

Profit over Public Good: The Impact of Investment Firm Ownership on Local News and Political Behavior*

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Abstract

Local newspapers play an important role in informing the public and holding elected officials accountable, yet the consolidation of newspapers under an increasingly small number of owners has raised questions about the commitment of newsrooms to reporting on local politics. Of particular concern is the rise of newspaper owners that deal primarily in investment and not the media industry, such as private equity firms and hedge funds. I document 856 instances of ownership changes among daily newspapers between 2004-2020, with just under half involving a purchase by an owner who primarily deals in investments. I find that a newspaper's acquisition by an investment-owner leads to more stories about national politics and fewer stories about local politics relative to acquisitions by other types of owners. I also find that a transition to investment ownership leads to reductions in both citizen knowledge and voter turnout, which in turn benefits local incumbents. These findings suggest that the rise of investment ownership is harming local newsrooms and the populations they serve.

Keywords: News Content, Local Elections, Local News, Citizen Engagement

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1 Introduction

Recent decades have seen wide-reaching changes to the American media landscape. As national cable news and social media have made news content more readily accessible for the average consumer, local news providers have found themselves in increasingly competitive media markets (Abernathy 2020). Newspaper circulation has dropped every year since 1987, and thousands of daily and weekly newspapers have closed since 2004 (Pew Research Center 2022). Advertising revenue, which had long been the primary source of income for local newspapers, has declined considerably from its high point in the early 2000s (Pew Research Center 2022). These drastic changes have raised serious questions about the availability and quality of traditional journalism. This trend is especially concerning given the large body of literature that has demonstrated negative consequences for civic life following the decline of local news (Darr, Hitt, and Dunaway 2018, 2021; Hayes and Lawless 2021; Gentzkow, Shapiro, and Sinkinson 2011; Rubado and Jennings 2020; Snyder and Strömberg 2010).

At the same time, large investment-based corporations have become increasingly involved in the news industry, taking advantage of the inability of legacy outlets to continue operating. Hundreds of newspapers haven been purchased by private equity firms, hedge funds, or other investment-based firms in recent decades, prompting concern from local communities about the future of place-based reporting. One notable example is The *Fayetteville Observer*, the oldest and one of the largest newspapers in the state of North Carolina, which was owned by the same family for four generations before its sale to GateHouse Media in 2018¹. Charles Broadwell, the publisher and owner of the newspaper and the grandson of a prior publisher, said that while he was “proud to carry it this far,” the newspaper needed to be sold to a “bigger company with national resources” that he and his family “just don’t have.”² Although at the time Broadwell was reportedly optimistic about the newspaper’s future, shortly after the purchase he described the consequences of the sale as “like walking around

¹GateHouse Media is a subsidiary of Fortress Investments, a private equity firm.

²<https://www.wral.com/story/fayetteville-observer-sold-to-gatehouse-media/15884799/>

in my own funeral.”³ Broadwell’s story is all too familiar as rising costs and declining revenue makes previous models of news production increasingly unsustainable. These economically-driven changes in news production may result in lower-quality local political information available to citizens, with worrisome implications for accountability of local officials and voters’ knowledge of local government.

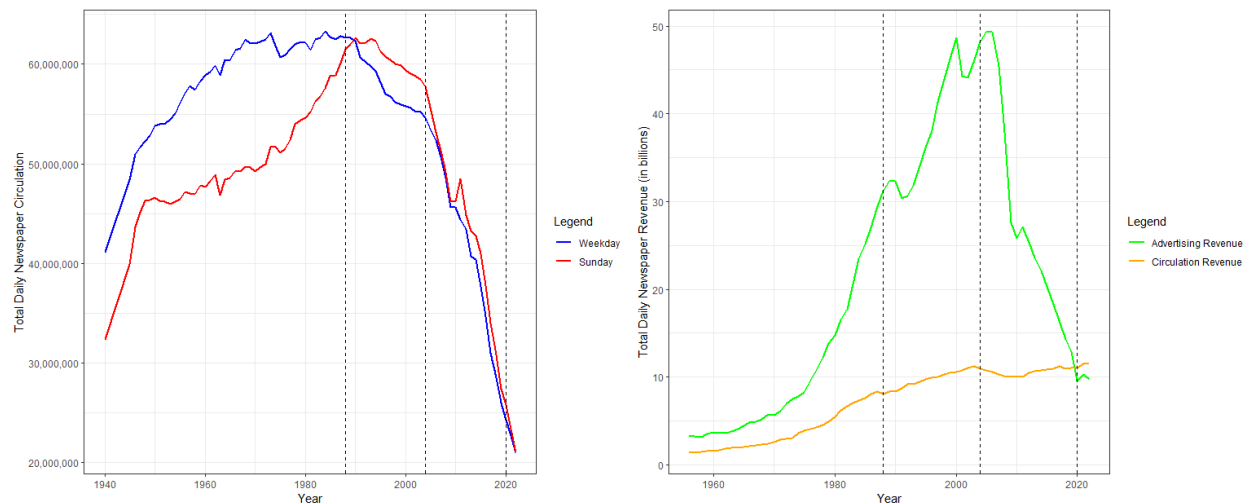


Figure 1: Total Daily Newspaper Circulation and Revenue

Figure 1 shows the extent of the problem. The dotted lines show the 16 year period I study in this paper and the 16 years prior (1988-2004). Although circulation began dropping in the late 1980s, the decline during 1988-2004 is only seven million, approximately 11% of all daily newspaper subscribers. The decline during 2004-2020 is much more stark; daily newspapers lost approximately 25 million subscribers, or just over half of total circulation. Despite this decline, revenue from circulation has remained relatively constant during both periods, with a slight rise from 1988-2004. Yet the money generated by circulation pales in comparison to the revenue generated through advertising, which increased by nearly 40% from 1988-2004. In the more recent period, however, revenue from advertising has plummeted, with a near 80% decline from 2004-2020. These numbers elucidate the challenges facing newspaper owners and their newsrooms and suggest that the newspaper industry as a whole is facing a

³<https://www.usnewsdeserts.com/reports/expanding-news-desert/loss-of-local-news/bigger-and-bigger-they-grow/>

dire financial situation.

In this paper, I document the widespread changes in ownership and news production in the newspaper industry. I collect ownership data for every daily newspaper in the United States and find that nearly half of all daily newspapers have changed ownership at least once between 2004-2020. Of the 856 daily newspaper ownership changes I document during this period, 440 of those ownership changes are purchases by an investment-owner. Using a differences-in-differences design, I measure the change in news content following a purchase by an investment-owner. My results show an increase in coverage of national politics and sports at the expense of local politics. Other types of ownership changes do not produce the same outcome.

How has this decline in local reporting affected civic life? Using the same differences-in-differences design, I find that citizens living in areas served by newspapers that are purchased by investment-owners are less able to evaluate their house representative and their governor. At the municipal level, voter turnout drops after a purchase by an investment-owner, particularly in mayoral elections. I also provide suggestive evidence that incumbents benefit from the decline in participation and knowledge.

This research contributes to the growing literature surrounding the effects of newspaper ownership. Dunaway (2011) found that newspaper ownership affected the treatment of campaign news, and Bailard (2016) noted that changes in coverage were primarily driven by the political and economic interests of the news owners. More recent scholarship has focused on the extent to which local news stories are being supplanted by national news. Martin and McCrain (2019) take advantage of the Sinclair group's recent acquisition of local TV programs and show that the channels acquired by Sinclair increased their coverage of national politics at the expense of local politics. Mastrorocco and Ornaghi (2020) build on that research by demonstrating that the Sinclair acquisitions affected the behavior of viewers and their ability to hold public institutions accountable. This research does not address the more recent phenomenon of the entry of investment-owners, which has only recently begun

to attract scholarly attention.

Ewens, Gupta, and Howell (2023) examine private equity acquisitions of daily newspapers. They find diminished local reporting and increased national reporting in newspapers that fall under private equity ownership. Dunaway and Peterson (2023) find a decline in the number of journalists and editors employed in a newsroom after a newspaper is purchased by an investment-owner. This paper builds on Ewens, Gupta, and Howell (2023) to include other types of investment-owners, such as hedge funds and pension funds. I also compare acquisitions by investment-owners to acquisitions by other owners to assess the degree to which any ownership change may affect newspaper content and civic life.

