

# Local Journalism under Private Equity Ownership\*

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## Abstract

Local daily newspapers have historically played an important role in U.S. democracy by providing citizens with information about local policy issues. However, in recent decades local newspapers have struggled to compete with new online platforms for readers' attention. Private equity investors—who specialize in reorganizing struggling firms in distressed sectors—have entered the industry. How do these new owners affect newspaper content, survival, and local civic engagement? We document nuanced effects, contrasting with the polarized debate on this topic in the media and political discourse. On one hand, we find that private equity ownership leads to higher digital circulation and lower chances of newspaper exit. On the other hand, we document a change in news composition away from information about local governance, and lower employment of reporters and editors. Finally, we find declines in participation in local elections, consistent with local newspaper content being relevant for civic engagement. The results have implications for knowledge about local policy issues and highlight trade-offs surrounding media ownership.

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# 1 Introduction

Starting with De Tocqueville (1835), a large body of literature argues that local newspapers are crucial to modern representative democracy, because they hold local leaders accountable and increase civic engagement (Snyder and Strömberg, 2010; Gentzkow et al., 2011).<sup>1</sup> Over the past two decades, local newspapers in the U.S. have struggled to compete for attention and advertising dollars with social media and other new sources of content, causing a vicious cycle of declining readership and revenue (Cagé, 2016). These internet sources are known to have lower local governance content (Falck et al., 2014; Gavazza et al., 2019). Voters' knowledge of local policy issues has declined, a trend that is associated with the increasing nationalization of U.S. politics, including the rise in straight-ticket voting based on partisan issues rather than location-specific policy positions (Hopkins, 2018; Moskowitz, 2018).

While much of the prior literature studies the role of shifting consumer preferences in driving these trends, we focus on an important supply-side change: the entry of private equity investors into the local newspaper industry. The share of newspapers owned by private equity funds has increased from about 5% in 2002 to about 23% in 2019 (Figures 1–2). Across the world, newspapers have typically been owned by the state or families; Djankov et al. (2003) document this pattern and present the private benefits of control, including fame and influence, as rationales for concentrated private sector media ownership. Private equity ownership represents the opposite end of a fundamentally different model, in which the main agenda is to quickly increase firm value and maximize profits as opposed to non-pecuniary amenities.

Perceived cost-cutting following newspaper buyouts has received widespread criticism in the news media. In this view, the single-minded pursuit of shareholder returns—which is more high-powered under private equity than other types of ownership—leads to an evisceration of local news, resulting in a loss of local monitoring functions provided by

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<sup>1</sup>Section 1.1 contains an extensive review of this literature. De Tocqueville (1835) wrote that the United States “makes use of an unlimited freedom of political association... Newspapers make associations, and associations make newspapers... Thus, of all countries on earth, it is in America that one finds both the most associations and the most newspapers.”

newspapers and a decline in government accountability (Lewis, 2018; Kuttner and Zenger, 2017; Smith and Chiglinsky, 2020; Shephard, 2018).<sup>2</sup> An alternative perspective is that private equity ownership leads to investments in digital platforms and efficiency gains that enable newspapers to survive and even thrive in a new environment. For example, a press release from the newspaper publishing unit of private equity firm Versa Capital Management explains that “[t]he company achieved significant cost synergies by successfully streamlining operations. It also launched new on-line and mobile platforms and introduced a number of creative revenue initiatives.”<sup>3</sup> In this view, investment in informational technology need not compromise the quality of local news reporting.

This paper studies the impact of private equity ownership on newspaper content, employment, political participation, and other outcomes. We digitize 17 years of Editor & Publisher International Yearbooks of daily newspapers from 2001–2017 and combine them with digital versions through 2019. The data contain basic information on a comprehensive sample of daily newspapers in the U.S. We connect these data to annual information on ownership, employment, and article content. To our knowledge, this is the first data set of newspapers from recent years in the U.S. and is the only one to include several interesting variables such as employment. We hope it will be useful for future research.<sup>4</sup>

Our digitized panel data includes 1,610 unique newspapers, 262 of which have ever been owned by private equity. These newspapers were either purchased in one of 56 deals or were subsequently acquired by a private equity-owned chain. We find that private equity tends to target newspapers that charge higher advertising rates, are members of chains, and that have relatively lower circulation. To assess the effects of buyouts, we use a differences-in-differences model with newspaper and year fixed effects. This estimates the impact of a newspaper switching to private equity ownership, relative to other newspapers in the same

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<sup>2</sup>For example, after private equity-owned GateHouse purchased a newspaper, an editor was quoted as saying: “I’m sweating bullets hoping some bean counter doesn’t say we’ve got to get another 17% profit out of this. How much more can these people cut? It becomes harder to do the right thing—to cover the city council meetings and find out what really did happen—when you had five people in the newsroom and now you’re down to two” (Kuttner and Zenger, 2017).

<sup>3</sup><https://www.businesswire.com/news/home/20141009006229/en/Civitas-Media-CEO-Announces-Stepping>.

<sup>4</sup>The authors will post the complete data for public use.

year. We also present dynamic leave-one-out differences-in-differences event study plots, which tests for pre-trends and describe the immediacy of any effects.

The results paint a more nuanced picture than the extreme views that characterize the public policy debate. First, we consider local policy reporting, which has important public good dimensions and for which there are no obvious substitutes. If local content production is relatively more expensive – for example, requiring more journalists and local office space – and private equity firms seek to quickly improve profitability, we expect a newly private equity-owned newspaper to shift away from local content production. Consistent with this prediction, the share of articles in a newspaper concerning local governance, which includes words such as “city council,” “zoning,” and “state legislature”, declines following private equity buyouts by 3.6 percentage points, which is 10.8% of the mean.

