32.

[64] Pennings, *Interlocking Directorates*, 13.

[65] Stearns and Mizruchi, "Broken Tie Re-Constitution and the Functions of Interorganizational Interlocks.".

[66] Pennings, *Interlocking Directorates,* 13.

[67] Lois Sayrs, *Pooled Time Series Analysis* (Newbury Park, CA: Sage, 1989), 5-7: In pooled time series, time series are combined with cross-sections (observations on a unit of analysis at single time points) to form one data set. In this study, the unit of analysis is company year.

[68] James A. Stimson, "Regression in Space and Time: A Statistical Essay," *American Journal of Political Science,* 29 (Nov., 1985), 914-947.

[69] Scott Menard, *Longitudinal Research* (Thousand Oaks, CA: Sage, 2002), 65-66.

[70] As of 1998, Ganett's daily circulation was 5,994,347 with 74 dailies, while Pulitzer was 581,028 with 15 dailies and Lee with 622,598 circulation and 21 dailies: Cranberg, Bezanson, and Soloski, *Taking Stock*, 26.

[71] In fact, residual plots against predicted values indicated some degree of heteroscedasticity.

[72] Dummy variables were coded 1 for the specific company, 0 for other 12 companies. This specification, so-called Least Squares with Dummy variables (LSDV) model, is one of the best ways to manage nonconstant variance in a pool: Sayrs, *Pooled Time Series Analysis*, 26. Many interlocking studies have used dummy variable approach to correct heteroscedasticity problem stemming from unobserved heterogeneity due to differences among units, i.e., firms and countries: See Walter W. Powell, Kenneth W. Koput, and Laurel Smith-Doerr, "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology," *Administrative Science Quarterly,* 41 (1996): 116-146; Linda Brewster Stearns and Mark S. Mizruchi, "Board Composition and Corporate Financing: The Impact of Financial Institution Representation on Borrowing," *Academy of Management Journal,* 36 (1993): 603-618.

[73] Introducing dummy variables successfully removed company-specific error from the error term. After specification, residual plots did not indicate any violations of constant variance.

[74] For the model predicting ratio of financial directors, Durbin-Watson statistic was 1.3 and for the model predicting ratio of advertising directors, Durbin-Watson statistic was 1.4. The statistics indicated slight autocorrelations since there is less autocorrelation as the statististic, ranging from 0 to 4, approaches the number 2. Autocorrelations for the first five lags were .344, .124, -.029, -.019. .036 for the model predicting ratio of financial directors; and .286, .085, .064, -.184, -.067 for the model predicting ratio of advertising directors. However, they displayed rapid decay toward zero indicating stationarity. Standard solutions for nonstationarity, i.e., differencing variables, were not necessary.

[75] WGLS estimators that are typically used to address many of these problems raise as many problems as they solve. Inclusion of a lagged dependent variable corrects for AR1 autocorrelation as well as, or better than, weighting on the lagged residuals and yields valuable substantive information about the dynamics of the model: Nathaniel Beck and Jonathan N. Katz, "What to Do (and Not to Do) with Time Series Cross-Section Data," *The American Political Science Review* 89 (Sep. 1995): 634-647.

[76] Inclusion of a lagged dependent variable reduced the residual autocorrelations and increased R^2. For example, autocorrelations at the first five lags became .253, -.070, -.092, .023, .078 and R^2 from .696 to .730 for the model predicting financial directors. Durbin-Watson statistic could not be used because a lagged dependent variable was included in the regression: Sayrs, *Pooled Time Series Analysis*, 31.

[77] Studentized residuals ranged from 2.7 to -2.5 for the model predicting financial directors and those for the model predicting advertising directors ranged from 2.9 to -2.0.

[78] James A. Stimson, "Regression in Space and Time: A Statistical Essay."

[79] When interpreting the dummy coefficients, one can read the constant term as the Pulitzer intercept and read other intercepts as the sum of the constant term and the appropriate coefficient. The constant term, representing Pulitzer, was 9.481, while the unstandardized coefficients of Times Mirror and Knight Ridder were 27.481 and 22.120, respectively.

[80] Interpretation is focused on the relative size of the coefficients. Normal tests of significance on dummy effects (i.e., for coefficient difference from zero) can be misleading for lack of a meaningful zero point. The reference category was Pulitzer and the constant term was -1.527. Unstandardized coefficients of New York Times and Tribune were 34.8 and 33.8, respectively.

[81] Dooley, "The Interlocking Directorate"; Pfeffer, "Size and Composition of Corporate Boards of Directors"; Mizruchi and Stearns, "A Longitudinal Study of the Formation of Interlocking Directorates."

[82] Lacy, Shaver, and St. Cyr, "The Effects of Pubic Ownership and Newspaper Competition on the Financial Performance of Newspaper Corporations"

[83] David C. Coulson, "Antitrust Law and Newspapers," *In Press Concentration and Monopoly* (ed.), Robert Picard, James Winter, Maxwell McCombs, and Stephen Lacy (Norwood, NJ: Ablex Publishing corporation, 1988), 179-195, 195.

[84] Winter, "Interlocking Directorships and Economic Power," 108.

[85] Lawrence Soley and Robert Craig, "Advertising Pressures on Newspapers: A Survey", *Journal of Advertising* 21 (Dec. 1992):1-10.

[86] David H. Weaver and G. Cleveland Wilhoit, *The American Journalist: U.S. News People at the End of an Era* (Mahwah, N.J: Lawrence Erlbaum Associates, Inc., 1996).

[87] The relationship between top manager A and outside director B can be influenced by third party ties when A has a common appointment to another board with a third director, C, who sits on B's Board: Gulati and Westphal, "Cooperative or Controlling?"

[88] Dreier and Weinberg, "Interlocking Directorates."