2 Theoretical Motivation

Media ownership impacts news production because owners can make choices about hiring/firing journalists and editors, allocating journalistic resources, and setting the agenda of a newsroom (Archer and Clinton 2018; Dunaway and Peterson 2023; Gentzkow and Shapiro 2006; Hamilton 2004). Local news is costly to produce and often requires dedicated and knowledgeable staff (Kaniss 1991), and local newsrooms are facing increasingly dire financial situations (Adgate 2021). Newspapers can cut costs or potentially increase profit by reducing local reporting and filling its pages with content that is cheaper to produce, such as stories about national politics or sports. These types of stories are cheaper than local stories because of the abundance of information online about national politics or sports. A newspaper would not need to send a journalist to the capital to write a story about national politics, but likely would need to send a journalist to city hall to report on city politics. Additionally, a story about national politics or sports could be run in every newspaper that a corporation owns, while a local news story would only be of interest to residents of a particular community. Research has demonstrated a connection between media consolidation and declining local content (Dunaway 2013; Martin and McCrain 2019), and Hamilton (2004)

shows that ownership type matters for newsroom investment and direction.

Why should we be worried about investment ownership of newspapers? Research has already found a decline in staffing levels (Dunaway and Peterson 2023; Ewens, Gupta, and Howell 2023), and other research has highlighted the relationship between the size of a newspaper’s staff and the amount and quality of the political coverage it produces (Peterson 2021). These concerns are not just theoretical; public statements made by the companies in question can help demonstrate their goals. In a 2015 press release, the CEO of Gatehouse Media said “We believe we can shield our cash flows from topline declines through measured expense reductions at our acquired properties, and remain confident in our ability to continue to grow free cash flow and our dividend.”⁴ The founder and CEO of Alden Global Capital, a hedge fund that owns Digital First Media, said “newspaper companies have a lot of assets that probably aren’t being fully utilized and could be sold off.” As Abernathy (2016) noted, these investment-owners are distinguished from other owners by their own stated emphasis on maximizing profits without a coinciding commitment to local journalism.

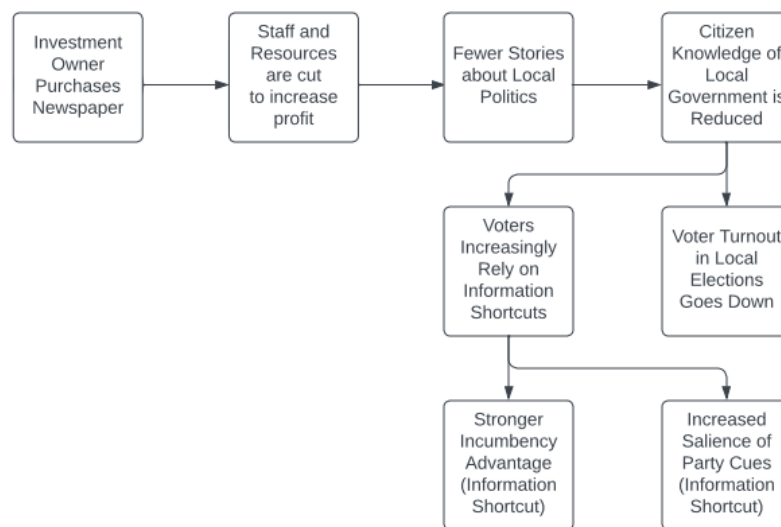


Figure 2: Theoretical Expectations of the Impact of Newspaper Ownership

Figure 2 presents a theory of how investment-ownership can affect the flow of information,

⁴<https://newspaperownership.com/additional-material/investment-newspaper-owners-statements/>

citizen knowledge, and voter behavior. After a purchase by an investment-owner, cost cutting measures are put into place to make the newspaper more profitable. Dunaway and Peterson (2023) find that one of those cost cutting measures is laying off editors and journalists, however other cost saving measures could be put in place that may also diminish local news such as the allocation of limited resources or an increased reliance on cheaper types of news content. All of these changes can lead to fewer stories about local politics, which in turn reduces knowledge about local politics for citizens. This may lead to consequences for local elections, such as lower voter turnout and an increased reliance on information shortcuts. The increased reliance on information shortcuts may increase the salience of both incumbency and party in elections, two important informational cues that prior research has linked to declining local news (Lockhart 2021; Moskowitz 2021).

3 Data and Measurement

I collect data from several sources. The first is the *Editor and Publisher Yearbook*, a newspaper directory that has been published annually for over a hundred years. In each presidential election year from 2004-2020, I extract the name, location, circulation, and ownership of every English-language U.S. daily newspaper for a total of 1,471 newspapers. To check the accuracy of the data, I compare the E&P data with lists of daily newspapers provided by the UNC Center for Innovation and Sustainability in Local Media. The datasets are remarkably similar, with over 99% of newspapers appearing in both datasets. From the data, I identify all newspapers that experience a change in ownership during the 16 year period. I find 856 instances of ownership changes between 2004-2020 among 657 different daily newspapers. Using Internet searches and newspaper websites/articles, I confirm each ownership change and identify the exact year it took place. As it likely takes time for new owners to institute their desired newsroom changes, I consider the first year of new ownership to be the year after the transaction year (for example, if a newspaper was bought in 2018, I

consider the first year of "new" ownership to be 2019).

While these datasets provide the name of the newspaper owner, the yearbooks provide no other information about the type of ownership. Using Internet searches and publicly available information, I hand code every daily newspaper as being owned by an investment-owner or not. Investment firm ownership is a key variable of interest in this paper. Following (Dunaway and Peterson 2023), I define a newspaper as investment-owned if it is owned by a private equity firm, hedge fund, or another owner whose background is primarily in investment and not in media.

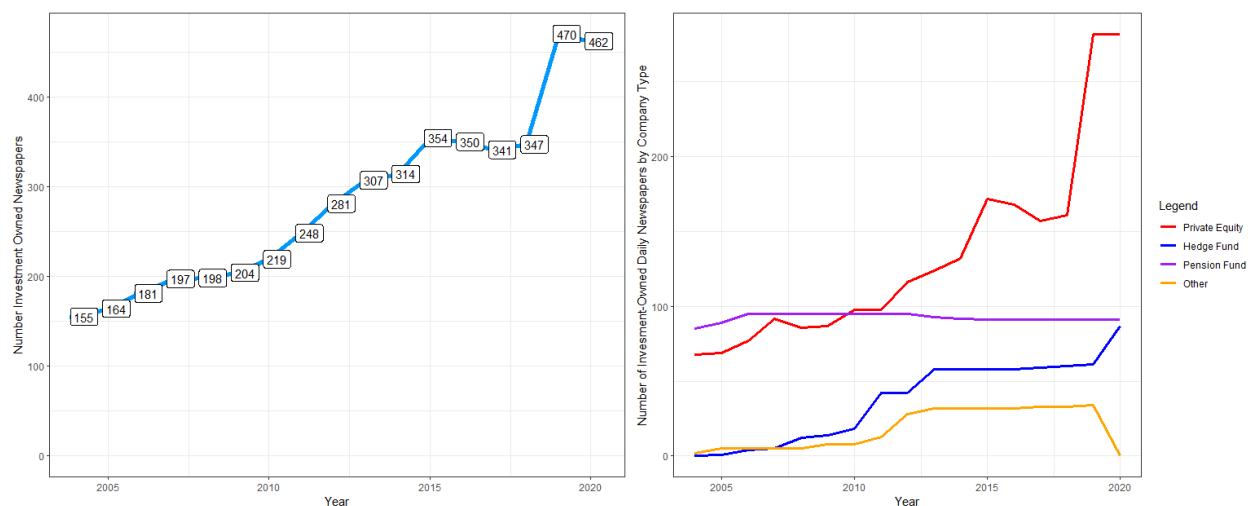


Figure 3: Number of Newspapers owned by Investment Owners 2004-2020

The right side of figure 3 shows the number of daily newspapers that come under investment-ownership between 2004-2020. Although there are a few examples of investment-owners selling newspapers back to non-investment-owners, the trend is clear: investment-ownership is on the rise. The number of papers owned by investment-owners is nearly triple what it was in 2004. The left side of figure 2 shows the breakdown of newspaper ownership by type of investment company. Private equity firms and hedge funds see the largest growth in their newspaper portfolio between 2004-2020. The only pension fund in the data, Community Newspaper Holdings Incorporated (CNHI), grew slightly but has been party to relatively few transactions when compared with hedge funds and private equity firms.