Instead of local news, private equity firms may produce more national news content, which can be syndicated across many different papers. Indeed, we observe an increase in the share of articles on national government topics (which includes words such as “Obama,” “Bush,” and “White House”) of 1.3 percentage points (8.3% of the mean). These results indicate a change in focus towards national news—which is more centrally produced and cross-syndicated to many newspapers within the same ownership structure—and away from local news. They do not reflect more overall articles; to the contrary, we find that the total number of articles declines. Thus, while the industry overall has been in a period of structural change, there appears to be an effect of private equity buyouts on the composition of news.

The most obvious rationale for these changes is cost savings. There is a fixed cost to producing new reporting, but once an article exists it can be disseminated through additional newspapers at a very low marginal cost. Under this hypothesis, we expect to observe a decline in employees at local newspapers, particularly reporters. Indeed, we find that the total number of employees declines by 6.9%. We observe similar magnitudes in the decline of employees who we can classify as reporters, and even larger declines in the number of editors (8.6%). By contrast, the number of interns and freelancers—who represent lower paid, casual labor—remains unchanged.

We consider several additional operational outcomes. First, private equity buyouts are associated with print circulation declines, but large increases in digital circulation. The digitization result should be interpreted with some caution as we are only able to observe digital circulation for a small portion of the sample. However, it offers suggestive evidence that private equity-owned newspapers invest in digital technologies, which increase digital access to newspaper content. Third, we find significant decreases in newspaper closure rates, suggesting that, at least within the span of our data, private equity owners do not quickly shut down firms after extracting rents. Taken together, these results suggest that private equity ownership is associated with managerial changes which raise digital circulation partially at the expense of print circulation while also improving survival prospects. Higher survival rates for private equity-owned newspapers are also suggestive evidence—though not conclusive—that our results are not solely driven by private equity owners targeting declining newspapers.

Our final analysis looked for real civic engagement effects that stem from less information about local government. Local newspaper reporting often spills over beyond the paper's readership, because local TV and especially social media rely on it as a source of information about local government issues.<sup>5</sup> It does not appear that as of yet internet sources, especially social media, offer a serious substitute for the traditional local issue coverage of newspapers. Instead, the emerging literature on the role of the internet and social media in politics suggests that these sources rely on newspapers for source material while also contributing to the nationalization and segregation of news consumption (see Section 1.1). Therefore, changes to newspaper content can affect public knowledge far beyond the newspaper's readership.

We show that total votes and turnout (i.e., votes as a share of the population) decline in elections of county commissions and councils. These bodies oversee county governments,

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<sup>5</sup>Such information spillovers have implications for revenue; for example Ardia et al. (2020) note that “[t]he platforms are able to mediate the relationship between news consumer and news producer, forcing news outlets to use platform-based services to reach their audience and collecting the profits from advertisers. Consumers increasingly rely on social media as their source for news, enhancing revenue for platforms at the expense of news providers who are losing advertising income while they still bear the cost of reporting the news.” Also see Shearer and Mitchell (2021) and Martin (2018).

which are responsible for local taxation, infrastructure, and judiciaries. After private equity buyouts, turnout declined by 0.82 percentage points, relative to a mean of 9%. We also observe declines for mayoral and sheriff elections, albeit with weaker statistical significance as the data are sparser. Finally, using survey data we find that private equity buyouts increase the fraction of people who have no opinion about their U.S. House Representative by two percentage points (relative to a mean of 18%), while having no effect on opinions about the U.S. President. These results suggest lower participation in local democracy after private equity buyouts, which raises concerns about deteriorating local news coverage reducing local government accountability.

The changes that emerge after private equity buyouts raise the question of whether other organizational forms have similar effects. We comprehensively classify each newspaper-year as having one of seven ownership types. All other ownership types—including that of other financial firms such as pension funds—correlate with more local governance content. Family-owned and, to a lesser degree, independent newspapers are causally associated with more local governance content. These ownership types, as well as private chains that are not family-owned, also retain more employees. Finally, we show that the effects of private equity are independent of consolidation effects, which Fan (2013) finds to be relevant in the newspaper market.

This paper offers the first academic study of private equity in a distressed industry. Industry observers often describe private equity as finding opportunities for returns in distressed sectors; for example, the co-heads of Apollo Global Management’s private equity business noted in a call with investors that opportunities to purchase distressed assets during the COVID-19 pandemic presented a “time to shine” for the firm.<sup>6</sup> One view of private equity’s approach to distressed industries focuses on financial engineering, in particular the strategy of placing high leverage on the company’s balance sheet. In this case, we might observe no operational changes. An alternative view is that operational changes increase efficiency, perhaps reorienting an unprofitable or declining business towards higher profitability. This perspective is supported by evidence that, in more stable

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<sup>6</sup>[Bloomberg article on Apollo.](#)

industries, private equity managers take an active role in operations to improve efficiency and create value. Our results are consistent with this more active operational view of private equity ownership.

Indeed, we find significant operational changes following private equity buyouts of newspapers. Overall, these changes appear to have ambiguous social welfare consequences. The bright side is that private equity ownership leads to higher newspaper survival rates and more digital content, consistent with investing to help to turn around and modernize a struggling industry. A downside is that civic engagement appears to decline because readers of newspapers and the outlets that rely on their reporting have less information about local government. The high-powered incentives to maximize profits that accompany private equity ownership may be poorly aligned with the public good characteristics and implicit contracts involved in reporting about local government.

## 1.1 Literature Review

In this section, we discuss three research areas that we build on and which provide important assumptions for our analysis: (1) How media exposure relates to political outcomes; (2) Whether social media substitutes for traditional news; and (3) The effects of private equity on consumers and other stakeholders.

**Media and Politics.** The first strand of literature documents that local governance content in newspapers affects voter turnout, voter decisions, and ultimately government policy. Perhaps most relevant, Gentzkow (2006) shows that the decline in voter turnout in the second half of the 20<sup>th</sup> century is linked to the substitution of newspapers and radio by television, which conveyed less political knowledge. Furthermore, Gentzkow et al. (2011) show that when a newspaper initially enters a market there is a large positive effect on political participation. While the effect of newspapers on Presidential turnout has declined in recent years, the effect on Congressional elections persists until the end of their sample in 2004. Also in this vein, Snyder and Strömberg (2010) show that when local newspapers reduce coverage of a U.S. House representative, the Congressman is less likely to work for

the constituency in Congress, is less likely to vote against the party line, and his district receives less federal spending.

From the political science literature, Hayes and Lawless (2015) and Hayes and Lawless (2018) show that less local media coverage of local issues and elections are associated with less civic engagement and noncompetitive U.S. House of Representatives elections. Filla and Johnson (2010) find that people with access to a daily local newspaper are more likely to vote regularly, and Darr et al. (2018) find that elections are less competitive in counties that have lost a local newspaper. Further evidence that newspaper and radio content affect policy includes Strömberg (2004), Dyck et al. (2008), Ferraz and Finan (2008), Drago et al. (2014), and Barthel et al. (2016).

Gao et al. (2019) find that local newspaper closures negatively affect long-run municipal borrowing costs because there is less information available about the quality of local government. In addition to studying different and broader outcomes, we focus on the changing composition of local news among operational newspapers rather than on the extensive margin of newspaper failure. This distinction is important because over 80% of newspapers survive over our sample period, despite the stresses in the industry (Table 1), while large fractions of surviving newspapers experience private equity ownership (21%, see Figure 1).

There is also evidence that information in the media is closely related to partisanship. For example, DellaVigna and Kaplan (2007) find that the entry of Fox News in U.S. localities increased the Republican presidential vote share. Gerber et al. (2009) show that exposure to more newspaper media in Virginia increased voting for Democrats, even when the newspaper slant was Republican.<sup>7</sup> Our finding that there is less local and more national content in newspapers after private equity buyouts is related to the overall trend of nationalization in U.S. politics; in recent decades, state and local election outcomes are

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<sup>7</sup>Outside the U.S., there is also interesting work on this topic. Using the staggered introduction in Italy of Berlusconi's private TV network, Durante et al. (2019) show that exposure to Berlusconi's network increased viewers propensity to vote for his party, in part because the content made viewers less civic-minded. Oberholzer-Gee and Waldfogel (2009) find that availability of local television news in Spanish increases Hispanic turnout. Enikolopov et al. (2011) demonstrate that an independent anti-Putin broadcaster in Russia reduced voting for the Putin government party substantially. DellaVigna et al. (2014) provide evidence that exposure to nationalistic content in a rival ethnic group's media increased ethnic hatred in the Balkans.



increasingly correlated to national election outcomes because fewer people vote for different parties in local (e.g., House) elections than in the Presidential election (Jacobson, 2015; Abramowitz and Webster, 2016; Hopkins, 2018). Martin and McCrain (2019) argue that this is related to conglomerate ownership of local television stations, which has been associated with a strong rightward shift in coverage. Moskowitz (2018) connects these trends to local news coverage. He shows that when voters have less exposure to news about local candidates' policies and performance, they are more likely to submit a "straight-ticket" ballot, in which national and more partisan issues are applied to local elections, even though the policies at stake—such as local infrastructure projects or school programs—have little to do with the national, partisan issues.

Our research also connects with work on media markets. For example, Angelucci et al. (2020) study the entry of national television news in 20<sup>th</sup> century America, and finds that there was a negative shock for local newspapers, leading to a decline in original reporting and, crucially, local news. Related to our main hypothesis that owner profit motives are related to news content, Gurun and Butler (2012) find that because newspapers rely on local firms for advertising revenue, they cover them more positively than non-local firms. Fan (2013) builds a structural model of newspaper markets at the county-year level, which he uses to estimate the effect of a merger within a media market with data from 1997–2005. Our research question concerns the type of newspaper ownership, and our results do not reflect within-media market mergers. Other work on media competition includes Groseclose and Milyo (2005), Gentzkow et al. (2014), Puglisi and Snyder (2015), Gentzkow and Shapiro (2010), and Cagé (2020). Finally, there has been analysis of the rise of billionaire control of newspaper outlets (Durante et al., 2019; Grossman et al., 2020).

In sum, this body of work provides strong evidence that newspapers have been essential – especially in the U.S. – for maintaining citizen engagement and policymaker accountability. This supports the connection that we draw between declining local governance content in newspapers and reduced voter turnout in local elections.