The other category encompasses corporations that deal primarily in investments but do not fit neatly into the other categories.⁵ There are a few cases that are somewhat challenging to classify, such as Jeff Bezos' purchase of *The Washington Post* or Patrick Soon-Shiong's purchase of the *The Los Angeles Times*. While these owners do not primarily deal in media, they also do not have the same profit driven goals that other investment-owners appear to have. For example, Patrick Soon-Shiong stated in several interviews that he planned to invest in his newspapers and increase local reporting.⁶ Jeff Bezos doubled the size of the staff at *The Washington Post*, and initiated several other changes with the express goal of improving the newspaper.⁷ Additionally, the UNC data regards these owners as private rather than investment-based, so I classify these ambiguous cases as non-investment purchases.

For data on news content I rely on NewsBank, a newspaper archive that has been used in prior newspaper research (Hayes and Lawless 2021). I collect data from every daily newspaper available in the archive, excluding any newspaper with more than a third of the years of interest missing. Using keyword searches, I collect the approximate number of stories related to local politics, national politics, state politics, and sports. I also collect the total number of articles housed by the archive for each newspaper. I will describe the collection process in greater detail in the content analysis section.

Table 1 shows the availability of daily newspapers in NewsBank. I also exclude newspapers that closed, merged with another newspaper, or shifted to weekly production between 2004-2020. Of the 1,261 daily newspapers, 288 are fully or near fully available on the archive. While this is far from complete coverage, the sample does include similar proportions of newspapers that change owners and newspapers that fall under investment-ownership. The newspapers available through NewsBank tend to be larger than an average daily newspaper, but there is still a reasonable sample of smaller circulation newspapers. A list of all

⁵One example is Berkshire Hathaway, Warren Buffet's investment company that purchased 31 daily newspapers between 2004 and 2020 using the name BH Media.

⁶<https://www.latimes.com/business/hollywood/la-fi-ct-patrick-soon-shiong-latimes-sold-20180616-story.html>

⁷<https://www.nytimes.com/2024/06/14/business/media/jeff-bezos-washington-post.html#:~:text=In%20the%20first%20seven%20years,reporting%20on%20the%20Trump%20administration.>

newspapers used in the content analysis can be found in the appendix.

Table 1: Newspaper Availability in NewsBank

	N	Availability in NewsBank	%
All Newspapers	1261	288	23%
Ownership Change	657	167	25%
IO Ownership Change	440	87	20%

In addition to media data, I also use the 2006-2020 Cooperative Election Studies (CES) to assess citizen knowledge and split ticket voting rates (Kuriwaki 2024).⁸ The CES is an annual, nation-wide survey that asks questions related to knowledge of elected officials and voting behavior. For data on election outcomes, I use the local elections dataset provided by (de Benedictis-Kessner et al. 2023). The local elections dataset includes voter turnout data for numerous city and county level offices, and also allows me to test the electoral success of local incumbents.

For each outcome, I use a difference-in-difference design to estimate the effect of new ownership and investment-ownership. The regression model for the newspaper content analysis is as follows:

$$Y_{nt} = \beta(\text{New Owner}) + \gamma(\text{New Investment Owner}) + \lambda_n + \alpha_t + \epsilon_{nt}$$

with Y_{nt} as the share of stories about local politics, national politics, state politics, or sports in newspaper n in year t , and *New Owner* as an indicator variable, which is zero if the newspaper has not changed owners and one in the first full year of new ownership and all years afterwards. *New Investment Owner* is another indicator variable coded as one if the newspaper is purchased by an investment owner or zero if it is not. λ_n and α_t are newspaper and year fixed effects, respectively. The newspaper fixed effects control for time-consistent omitted variables causing across-newspaper variation. The year fixed effects capture any variation that is due to national trends in a given year rather than the types of newspaper

⁸The CES began in 2006, so there is no data available for 2004 or 2005

specific effects I am trying to estimate. The year fixed effects are particularly important to include given the myriad of other changes that are affecting the media industry and news production such as the popularization of social media or the availability of news online. The model is nearly the same for analyses that examine aggregate election data except the newspaper fixed effects are replaced for county or city fixed effects (depending on the unit of analysis).

One significant challenge with studying locations served by newspapers is the existence of large municipalities that have multiple daily newspapers. Los Angeles County, which is home to 9.8 million people, had twelve daily newspapers in 2004, of which 10 changed owners by the end of 2020. This makes it challenging to isolate the effects of any single ownership change. To account for this, I restrict the data to only counties or cities (depending on the outcome of interest) that have a single daily newspaper in each of the analyses where location is considered. This does not affect the newspaper content analysis as the measurement occurs within newspapers. Regressions using the full dataset can be found in the appendix, and the results are largely consistent in both approaches.

The model changes slightly for the analyses that rely on survey data of individuals from the CES. That model is:

$$Y_{it} = \beta(\text{New Owner}) + \gamma(\text{New Investment Owner}) + \lambda_c + \alpha_t + X_i + \epsilon_{nt}$$

In this model, Y_{it} is the outcome of interest (ability to evaluate elected officials or having cast a split ticket vote) in individual i in year t . X_i denotes individual level partisan and demographic controls. I connect newspaper data with individual survey respondents using county of residence, so I use county and year fixed effects which are λ_c and α_t .

4 Newspaper Content Analysis

To conduct the content analysis, I search for key words related to local (mayor, city council, city hall, city government, county government, county executive, school board, school

district, planning board, zoning), national (Bush, Obama, Trump, Biden, Congress, White House), and state (Governor, Lieutenant Governor, state senate, state policy, state legislature, state capitol) politics. I also collect sports key words (MLB, NBA, NFL, baseball, basketball, football) to have a non political group. The search feature in NewsBank allows for boolean searches, so the number of local, national, state, and sports articles in each newspaper-year is the number of articles that contain any of those keywords⁹.

While these terms are not exhaustive, I aimed to select the words that would most likely indicate national, state, or local political reporting. Many of these words have been used by prior media researchers (Hayes and Lawless 2021; Ewens, Gupta, and Howell 2023), and I avoided selecting words that are frequently used outside of politics. For example, I did not include the word “President” because it is used frequently by companies and other entities that are not related to national politics.

As I want to calculate the share of article content, I also collect the total number of articles housed by the archive for each newspaper-year. I use the share of article content rather than the raw number of stories for several reasons. First, the number of stories a newspaper produces varies year to year so a reported change may be due to a change in the overall number of stories rather than stories about a particular topic. Second, the share of articles is a good proxy for the weight of coverage that a newspaper reader is exposed to, which may affect what topics a reader thinks are important and pays attention to (Iyengar and Kinder 1987).

In total, I analyze over 85 million articles across 288 newspapers. I calculate the dependent variable as the number of articles mentioning a key word divided by the total number of articles in each newspaper-year. As a reminder, the independent variable is an indicator meant to denote the ownership status of the newspaper in each given year.

Table 2 shows the results of the content analysis. Investment-ownership leads to a decrease in local stories and an increase in national stories, while other ownership changes do

⁹For example, if an article uses the word mayor twice and the word city council once, the article would only count once in the local data.

Table 2: Effects of New Newspaper Ownership on Share of Articles by Topic 2004-2020

	Local	National	State	Sports
New Owner	0.001 (0.002)	0.000 (0.002)	0.000 (0.001)	-0.002 (0.003)
New Investment Owner	-0.006** (0.002)	0.009*** (0.002)	-0.001 (0.001)	0.007* (0.003)
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.096	0.071	0.032	0.146
Observations	4868	4868	4868	4868

Note: This table shows the effects of a newspaper ownership change on the share of stories about local politics, national politics, state politics, or sports. Standard errors are clustered by newspaper.

*p<0.05; **p<0.01; ***p<0.001

not. The share of local stories declines by .6 percentage points, which is about 6% of the outcome mean, while the share of national stories increases by about .9 percentage points or about 13% of the outcome mean. This demonstrates that the readers of investment-owned newspapers are getting proportionally fewer local stories and more national stories. Other types of ownership changes do not produce significant changes in news content.

While there is minimal change to the coverage of state politics, there is a significant increase in the coverage of sports once a paper is investment-owned. Stories about sports are likely cheaper to produce than stories about local politics because of the universal appeal of sports content, which allow newspaper owners to run the same story in multiple newspapers. Additionally, there is a wealth of information online about sports from organizations such as ESPN, including interviews with players and information about game outcomes. This is a stark contrast to local political news which is both harder to find online and appeals only to local residents (Hindman 2011). Finally, empirical evidence suggests that newsroom cuts are largely concentrated among political reporters rather than journalists who focus on entertainment (Dunaway and Peterson 2023). This suggests that local news is also being supplanted by non-political news that may be both cheaper and easier for a large corporation to generate.