**Social Media.** A growing literature indicates that internet sources of news, especially social media, do not offer meaningful substitutes for the traditional local issue coverage

found in newspapers. For example, Levy (2020) shows that Facebook algorithms limit exposure to counter-attitudinal news, and thereby increase polarization. There is also evidence that social media increases the prevalence of fake news about politics (Vosoughi et al., 2018). In particular, Allcott and Gentzkow (2017) show that Facebook is four times more likely to be visited immediately before a visit to a fake news website than before a visit to a real news website.

Similar to the findings of Gentzkow (2006), Falck et al. (2014) document that internet availability has negative effects on voter turnout, which they attributed to reduced information via television. Gavazza et al. (2019) also demonstrated that in the U.K., more time spent on the internet decreased voter turnout by crowding out consumption of media with more news content, especially newspapers. While there is evidence that people who deactivate their Facebook accounts have less knowledge about national politics (Allcott et al., 2020), and research on non-democratic countries finds that social media penetration increases political protests (Qin et al., 2019; Enikolopov et al., 2020), in Western countries research indicates that under certain circumstances, access to broadband internet or social media increase nationalism, hate crimes, and political polarization (Bakshy et al., 2015; Sunstein, 2018; Schaub and Morisi, 2019; Bursztyn et al., 2019; Müller and Schwarz, 2019). For example, Lelkes et al. (2017) show that in the U.S. in the 2000s, access to broadband internet increased partisan hostility.

We conclude based on this literature that internet- or social media-based news does not thus far offer objective information about sub-national policy issues in democratic countries and therefore is unlikely to provide an unbiased, full substitute for a decline in local government content at local newspapers. Conversely, growing evidence suggests that these sources increase nationalization of news content and polarization. This leads us to argue in our analysis that less local government content in local newspapers implies less information available to citizens.

**Private Equity.** This paper also contributes to analysis of private equity's impact on product quality, labor, and other stakeholder outcomes. It is well-known that private equity ownership is associated with exceptionally high-powered incentives to maximize firm value

(Kaplan and Stromberg, 2009; Boucly et al., 2011). These incentives do not necessarily imply operational changes if, for example, managers rely on leverage and tax strategies to generate returns (Axelson et al., 2013). Alternatively, managers may be particularly good at screening, and choose targets that are on trajectories toward better outcomes (Guo et al., 2011; Acharya et al., 2013).

However, there is now a large body of evidence that private equity managers actively intervene in portfolio company management. This work has found largely positive implications for product quality, employees, and consumers (Davis et al., 2014; Agrawal and Tambe, 2016; Bernstein and Sheen, 2016; Davis et al., 2019; Fracassi et al., 2020). We also observe active intervention in operations. Our findings that reporter employment and local news content decline are consistent with more nuanced effects of private equity in sectors characterized by public good provision. In the context of education and healthcare, which are characterized by both public goods provisions as well as intensive government subsidy, Eaton, Howell and Yannelis (2019) and Gupta et al. (2020) found negative effects on student and patient outcomes, respectively, after private equity buyouts. Turkel et al. (2021) also examines the impact of financial investors on newspaper investigative journalism, but finds little impact, as part of a broader analysis of newspaper textual content. We differ by providing a much larger and more systematic analysis of that question, and find more substantial evidence for the impact of private equity buyouts.

Finally, there is a literature related to high-powered incentive compensation, which is important for the key mechanism underlying our focus on ownership type: high-powered incentives impact product outcomes. A traditional view of convex compensation schemes—corresponding to the option-like profits for private equity fund managers—is that they should lead to greater risk-taking (Grinblatt and Titman, 1989; Jensen and Meckling, 1976; Palomino and Prat, 2003). In our context, we might observe more highly successful newspaper chains under private equity ownership, but also more failures and shut-downs. In contrast, we observed that the probability of closure declines. Carpenter (2000) presents a theory consistent with these results, showing that when a manager is paid with an option he cannot hedge, the option compensation does not lead to more risk

seeking, especially when the evaluation date is far away. This is in part because leverage magnifies the manager's exposure to the asset volatility.<sup>8</sup>

In sum, this paper offers to our knowledge the first evidence of private equity's effect in media. Our conclusions support the view that even in a distressed industry, changes wrought by private equity extend beyond financial engineering to operational engineering. Our findings are more nuanced than previous work, suggesting that – contrary to media reports – there are fewer closures after buyouts but there are also problematic declines in reporter employment and local government news content.

## **2 Data and Descriptive Statistics**

We use three primary data sources in this paper. In this section, we discuss each data source in turn and outline how we constructed a dataset for analysis. First, we use Editor & Publisher International Yearbooks data on newspapers (Section 2.1) supplemented with newspaper audit data from the Alliance for Audited Media. Second, we collect PitchBook data on private equity deals (Section 2.2). Third, we use NewsLibrary data on article content (Section 2.3). Fourth, we acquire employment data from LinkedIn (Section 2.4). Finally, we use multiple sources of data on political participation (Section 2.5). Descriptive statistics and a targeting analysis are presented in Section 2.6.

### **2.1 Editor & Publisher Data**

We digitize 17 years of Editor & Publisher (E&P) International Yearbooks of daily newspapers from 2001–2017, which contain basic information on essentially every daily newspaper in the U.S.<sup>9</sup> E&P data are traditionally used primarily by advertisers, and for this reason have audited circulation coverage. By circulation we generally refer to print circulation unless we specify digital circulation instead. We combine these digitized

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<sup>8</sup>Also see Goetzmann et al. (2003) and Kouwenberg and Ziemba (2007).