One concern with this analysis is the possibility that investment-owners purchase newspapers that are already in a state of decline, and thus the effect that I show in Table 2 may be due to the characteristics of the newspapers that investment-owners purchase rather than the decisions those owners make after the purchase. Additionally, although two way fixed effects (TWFE) models can be powerful tools for causal inference, recent scholarship has demonstrated problems with a staggered differences-in-differences design that relies on two way fixed effects (Sun and Abraham 2020; Goodman-Bacon 2021). In particular, Sun and Abraham (2020) show that variation in treatment timing can cause coefficients in a lead or lag to be contaminated by effects from other periods, which in turn can lead to a violation of the parallel trends assumption. To account for each of these concerns, I conduct an Event Study using both the traditional TWFE design and the estimator in Sun and Abraham (2020).

Figure 4 shows the differences-in-differences event studies on the share of articles about local politics and national politics. The event studies show the point estimates and confidence intervals of the regression in each time period before and after a purchase by an investment-owner. The reference year is the year before the deal as I want to capture the last full year of prior ownership. The event study on the share of articles about local politics shows fairly consistent rates of local stories prior to a purchase, followed by a sizable drop in the first full year of investment-ownership. The event study on the share of articles about national politics is less clear; while the point estimates do indeed rise after a purchase by an investment-owner, the rise appears to begin prior to the sale. In other words, I cannot rule out the possibility of pre-trends impacting my results, however there may be other reasons why a newspaper would increase its national reporting before a sale to an investment-owner. For example, a newspaper owner may anticipate or even plan to sell their newspaper and may increase national reporting to attract buyers.

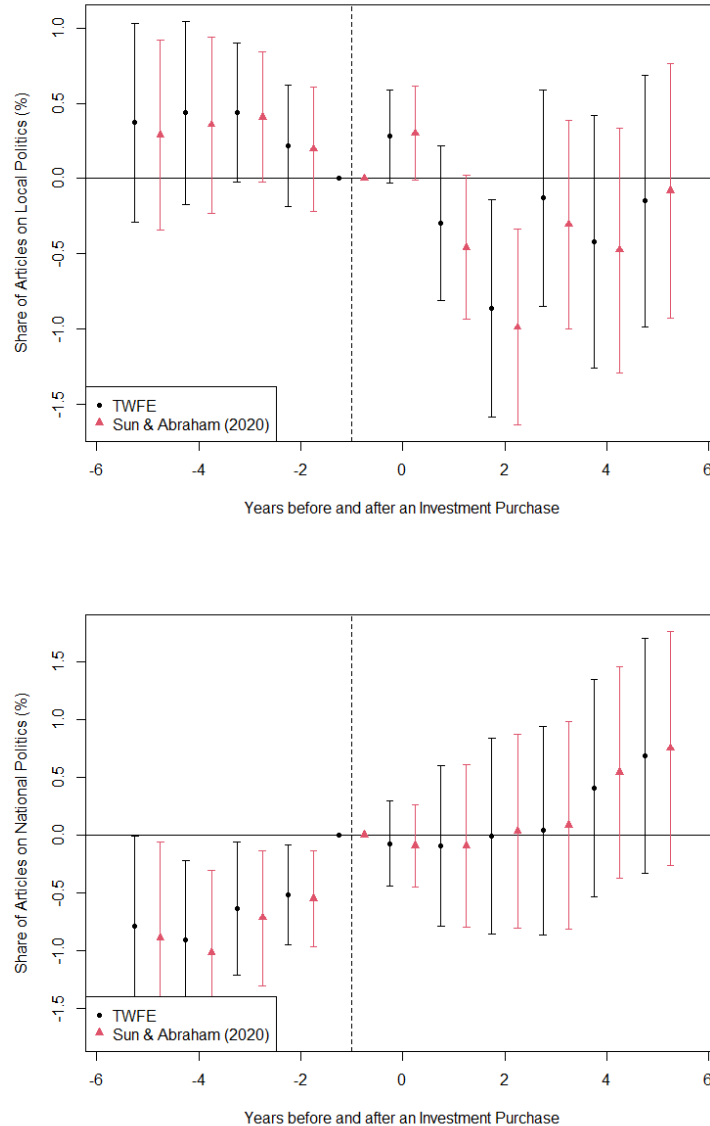


Figure 4: Event Study of Investment Ownership on Share of Articles by Topic: Local and National Politics

5 Citizen Knowledge

Next, I will use data from the Cooperative Election Study to test the effects of newspaper ownership on citizen knowledge. The CES asks respondents to evaluate their elected official, and if respondents were able to give any evaluation then I consider them able to evaluate

a particular office. If a respondent answered the survey “Not Sure” or “Never Heard of This Person”, I consider the respondent unable to evaluate their elected official for that office. Although the CES asks other questions about knowledge of elected officials (like ability to recall their name), this question is preferable because it is both simple and has been asked consistently in every CES survey (2006-present). As the CES relies on individual respondents, I use demographic and partisan controls. Specifically, I control for family income, age, race, gender, education, and marital status, in addition to indicators for party affiliation (Republican, Democrat, or Independent).

Table 3: Effects of New Newspaper Ownership on Citizen’s Ability to Evaluate Elected Officials (Only Counties with One Newspaper) 2006-2020

	House	Senator	Governor	President
New Owner	0.003 (0.004)	-0.005 (0.003)	0.002 (0.003)	-0.001 (0.002)
New Investment Owner	-0.010* (0.004)	0.008* (0.003)	-0.007* (0.003)	-0.002 (0.002)
Year FE	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes	Yes
Outcome Mean	0.745	0.843	0.903	0.972
Observations	301313	301313	301313	301313

Note: This table shows the effects of a newspaper ownership change on the ability of CCES survey respondents to evaluate elected officials. If a respondent answered the survey “Not Sure” or “Never Heard of This Person,” I consider them unable to evaluate their elected official. Standard errors are clustered by county.

*p<0.05; **p<0.01; ***p<0.001

The results in Table 3 show a small but statistically significant drop in the ability of respondents to evaluate their U.S. representative and their governor following their county’s newspaper being purchased by an investment-owner. Interestingly, citizen’s are actually better able to evaluate their senator following an investment-purchase, which may reflect the increase in coverage of national politics. There is no effect on citizen’s ability to evaluate the President, which is relatively unsurprising given the very high baseline (roughly 97% of

respondents were able to give an evaluation of the President).

6 Voter Behavior

I also use the CES data to test for new ownership's effects on the polarization of voting behavior by looking at split ticket voting rates, or the rates at which voters choose candidates from different party affiliations on the same ballot. Prior research has demonstrated a connection between local news consumption and split ticket voting (Darr, Hitt, and Dunaway 2018; Moskowitz 2021). This research has theorized that less information about local officeholders leads to voters using party affiliation as an information shortcut. Thus, less local news may lead to increased split ticket voting. I use the same control variables that I used in the prior analysis.

Table 4: Effects of New Newspaper Ownership on Split Ticket Voting (Only Counties with One Newspaper) 2008-2020

	House/President	Sen/President	Gov/President
New Owner	-0.004 (0.004)	-0.010* (0.005)	-0.002 (0.006)
New Investment Owner	-0.001 (0.004)	-0.004 (0.005)	-0.011 (0.007)
Year FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes
Outcome Mean	0.070	0.059	0.071
Observations	157222	102733	72804

Note: This table shows the effects of a newspaper ownership change on split ticket voting between House/Senator/Governor and the President. Standard errors are clustered by county.

*p<0.05; **p<0.01; ***p<0.001

Table 4 presents the results for split ticket voting. Each column represents an individual ballot selection on a lower level office and the president. If a respondent votes for two candidates with different party affiliations, I consider them having cast a split ticket and

they are coded as treated. There is no statistically significant effect of investment ownership on split ticket voting rates, however other types of ownership changes seem to produce a small decrease in split ticket voting for senatorial elections. It should be noted, however, that the sample sizes for this analysis are smaller because not every CES respondent has a house, senatorial, or gubernatorial election each year the survey is fielded.