<sup>9</sup>E&P also tracks weekly newspapers, but we focus on dailies as they are more likely providing consistent, up-to-date local news coverage. For this reason, we also drop USA Today and the Wall Street Journal from our sample.

records with a digital version of the data in 2018 and 2019 provided by E&P. The resulting dataset includes 1,610 unique newspapers.

An example of the structure of these books is in Appendix Figure A.1. The variables we obtained from E&P are newspaper name, parent (or “group”) name, circulation, and advertising rates. Circulation refers only to print subscriptions. We supplemented the E&P circulation data with information provided by the Alliance of Audited Media. Their database tracks both print and digital media subscriptions, while also providing geographic coverage of the former. Advertising rates are calculated as the dollars charged per open inch, which is the price that a new advertiser, who does not have existing discounts, would be charged for one square inch.<sup>10</sup> During the computer reading of the images, some text proved to be unreadable, and despite a great deal of manual cleaning, there are missing newspaper-years for some variables. This is one reason for different sample sizes for variables from E&P.

The group names in E&P do not always reveal ultimate newspaper ownership structure and in turn, ownership type. In some cases, a local newspaper is assigned to a group that is itself owned by a parent group. To address this issue, we supplement the list of group-year data with an index of newspaper groups from the appendix of some of the E&P yearbooks, which contain indices listing parent group, subsidiaries, and newspapers. These data provide information on full ownership structure and help to fill in the gaps from the machine-reading of the PDFs. Next, E&P also has lags in its tracking of ownership changes. For all instances of group name changes, we hand-checked the ownership change and searched for exact dates of such changes. This step is crucial for the non-private equity ownership changes because there is no commercial data provider, like PitchBook, tracking buyouts or mergers of newspaper companies.

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<sup>10</sup>We do not use data on price for two reasons. First, it is not recorded consistently in the E&P data, for example with some newspapers having only monthly data and others daily. Second, there is widespread tiered pricing and discounts, with some newspapers having many price levels depending on the nature of the subscription. Therefore, it is impossible to obtain a consistent price measure even if we observed all the price levels, because we do not observe the distribution of prices across subscribers.

## 2.2 Private Equity Deal and Other Ownership Data

Our primary source of data on private equity transactions is a proprietary list of deals compiled by PitchBook Inc., a leading market intelligence firm. To create the list, we search PitchBook for all U.S.-based newspaper or media acquisitions through 2019 that involved a private equity sponsor. We merge the targets of these deals, which are typically parent companies, to the E&P newspaper data using the group or ultimate parent name, and in some cases merged by hand. In sum, we identify 56 deals in which 168 unique newspapers were acquired. The now private equity-owned chains subsequently acquired an additional 94 newspapers. Therefore, we observe a total of 262 newspapers under private equity ownership at some point during our sampling period from 2001–2019.<sup>11</sup>

We supplement the PitchBook data with manual identification of owner type for each newspaper-year in our data. This process involved hand-checking the ownership type and historical ownership changes of each newspaper. We assign newspapers to one of the following mutually exclusive categories: family, independent, non-profit, hedge fund, other financial firm, partnership, pension fund, private chain, private equity, and public company. The family status takes precedence over other ownership types; that is, if a chain is family-owned, we call it family-owned and not part of a private chain. Independent newspapers have standalone (i.e., non-chain) ownership and are not family-owned.

We do not treat hedge funds as private equity as they have a different incentive structure, including long-term holding periods. We also do not consider them on their own as there is only one hedge fund in the data: Alden Capital, primarily through its ownership of MediaNews Group. Further, hedge funds differ from private equity in the open-ended nature of their investment horizon period, which does not result in the same incentives for short-term profit seeking. Prior literature on the impact of hedge fund interventions on corporate value emphasize resulting operational improvements in labor productivity and innovation, including Brav et al. (2018) and Brav et al. (2015). We observe similar results when combining private equity and hedge fund owned newspapers.

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<sup>11</sup>The 2019 data on private equity deals is only used for the first two figures in the paper. Other information for that year is a work-in-progress.

## 2.3 NewsLibrary Data

We obtain data on textual frequency of local news content using the NewsLibrary dataset, as in Gentzkow and Shapiro (2010). We can identify 745 of our 1,610 unique newspapers in the NewsLibrary data, which represents 44.5% of total U.S. circulation as of 2018. We are interested in the share and quantity of articles in a newspaper that are concerned with certain types of content, in particular local policy and especially governance content. As explained in Section 1.1, this type of coverage is strongly associated with higher civic engagement, and a more robust democracy. All the word choices used are based on manual coding of a random subset of articles.

Our first set of words concerns local government, which we term Local Policy - Government. These articles include any of the following words: city council, city hall, mayor, state senate, state legislature, zoning or planning board. Our second category, Local Policy - School, include the words: board of education, school board or school district. Next, we consider obituaries, which in local newspapers predominantly concern the deaths of local citizens and thus tend to require more local employee time. We identify obituaries as articles including any of the following words: died, finally at peace, or passed away.

We then examine articles concerning topics that may be associated with synergies and cost savings across newspapers, because they do not have local content. First, as a proxy for international news coverage, we locate articles including either of the words China or Russia. Second, we identify articles on national politics as those with any of the following words: Bush, Congress, Obama, Trump, White House, Democrat, Republican. Finally, we assess syndication using articles from the Associated Press wire service. While there are other wire services, the Associated Press is the most easily observable in the content data and not conflated with other topics that might have the same name as the wire service. We use automated scripts to assess the frequency of words associated with these categories of news.<sup>12</sup>

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<sup>12</sup>We restrict analysis of all news content variables to newspapers that have at least 300 articles.