Next, I turn to turnout in local elections. I examine voter turnout rates in both county and city elections, specifically city council, mayoral, sheriff, and county council elections. It is important to note that not every county and city is represented in the local elections database, and the data availability may affect the results. In particular, the database is more likely to include more populous cities and counties, although there are some smaller localities included as well. I calculate the turnout by taking the number of votes for all candidates for a particular office in a given election divided by annual population estimates from the U.S. census. The city level analysis uses city population estimates and city fixed effects, while the county level analysis uses county population estimates and county fixed effects. District fixed effects are also included for the city council and county council analyses, as these offices are sometimes elected in districts.

Table 5: Effects of New Newspaper Ownership on Turnout in Local Elections (Only Cities or Counties with One Newspaper) 2004-2020

	City Elections		County Elections	
	City Council	Mayor	County Council	Sheriff
New Owner	-0.003 (0.007)	0.017 (0.012)	-0.009 (0.006)	0.022 (0.015)
New Investment Owner	-0.007 (0.009)	-0.030* (0.015)	0.006 (0.007)	-0.028 (0.018)
Year FE	Yes	Yes	Yes	Yes
City FE	Yes	Yes	No	No
County FE	No	No	Yes	Yes
District FE	Yes	No	Yes	No
Outcome Mean	0.083	0.172	0.129	0.330
Observations	3949	836	6235	1040

Note: This table shows the effects of a newspaper ownership change on voter turnout in city and county elections. Standard errors are in parentheses below the estimates. Standard errors are clustered by city or county.

*p<0.05; **p<0.01; ***p<0.001

Investment-ownership leads to reductions in turnout in local elections, particularly in

mayoral elections. When a city's newspaper is purchased by an investment-owner, turnout in mayoral elections declines by about 3 percentage points. Additionally, turnout in mayoral elections seems to increase slightly following other types of ownership changes, which suggests that ownership changes that do not involve an acquisition by an investment owner might increase coverage of local races. The coefficient for turnout in sheriff races is substantively similar yet not significant at the .05 level. The results are far weaker for city and county council elections, which is unsurprising given the nature of the offices. Mayors and sheriffs serve in roles that are occupied by a single person, whereas council members are part of a group. Thus, it may be easier for voters to use newspapers to learn about mayors and sheriffs when compared to the ease of learning about members of a city or county council.

I also use the local elections database to test the electoral success of incumbents. Similar to how partisan affiliation can be an information shortcut for voters, incumbency can be another informational shortcut that voters may use, particularly at the local level where candidates are less well known (Lockhart 2021). A less informed voter may be more likely to vote for an incumbent, either because they lack positive information about the challenger or because they lack negative information about the incumbent. This can have deleterious implications for representation, as incumbents may be less responsive to the needs and wishes of the public if they do not fear an electoral penalty.

I restrict the sample of mayoral and city council elections to races where the incumbent was running for re-election. I also drop elections where the incumbent ran unopposed as there was no challenging candidate for voters to learn about. The dependent variable is whether the incumbent was re-elected.

Table 6 presents the results for the analysis on incumbency. Mayors are more likely to be re-elected following their city's newspaper being purchased by an investment firm. Conversely, incumbents appear less likely to be re-elected following other types of ownership changes. The local incumbency advantage is already quite strong, as incumbent mayors who run for re-election have a near 80% chance of winning their election. Thus, these estimates

Table 6: Newspaper Ownership Changes and Incumbent Chances of Victory in City Elections (Only Cities with One Newspaper) 2004-2020

Dependent Variable	Mayor	City Council
New Owner	-0.229 (0.133)	0.042 (0.045)
New Investment Owner	0.322* (0.157)	0.016 (0.055)
Year FE	Yes	Yes
City FE	Yes	Yes
Outcome Mean	0.77	0.80
Observations	526	2748

Note: This table shows the effects of a newspaper ownership change on incumbent chances of victory in city elections. Standard errors are clustered by city.

*p<0.05; **p<0.01; ***p<0.001

suggest an even bigger advantage than already exists for mayors running for re-election in cities where the local newspaper is under investment ownership.

Although this estimate is large and statistically significant, it should be noted that the sample size of incumbents running for re-election is quite small and the standard errors are relatively large. Thus, I take this result as suggestive and encourage future researchers to continue testing the connection between local news and incumbency.

7 Discussion and Conclusion

Local newspapers are frequently described as being in a state of crisis, and trends of declining circulation and revenue are likely to continue. As newsrooms continue to grapple with changes in communications technology and reductions in available resources, news owners may find it increasingly challenging to sustain previous models of news production. This paper contributes to scholars' understanding of the decline of local news and its consequences by offering evidence of the impact of ownership changes on news production and civic life. There appears to be little effect of newspaper ownership changes when the change is among

media focused owners, but investment-ownership is associated with less local news and less participation in local politics.

While there are considerable consequences to investment-ownership, it is worth mentioning that the effects I estimate in this paper are moderate and in smaller magnitude than other work that has studied geography-induced differences in news supply, such as Moskowitz (2021). In fact, one might argue that despite any deleterious outcomes associated with investment-ownership, it may be preferable to the alternative of a newspaper closing entirely. After all, some local reporting from a local newspaper is almost certainly better than none at all. And indeed several family owned or other privately owned newspapers that were at risk of closing entirely have been purchased by investors. The majority of newspaper acquisitions, however, come from acquisitions of large public, or less often, private chains. While these chains are certainly not immune from the financial pressure facing newsrooms nation-wide, there is little evidence to suggest that they were in immediate danger of bankruptcy. Rather, lucrative offers and exhausted owners have allowed investment companies to swallow up large numbers of newspapers in a short span of time.

Furthermore, there may be effects of investment-ownership that take a longer amount time to emerge and be documented by scholars. In the book *Hedged: How Private Investment Funds Helped Destroy American Newspapers and Undermine Democracy*, communications scholar Margot Susca conducts a plethora of in-depth interviews on newspaper staff about the rise of investment-ownership. In one particularly notable interview, a former editor and columnist at the *St. Louis Post-Dispatch* said “There are governments that nobody watches. There are investigations that might have made major changes that are lost. Investigations that could have led to new approaches and policy, but there’s nobody to call” (Susca 2024, p. 5). This quote highlights the notion that there may be additional consequences of investment-ownership outside of what I find in this paper, and it is my hope that scholars continue to document and investigate the rise of investment-ownership.

Historically, the FCC has pursued relatively limited restrictions on newspaper ownership,

and even some of those restrictions have fallen away in recent years. In 2017, the FCC eliminated the Newspaper and Broadcast Cross-Ownership Rule, which prohibited an owner from owning a full-power broadcast station and a daily newspaper if the station's contour completely encompassed the newspaper's city of publication and the station and newspaper were in the same relevant Nielsen market. The FCC stated that the rule was "outdated considering the explosive growth of the number and variety of sources of local news and information in the modern marketplace". While the report is likely correct about the number and variety of information sources, those sources may not provide the same level of local news coverage that has been historically found in newspapers (Abernathy 2020). A 2011 report by the FCC found that the internet was not a prominent place for local news outlets (Hindman 2011). Additionally, the filtering algorithms used by platforms like Google tend to elevate news produced by national outlets at the expense of local news content (Usher 2019). While local TV stations have not yet been targeted by investment-owners in the same way that newspapers have, the elimination of the FCC rule may change that in the future.

Is there hope on the horizon? In 2020, the Local Journalism Sustainability Act was introduced in the House of Representatives to provide tax credits to local newspapers in order to help them operate and report on local politics. Although it never received a vote of the full house, the bill was widely supported by the media and newspaper industry. David Chavern, the President and CEO of News Media Alliance, wrote, "As journalists are on the front lines reporting on the coronavirus crisis, local news publishers have been dealt a major blow from the contraction of the local advertising market." Various state legislatures have considered their own interventions, such as Illinois' state legislature, which passed a version of the federal bill in May 2024. My research suggests that ownership is another area that lawmakers and policy experts should consider when discussing ways to assist local journalism and the communities they serve.

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Appendix A: Results with all counties and cities

Table 7: Effects of New Newspaper Ownership on Citizen's Ability to Evaluate Elected Officials (All Counties) 2006-2020

	House Rep	Senator	Governor	President
New Owner	0.002 (0.003)	-0.005 (0.003)	0.000 (0.002)	-0.000 (0.001)
New Investment Owner	-0.005 (0.004)	0.002 (0.003)	-0.007** (0.003)	-0.001 (0.002)
Year FE	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes	Yes
Outcome Mean	0.782	0.841	0.906	0.970
Observations	531755	531755	531755	531755

Note: This table shows the effects of a newspaper ownership change on the ability of CCES survey respondents to evaluate elected officials. If a respondent answered the survey "Not Sure" or "Never Heard of This Person," I consider them unable to evaluate their elected official. Standard errors are clustered by county.