## 2.4 LinkedIn Data

To augment our sample with employment information, we use scraped LinkedIn data.<sup>13</sup> The data include information on over 300 million individuals with public LinkedIn profiles as of May 2017. Crucially for our purposes, LinkedIn profiles contain detailed work histories, and so capture extended data prior to the study period for individuals with public profiles. We can identify 766 of our 1,610 unique newspapers in the LinkedIn data with at least one reporter.

We extract job titles from the LinkedIn data for all individuals identifying themselves as employed at the newspaper as of a given year. This allows us to identify the number of people with certain job titles on a panel basis for each newspaper. We first consider all employees. Next, we create a “Reporters” variable which includes all people with the word reporter or journalist in their job title. We also identify “Editors” as people with the word Editor in their job title, and finally “Interns and Freelancers” as people with either of those words in their job titles.

## 2.5 Politics Data

To investigate changes in political participation at local levels, we use two sources of data. The first is county-level election data, which we acquire from the Local Elections in America Project (LEAP) at Rice University. This has been used in the political science literature, for example in de Benedictis-Kessner and Warshaw (2020). We consider vote totals in three types of local elections. First and most important are county legislative elections. These units of government, including county commissions and councils, collectively bear oversight of local county governments including local government, local taxes, and other local administrative services including infrastructure and judicial functions. Elections to these offices, as a result, are likely to be very local races for which we expect local news commentary to be most important.

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<sup>13</sup>Legal precedent in *hiQ Labs v. LinkedIn* protects the rights of academics and other third-parties to use scraped data from publicly available LinkedIn profiles.



Secondly, we examined mayoral elections. While these are sparser and do not always map to a newspaper area, they are an important election for city governments. Thirdly, we considered sheriff elections, which are even sparser. We converted voting totals to turnout percentages using county-year population data from the U.S. Census Bureau. The election data exist only for a subset of newspaper years, both because elections do not happen every year and because not every county has election data reported in the LEAP files.

As an alternative source of real political outcomes, we examine survey responses from the Cooperative Congressional Election Study (CCES) across the 2006—2019 waves. CCES is a national survey administered by YouGov, with over 50,000 individuals surveyed annually, using a stratified sample procedure. We focus on variables related to news interest and whether an individual has any opinion about their elected representatives. For these variables, we develop a treatment measure of whether there are any private equity-owned papers in the county-year.

## **2.6 Descriptive Statistics and Targeting**

This section summarizes the data, and reports the characteristics of newspapers that robustly predict buyouts. Statistics on the outcome variables employed in this analysis are shown in Table 1. The top two sets concern the share and number of articles in a given newspaper-year that cover particular content areas, as defined in Section 2.3. The next set contains data on employment from LinkedIn. The next set contains the LinkedIn-based variables. The following two sets report variables from E&P, with the maximum number of newspaper-years in the bottom set. Specifically, we observe print circulation and advertising rates, both of which have large standard deviations. As can be seen in the example in Appendix Figure A.1, some newspapers charge only a few dollars per open inch, while others charge hundreds of dollars. Finally, the last set contains election data, which exists only for a subset of newspaper-years as mentioned previously. These variables are summarized in levels, but we usually consider log transformations in analysis.<sup>14</sup> The table indicates that private equity-

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<sup>14</sup>Note that the data samples differ for the first three sets of variables, as only a subset of newspapers match to each external source, as explained previously. With E&P, we could not parse circulation and advertising for

owned newspapers are on average smaller than other types of newspapers, with about 60% of the total number of articles, 69% of the employees, and 82% of the circulation.

We begin by documenting the rise of private equity ownership in the newspaper industry. In Figure 1 we show the share of newspapers and the total number of newspapers owned by private equity firms each year. While there is both entry and exit, on average private equity ownership increased from just under 5% in 2002 to 21% in 2019. We place this increase into the broader industry context in Figure 2 Panel A. This figure documents industry ownership dynamics by charting the number of newspapers owned under each of the major categories in each year. As there are very few partnerships and non-profits, we grouped these together with the unknown ownership category. We combined pension funds, the single hedge fund, and other financial firms into a single category called “Other Financial Firms.” A clear trend is the marked decline in the share of newspapers that are part of private chains. Inspecting the data, we find that many of the transitions to private equity, hedge fund, or public company ownership are from private chain status.

The figure yields two other noteworthy insights. First, while the total number of newspapers was roughly constant around 1,500 until 2012, subsequently we see a steady decline. Second, the share of family-owned and independent newspapers has been, perhaps surprisingly, constant over time with the latter even increasing slightly. The increase in independent newspapers seems to stem from cases in which a chain of two to three newspapers breaks apart, either because one of the newspapers are purchased by a larger company, for example a publicly listed entity such as the McClatchy Company, or because one closes, leaving a single standalone newspaper.