*p<0.05; **p<0.01; ***p<0.001

Table 8: Effects of New Newspaper Ownership on Split Ticket Voting (All Counties) 2008-2020

	House/President	Gov/President	Sen/President
New Owner	-0.004 (0.004)	-0.006 (0.006)	0.003 (0.005)
New Investment Owner	0.002 (0.004)	-0.009 (0.007)	0.002 (0.005)
Year FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes
Outcome Mean	0.071	0.072	0.062
Observations	264067	120321	171388

Note: This table shows the effects of a newspaper ownership change on split ticket voting between House Rep/Senator/Governor and the President. Standard errors are clustered by county.

*p<0.05; **p<0.01; ***p<0.001

Table 9: Effects of New Newspaper Ownership on Turnout in Local Elections (All Places)
2004-2020

	City Elections		County Elections	
	City Council	Mayor	County Council	Sheriff
New Owner	0.008 (0.009)	0.015 (0.014)	-0.002 (0.008)	0.036 (0.022)
New Investment Owner	-0.020* (0.009)	-0.020 (0.015)	0.011 (0.008)	-0.014 (0.023)
Year FE	Yes	Yes	Yes	Yes
City FE	Yes	Yes	No	No
County FE	No	No	Yes	Yes
District FE	Yes	No	Yes	No
Outcome Mean	0.121	0.177	0.122	0.319
Observations	11048	2399	11822	1783

Note: This table shows the effects of a newspaper ownership change on voter turnout in local elections. Standard errors are in parentheses below the estimates. Standard errors are clustered by city or county.
*p<0.05; **p<0.01; ***p<0.001; ·p<0.1

Table 10: Newspaper Ownership Changes and Incumbent Chances of Victory in City
Elections (All Cities) 2004-2020

Dependent Variable	City Council	Mayor
New Owner	-0.005 (0.054)	0.026 (0.143)
New Investment Owner	0.009 (0.056)	0.102 (0.151)
Year FE	Yes	Yes
City FE	Yes	Yes
Outcome Mean	0.82	0.80
Observations	8560	1903

Note: This table shows the effects of a newspaper ownership change on incumbent chances of victory in city elections. Standard errors are clustered by city.
***p<0.001; **p<0.01; *p<0.05; ·p<0.1

Appendix B: Results excluding newspapers with multiple ownership changes

One potential critique of my approach is the fact that many newspapers that change owners multiple times. Nearly half of all daily newspapers change owners more than once, and several change owners more than twice. This presents a problem as I can only treat a newspaper, city, or county one time and the model is unable to consider a second or third ownership change of the same type (the model does allow for one non-investment based ownership change and one investment based ownership change). It is possible that the results presented in this paper are affected by this treatment problem. In this section, I run all of the main analyses with any newspaper that changes owners more than once dropped from the analysis.

Table 11: Effects of New Newspaper Ownership on Share of Articles by Topic 2004-2020

	Local	National	State	Sports
New Owner	0.001 (0.002)	0.001 (0.002)	-0.000 (0.001)	-0.004 (0.003)
New Investment Owner	-0.007* (0.003)	0.013*** (0.003)	0.000 (0.001)	0.009* (0.004)
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.097	0.072	0.033	0.147
Observations	3625	3625	3625	3625

Note: This table shows the effects of a newspaper ownership change on the share of stories about local politics, national politics, state politics, or sports. Only newspapers that change owners once are included in this table. Standard errors are clustered by newspaper.

*p<0.05; **p<0.01; ***p<0.001

Table 12: Effects of New Newspaper Ownership on Citizen's Ability to Evaluate Elected Officials (All Counties) 2006-2020

	House Rep	Senator	Governor	President
New Owner	0.006 (0.004)	-0.013*** (0.004)	-0.001 (0.003)	0.000 (0.002)
New Investment Owner	-0.013* (0.005)	0.009* (0.004)	-0.004 (0.004)	-0.003 (0.002)
Year FE	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes	Yes
Outcome Mean	0.782	0.841	0.906	0.970
Observations	262001	262001	262001	262001

Note: This table shows the effects of a newspaper ownership change on the ability of CCES survey respondents to evaluate elected officials. If a respondent answered the survey "Not Sure" or "Never Heard of This Person," I consider them unable to evaluate their elected official. Standard errors are clustered by county.

*p<0.05; **p<0.01; ***p<0.001

Table 13: Effects of New Newspaper Ownership on Split Ticket Voting 2008-2020

	House/President	Gov/President	Sen/President
New Owner	-0.002 (0.005)	0.010 (0.008)	-0.014* (0.006)
New Investment Owner	0.000 (0.006)	-0.027* (0.010)	0.003 (0.007)
Year FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes
Partisan Controls	Yes	Yes	Yes
Outcome Mean	0.071	0.072	0.062
Observations	112294	46069	70751

Note: This table shows the effects of a newspaper ownership change on split ticket voting between House Representative/Senator/Governor and the President. Standard errors are in parentheses and clustered by county.

*p<0.05; **p<0.01; ***p<0.001

Table 14: Effects of New Newspaper Ownership on Turnout in Local Elections 2004-2020

	City Elections		County Elections	
	City Council	Mayor	County Council	Sheriff
New Owner	-0.015 (0.009)	0.005 (0.016)	-0.003 (0.007)	0.025 (0.021)
New Investment Owner	-0.004 (0.012)	-0.044* (0.020)	-0.002 (0.008)	-0.042 (0.026)
Year FE	Yes	Yes	Yes	Yes
City FE	Yes	Yes	No	No
County FE	No	No	Yes	Yes
District FE	Yes	No	Yes	No
Outcome Mean	0.121	0.177	0.122	0.319
Observations	11222	2403	3910	1694

Note: This table shows the effects of a newspaper ownership change on voter turnout in local elections. Standard errors are in parentheses below the estimates. Standard errors are clustered by city or county.

*p<0.05; **p<0.01; ***p<0.001; ·p<0.1

Table 15: Newspaper Ownership Changes and Incumbent Chances of Victory in City Elections 2004-2020

	City Council	Mayor
New Owner	-0.028 (0.049)	-0.450* (0.180)
Investment Owner	0.041 (0.069)	0.501* (0.216)
Year FE	Yes	Yes
City FE	Yes	Yes
Outcome Mean	0.82	0.80
Observations	2750	335

Note: This table shows the effects of a newspaper ownership change on incumbent chances of victory in city elections. Standard errors are clustered by city.

***p<0.001; **p<0.01; *p<0.05; ·p<0.1

Appendix C: Article Content Event Study

Figures 5-6 shows the differences-in-difference event study on the share of state political content and sports. The event study shows the point estimates and confidence intervals of the regression in each time period before and after an a purchase by an investment-owner. The reference year is the year before the deal.

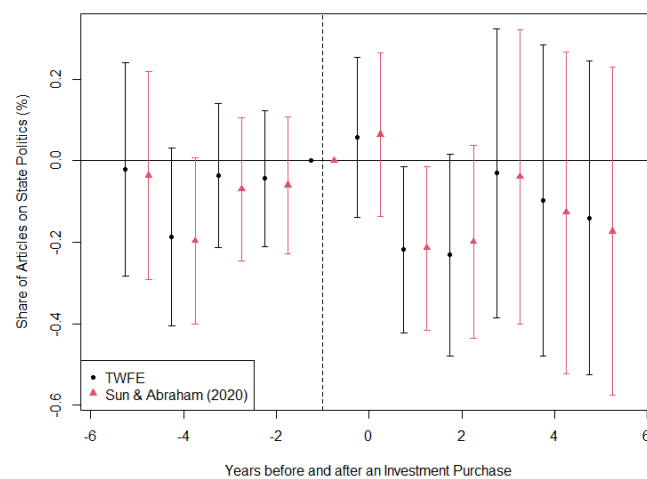


Figure 5: Event Study of Investment Ownership on Share of Articles by Topic: State Politics

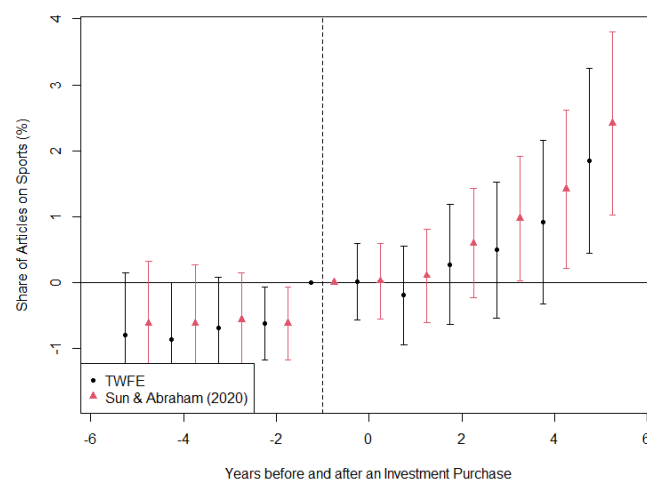


Figure 6: Event Study of Investment Ownership on Share of Articles by Topic: Sports

Appendix D. Newspaper Aquisitions

How have these investment-owners acquired so many newspapers in a short span of time? Table 16 shows the largest transactions by number of newspapers from 2004-2020. Investment-owners are involved in the majority of large transactions, and are typically the buyer. Although investment-owners can and do purchase individual newspapers, targeting distressed private and public chains have allowed investment-owners to rapidly increase their newspaper portfolio.

Table 16: Ownership Changes Involving 5 or more Daily Newspapers

Acquisitions by Investment-Owner				
Old Owner	New Owner	Year	Papers	Purchased
Gannett	GateHouse Media	2019		112
Liberty Group Publishing	GateHouse Media	2006		34
McClatchy	Chatham Asset Management	2020		26
Halifax	GateHouse Media	2015		23
MediaNews Group	Digital First Media	2011		22
Media General	BH Media	2012		15
Journal Register Co.	Digital First Media	2013		15
Brown Publishing Company	Civitas Media	2010		12
Tronc/Tribune	Tribune (Sam Zell)	2008		7
Stephens Media Group	GateHouse Media	2015		7
Morris Communications Company	GateHouse Media	2017		7
Morris Communications Company	GateHouse Media	2007		7
MediaNews Group	GateHouse Media	2015		7
Copley Press Inc	GateHouse Media	2007		7
Schurz Communications Inc	GateHouse Media	2019		6
NewsCorp	GateHouse Media	2013		6
Heartland Publications LLC	Civitas Media	2012		6
Omaha World-Herald Company	BH Media	2011		5
Heartland Publications	Civitas Media	2012		5
Dix Communications	GateHouse Media	2017		5
Acquisitions by Other Owners				
Old Owner	New Owner	Year	Papers	Purchased
BH Media	Lee Enterprises	2020		31
Knight Ridder	McClatchy	2006		15
New York Times Company	Halifax	2012		13
EW Scripps	Gannett	2016		13
Civitas Media	AIM Media	2017		13
Pioneer News Group	Adams Publishing Group	2017		7
American Consolidated Media	Adams Publishing Group	2014		7
Freedom Community Newspapers Inc	Halifax	2012		6
Dow Jones Co	NewsCorp	2007		6
Pulitzer	Lee Enterprises	2005		5
GateHouse Media	Paddock Publications Inc	2016		5
Freedom Communications	AIM Media	2012		5

Appendix E. Ownership changes from 1988-2004 compared to 2004-2020

How new is this large volume of ownership changes? Nearly half of all daily newspaper changed owners during my 16 year period of study. To assess the frequency of ownership changes in the past, I use digitized *Editor and Publisher* Yearbooks from Gentzkow, Shapiro, and Sinkinson (2011). From 1988-2004, the 16 year period prior to the years I study in this paper, I find a total of 701 daily newspapers that experience an ownership change for a total of 967 ownership changes. Interestingly, this is slightly more than the current period, where I find 856 instances of ownership changes among 657 daily newspapers. However, there were approximately 200 more daily newspapers publishing during 1988-2004 when compared to 2004-2020, meaning the proportion of all daily newspapers that change owners is roughly equal during the two periods.

Appendix F. Newspapers fully or near fully available on NewsBank

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Anniston Star	25411	Anniston, AL
Appeal-Democrat	21722	Marysville, CA
Arizona Daily Star	103618	Tucson, AZ
Bulletin The	26583	Norwich, CT
Centre Daily Times	24395	State College, PA
Chronicle The	9491	Willimantic, CT
Chronicle-Tribune	17414	Marion, IN
Cleveland Plain Dealer The	354309	Brooklyn, OH
Courier The	6100	Lincoln, IL
Daily Chronicle	8460	DeKalb, IL
Daily Courier-Observer	4924	Massena, NY

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Daily Democrat The	10089	Woodland, CA
Daily Press	29278	Victorville, CA
Daily Times	21379	Maryville, TN
The Daily Times	22435	Salisbury, MD
Daytona Beach News-Journal The	73664	Daytona Beach, FL
Democrat and Chronicle	114502	Rochester, NY
Durant Daily Democrat	6100	Durant, OK
Englewood Sun	7700	Englewood, FL
Erie Times-News	59454	Erie, PA
Freeman The	14395	Waukesha, WI
Gazette-Mail	45072	Charleston, WV
Globe-Gazette	16177	Mason City, IA
Harlan Daily Enterprise	6600	Harlan, KY
Herald and News	16532	Klamath Falls, OR
Herald Journal	14874	Logan, UT
Herald-Dispatch The	22648	Huntington, WV
Herald-Journal	48798	Spartanburg, SC
Herald-Whig The	18748	Quincy, IL
Intelligencer	41227	Doylestown, PA
Intelligencer Journal/Lancaster New Era	44923	Lancaster, PA
Intelligencer Wheeling News-Register	22263	Wheeling, WV
Jersey Journal The	26667	Secaucus, NJ
Joplin Globe	29674	Joplin, MO
Journal-Advocate	5000	Sterling, CO
Journal Gazette	70000	Fort Wayne, IN
Journal Inquirer	41888	Manchester, CT
Journal Star	68089	Peoria, IL
Kalamazoo Gazette	56706	Kalamazoo, MI
Kane County Chronicle	14753	Geneva, IL
Kansas City Star The	270335	Kansas City, MO
Kerrville Daily Times	10000	Kerrville, TX
LaGrange Daily News	13400	LaGrange, GA
Las Vegas Review-Journal	159507	Las Vegas, NV
Lexington Herald-Leader	114234	Lexington, KY
Lima News	34148	Lima, OH
Lincoln Journal Star	74893	Lincoln, NE

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Lodi News-Sentinel	16553	Lodi, CA
Longview News-Journal	28848	Longview, TX
Los Angeles Daily News	175404	Woodland Hills, CA
Lowell Sun, The	48584	Lowell, MA
Lubbock Avalanche-Journal	52976	Lubbock, TX
Lufkin Daily News	14700	Lufkin, TX
Macon Telegraph The	62228	Macon, GA
Manhattan Mercury, The	9500	Winfield, KS
Marin Independent Journal	40245	San Rafael, CA
Marion Chronicle-Tribune	17414	Marion, IN
Marysville Appeal-Democrat	21722	Marysville, CA
Merced Sun-Star	16878	Merced, CA
Meriden Record-Journal	24296	Meriden, CT
Miami Herald	306943	Doral, FL
Midland Daily News	16439	Midland, MI
Midland Reporter-Telegram	19664	Midland, TX
Milwaukee Journal Sentinel	240581	Milwaukee, WI
Minneapolis Star Tribune	381094	Minneapolis, MN
Mobile Press-Register	94045	Mobile, AL
Modesto Bee	83387	Modesto, CA
Monroe News-Star	33622	Monroe, LA
Monterey County Herald The	33766	Monterey, CA
Morning Sentinel	19970	Waterville, ME
Morning Sun, The	14000	Pittsburg, KS
Morris Herald-News	7148	Morris, IL
Mountain Democrat	12792	Placerville, CA
Muskogee Phoenix	16455	Muskogee, OK
Myrtle Beach Sun News	49462	Myrtle Beach, SC
Napa Valley Register	17851	Napa, CA
Nashua Telegraph	26566	Nashua, NH
New Castle News	17742	New Castle, PA
New Haven Register	92098	New Haven, CT
New York Post	686207	New York, NY
Newark Star-Ledger	400042	Newark, NJ
Newport Daily News The	14300	Newport, RI
Newton Daily News	5476	Newton, IA