Figure 2 Panel B provides basic information about the major ownership types with three means calculated across all newspaper-years: the share of total newspaper-years, the share of content that concerns local policy, and the number of reporters per ten articles (excluding individuals who identify themselves as interns). Private equity is characterized, on average, by the lowest share of articles on local policy, at 32%. The highest share is for

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all newspaper-years. All variables that are unbounded above (including the total number of articles, employee counts, circulation, and total votes) are winsorized at 2.5% level on both sides, which is a restriction we make throughout the paper.

other financial-owned newspapers (e.g., by pension funds), at 46%. Interestingly, the number of reporters per ten articles published, which is related to the degree of syndication, centralization, and investigative effort, is highest among newspapers owned by private chains, at nearly 30%. As we will subsequently explore, there does not seem to be a clear relationship between greater separation of ownership and control on scale and newspaper outcomes. What is clear is that private equity-owned newspapers have far fewer reporters per ten articles, at just 2%. The next-lowest is publicly listed companies. Of course, there are many possible structural reasons for these differences. Notably, private equity ownership tends to occur later in the study period, after newspaper revenue and attention share had in general declined substantially. This highlights the need for a within-newspaper comparison that also controls for the year.

### **2.6.1 Predictors of Private Equity Ownership**

What predicts a newspaper's ownership change to private equity? One hypothesis is that private equity firms purchase struggling papers. Alternatively, these investors may seek out newspaper groups that have the assets or sales to support changes in capital structure. In Table 2 we consider predictors of private equity ownership. The dependent variable is a binary indicator that equals one if a newspaper-year switches to private equity ownership in that year. For this analysis, we then stop tracking the paper after that year. Column 1 includes covariates but no fixed effects. Columns 2–7 introduce fixed effects and additional controls.

Across most specifications, we find that the transition to private equity ownership is correlated with the newspaper previously having relatively low circulation and high advertising rates. The lower circulation is consistent with private equity firms targeting distressed newspapers. A challenge to this interpretation is that circulation audits might be more likely to occur around buyout years, which would result in less stale circulation measurements. Nonetheless, the relationship persists when controlling for whether an audit occurred in the previous year, and when including only observations with circulation that is not stale, meaning that it changed from the previous year (column 5).

Relative to the excluded category of “Other financial firms,” private equity firms target newspapers owned by all other ownership forms. They are most likely to target newspapers owned by publicly traded companies, private chains, and families. Independent newspapers are less likely to transition to subsequent private equity ownership. These patterns are understandable in the context of a generally distressed industry. Both public and private chains faced considerable challenges in managing groups of struggling newspapers, and private equity is a natural buyer in such cases. Many family-owned chains faced succession issues with ownership within families, as in other industries.

### 3 Empirical Strategy

For each outcome, we present two differences-in-differences regression estimates: one that compares the post-buyout period to the pre-buyout period, and one that estimates the dynamic effect for each year around the buyout. Both approaches include newspaper and year as fixed effects. In other words, we compare newspapers after vs. before private equity ownership to other newspapers that never come under private equity ownership, while allowing for an average effect on the whole industry of being in each year. The first regression model is:

$$y_{it} = \alpha_i + \alpha_t + \beta PE_{it} + \varepsilon_{it} \quad (1)$$

Here,  $y_{it}$  represents an outcome such as the log number of reporters.  $\alpha_i$  and  $\alpha_t$  are two vectors of fixed effects controlling for the average of the particular newspaper and year respectively. The coefficient of interest  $\beta$  represents the effect of being private equity-owned. We cluster standard errors by newspaper.

The dynamic differences-in-differences specification in Equation 2 follows a standard event-study design as in Aitor (2003) and Almond et al. (2011). This second approach separately estimates coefficients for each year around the buyout using the following equation:

$$y_{it} = \sum_{s=-19}^{t=19} \beta_s \mathbf{1}\{t = s\} + \alpha_i + \alpha_t + \varepsilon_{it} \quad (2)$$

We fully saturate the model to account for all years before and after the deal date. The omitted category is  $\mathbf{1}\{t = -1\}$ , reflecting the year prior to deal. All other aspects of the equation are as defined previously. We show the results graphically by plotting the coefficients  $\beta_t$  for the years immediately around the buyout. In a robustness test, we also show the raw means of key outcome variables for target newspapers in the years around the buyout.

## 4 Results

We focus first on private equity ownership in Section 4.1, then compare the major ownership types to one another (Section 4.2). Robustness tests are presented in Section 4.3.

### 4.1 Effects of private equity ownership

**News Content.** Our main outcome of interest is news content, in particular the share of articles regarding local policy issues. Table 3 uses Equation 1 to assess the effect of buyouts on the share (Panel A) and the number (Panel B) of a newspaper's articles that cover a specific topic. The share measure informs on the allocation of reader's attention within the newspaper across content types. We find a significant negative effect of private equity buyouts on the share of articles concerning local government policy. Specifically, these decline by 3.6 percentage points, or 10.8% of the mean. We also observe a negative effect coefficient for obituaries albeit not for school policy. This could reflect substantial demand among readers for information about local schools, where the importance of knowledge may be more salient, especially for parents. We see an increase in the share of articles about national politics of 1.3 percentage points or 8.3% of the mean.

The event study differences-in-differences results are reported in Figure A.2. Consistent with an assumption of valid identification, pre-trends in local content variables are minimal and never significant prior to the deal. By contrast, the coefficients for local content (local government and obituaries) drop discontinuously in the years immediately following the deal year (Panels A and C), while there are upward trends after the deal year for both national

and international politics (Panels D and E). The event study implies that the effects we observe in Table 3 are unlikely to be driven by pre-existing trends in local content shifting, and instead can be causally attributed to changes to private equity operations beginning in the years after the deal.<sup>15</sup>

We confirm that these results do not reflect an overall increase in articles on any of these topics in Table 3 Panel B. The total number of articles decreases, reflecting large declines in all our measures of local policy, including a 23% decline in the number of articles pertaining to local government (column 2). Here and below, we report the exponentiated coefficients when the outcome is logged. We observe negative but smaller and insignificant coefficients for international and national politics news (columns 5–6). These changes in article content are consistent with cost-cutting measures by private equity firms, which change the total number articles, and disproportionately cut articles which are more expensive to produce (i.e., local journalism) while shifting content towards more syndicated and national content which is easier to share across newspapers.