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Newton Kansan, The	6000	Columbus, KS
Norwich Bulletin The	26583	Norwich, CT
Observer-Dispatch	43421	Utica, NY
Observer-Reporter	33714	Washington, PA
Ocala Star-Banner	47901	Ocala, FL
Odessa American	24139	Odessa, TX
Olympian	33848	Olympia, WA
Opelika-Auburn News	14924	Opelika, AL
Orange County Register	303418	Santa Ana, CA
Orlando Sentinel	248492	Orlando, FL
Owensboro Messenger-Inquirer	27960	Owensboro, KY
Palm Beach Daily News	6270	Palm Beach, FL
Palm Beach Post	154786	West Palm Beach, FL
Paris News	10400	Paris, TX
Parsons Sun	6600	Parsons, KS
Patriot-News	100129	Mechanicsburg, PA
Peoria Journal Star	68089	Peoria, IL
Philadelphia Daily News	135956	Philadelphia, PA
Philadelphia Inquirer	368883	Philadelphia, PA
Pittsburgh Post-Gazette	238860	Clinton, PA
Plainview Herald	8000	Plainview, TX
Placerville Mountain Democrat	12792	Placerville, CA
Porterville Recorder	9202	Porterville, CA
Portland Oregonian The	337707	Portland, OR
Portland Press Herald/Maine Sunday Telegram	77788	Portland, ME
Progress-Index	13584	Petersburg, VA
Redlands Daily Facts	6948	Redlands, CA
Record Searchlight	30827	Redding, CA
Record-Journal	24296	Meriden, CT
Register-Guard	70794	Eugene, OR
Richmond Times-Dispatch	184950	Richmond, VA
Roanoke Times	98687	Roanoke, VA
Rockford Register Star	64519	Rockford, IL
Rutland Herald	20833	Rutland, VT
Sacramento Bee	293705	Sacramento, CA
Saginaw News	46439	Saginaw, MI

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Salem News	14542	Beverly, MA
Salina Journal, The	27272	Salina, KS
Salt Lake Tribune	118919	Salt Lake City, UT
San Antonio Express-News	226109	San Antonio, TX
San Bernardino Sun The	71934	San Bernardino, CA
San Diego Union-Tribune	328531	San Diego, CA
San Francisco Chronicle	431718	San Francisco, CA
San Gabriel Valley Tribune	47266	Monrovia, CA
San Jose Mercury News	263067	San Jose, CA
San Luis Obispo Tribune	39427	San Luis Obispo, CA
Santa Cruz Sentinel	25305	Scotts Valley, CA
Santa Fe New Mexican	24790	Santa Fe, NM
Santa Maria Times	16562	Santa Maria, CA
Santa Monica Daily Press	19000	Santa Monica, CA
Savannah Morning News	53825	Savannah, GA
Scranton Times-Tribune	59188	Scranton, PA
Seattle Times	231051	Seattle, WA
Seguin Gazette	4800	Seguin, TX
Sentinel	17373	Carlisle, PA
Shamokin News-Item	10569	Shamokin, PA
Shreveport Times	49025	Shreveport, LA
Signal, The	9200	Santa Clarita, CA
Signal The	8000	Santa Clarita, CA
Siskiyou Daily News	6000	Yreka, CA
Southern Illinoisan The	27671	Carbondale, IL
Spartanburg Herald-Journal	48798	Spartanburg, SC
Springfield Republican	85745	Springfield, MA
Springfield State Journal-Register	55334	Springfield, IL
St. Albans Messenger	5200	St. Albans, VT
St. Louis Post-Dispatch	286310	Saint Louis, MO
St. Paul Pioneer Press	191264	Saint Paul, MN
Star-Ledger The	400042	Newark, NJ
StarNews	53571	Wilmington, NC
State Journal-Register The	55334	Springfield, IL
State	115464	Columbia, SC
Sterling Journal-Advocate	5000	Sterling, CO

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Sun Herald	38897	Biloxi, MS
Sun-Gazette	28040	Williamsport, PA
Tacoma News Tribune	127928	Tacoma, WA
Telegraph	26566	Nashua, NH
Telegraph The	62228	Macon, GA
Times Daily	26861	Florence, AL
Times Leader	42585	Wilkes Barre, PA
Times Record News	29825	Wichita Falls, TX
Times The	49025	Shreveport, LA
Times-Tribune	59188	Scranton, PA
Times-News	42913	Hendersonville, NC
Times-News	19506	Burlington, NC
Times-News	21440	Twin Falls, ID
Topeka Capital-Journal, The	50754	Topeka, KS
Tulsa World	141000	Tulsa, OK
Union Democrat	11682	Sonora, CA
Union-Bulletin	15304	Walla Walla, WA
Utica Observer-Dispatch	43421	Utica, NY
Vallejo Times-Herald	20927	Vallejo, CA
Victoria Advocate The	34747	Victoria, TX
Vindicator The	57943	Youngstown, OH
Vincennes Sun-Commercial	10538	Vincennes, IN
Virginian-Pilot The	200055	Norfolk, VA
Waco Tribune-Herald	39520	Waco, TX
Walla Walla Union-Bulletin	15304	Walla Walla, WA
Washington Examiner	101552	Washington, DC
Washington Observer-Reporter	33714	Washington, PA
Watertown Daily Times	31484	Watertown, NY
Waukesha Freeman The	14395	Waukesha, WI
Westerly Sun	8370	Pawcatuck, CT
Wheeling Intelligencer	22263	Wheeling, WV
Whittier Daily News	16964	Monrovia, CA
Wichita Eagle, The	87063	Wichita, KS
Williamsport Sun-Gazette	28040	Williamsport, PA
Willimantic Chronicle The	9491	Willimantic, CT
Winchester Star The	21253	Winchester, VA

Table 17: Newspapers included in Content Sample

Newspaper Name	Circulation	Location
Winston-Salem Journal	84459	Winston-Salem, NC
Wisconsin State Journal	110291	Madison, WI
World	13010	Coos Bay, OR
Wyoming Tribune-Eagle	15564	Cheyenne, WY
Yakima Herald-Republic	38104	Yakima, WA
York Dispatch	34412	York, PA
Youngstown Vindicator The	57943	Youngstown, OH
Yreka Siskiyou Daily News	6000	Yreka, CA

Appendix G: Unique Newspaper Owners

Although this paper is not explicitly about consolidation, it is true that newspaper consolidation has accelerated during the period I study. Figure 7 shows the consolidation of newspaper owners from 2004-2020.

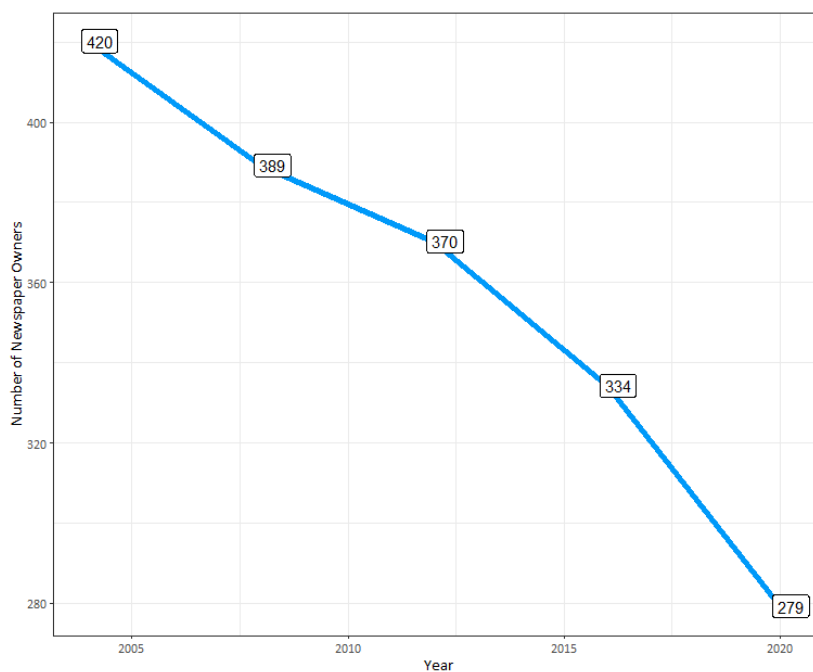


Figure 7: Number of Unique Newspaper Owners in Data