**Employment.** We next assess a plausible mechanism which would result in decreases in local news coverage: changes in employment. In Table 4, we consider the log number of employees at the newspaper using the LinkedIn data. We find large and statistically significant decreases in employment at newspapers after buyouts. The overall number of employees declines by 6.9% (column 1), and the number of reporters declines by 6.7% (column 2). The effect, at 8.6%, is higher for editors, who would typically be more highly paid, and statistically significant at the 5% level (column 3). Conversely, we see no effect of private equity buyouts on the number of interns and freelancers, who are typically less costly, as they earn less per hour, do not receive benefits, and do not have long-term contracts. The event study analysis in Figure 4 confirms these effects. The plots reveal a steady and statistically significant decrease in employment in the years after a buyout and minimal (and not significant) pre-trends in the years prior to the buyout.

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<sup>15</sup>We see less stark changes for school coverage (Panel B) as well as for changes in AP Wire services (Panel F). An additional complication, for AP Wire services, is that use of these services is trending down in our sample over time. As a result, control newspapers, included in the –1 years before the deal, push the coefficient on that control year upwards.

The employment effects, combined with the decline in absolute local news coverage, suggest a private equity operational strategy of reducing costs by cutting local reporting staff. The near-zero marginal cost of non-local news dissemination may allow the private equity-owned newspapers to partially make up for the resulting decline in local content with relatively more national and international content that is syndicated from other newspapers.

**Operations.** While less centrally related to our question of local news production, we are also interested in operational outcomes. First, Table 5 Panel A considers variables connected to how the newspaper treats demand curves on its two-sided platform. We find negative effects on the number of print newspaper subscribers. The data include many instances in which circulation is the same from year-to-year, suggesting imputed and possibly stale data. Therefore, we present two models: one with all the data (Panel A column 1), and one restricted to newspaper-years in which circulation changes from year to year, in case the absence of change represents stale data (Panel A column 2). The results indicate declines of 9.8–11.1%. In contrast, in column 3 we see a dramatic increase of 44% in digital circulation.<sup>16</sup> Unfortunately, we do not observe subscriber prices.

The other side of the newspaper's platform consists of advertisers. We see no significant effect on the advertising rate in columns 5–6, though this is imprecisely measured. Here, we use the same approach to address possibly stale data, though it is more likely that menu costs make advertising rates sticky, rather than the circulation is the same year-to-year. The negative effects on both circulation and advertising could potentially point to private equity firms reducing prices for advertisers in an environment of increasing competition with online advertising opportunities, while increasing prices for subscribers. This could increase overall profits if prices rise sufficiently relative to the declines in subscriptions. What is clear from our results is that private equity ownership leads to improvements in digital circulation, consistent with evidence from other sectors that private equity investors make IT investment in their portfolio firms (Agrawal and Tambe, 2016).

We see strong evidence of these circulation shifts in the event study approach, show in

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<sup>16</sup>Note that throughout the paper, where the dependent variable are logged, we exponentiate the coefficients. In this case, we calculate the effect on digital circulation as  $44 = (\exp(0.363) - 1) \times 100$ .

Figure 5. Trends in circulation are generally insignificant prior to the buyout year, especially for digital circulation. By contrast, after the deal year, we observe economically and significant decreases in print subscription paired with extremely large increases in digital subscription. We observe little change in advertising rates in comparison. These results suggest that private equity ownership is associated with shifts in digital strategy which lead to large increases in digital subscription.

We find a second benefit of private equity ownership in the form of reduced closure. Following Gao et al. (2019), we consider the outcomes of the newspaper shutting down entirely, merging and changing the newspaper name, or transitioning to a weekly newspaper. All these outcomes represent major changes in newspaper operation. While the annual rates of closure are small, we find that private equity-owned newspaper are much less likely to close newspapers. The results are reported in Table 5 Panel B. Column 2 shows that within year and state, private equity-owned newspapers are 0.3% less likely to shut down, relative to a mean of 0.4%, implying a 75% reduction relative to the mean. They are also less likely to become a weekly newspaper, shown in column 4. This effect is 60% relative to the mean. In contrast, we find no evidence that private equity ownership leads to a “rolling up” of newspapers into single entities with the same name, shown in column 3.

**Political Outcomes.** The negative effect of private equity ownership on local news content raises the question of whether there are real implications in the form of political participation. We focus on local political races. As de Benedictis-Kessner and Warshaw (2020) explain, local offices are responsible for providing local public goods yet are not very salient elections and, in recent decades, suffer from low turnout. We expect local newspapers to provide area citizens with key information relevant for their political participation. To conduct our analysis, we exploit the geographic boundaries around newspaper coverage areas. Specifically, we assume that county residents are most likely to read their own county’s newspaper for information. This allows us to analyze the impact of private equity ownership on political outcomes at the local county level.

We consider three types of local elections: legislative councils, mayors, and sheriffs. The broadest coverage exists for council elections, and it is here we find the strongest effects,



shown in columns 1–3 of Panel A in Table 6. First, total votes decline by about 3,000 relative to a mean of about 32,000 (9%) when there is a private equity-owned newspaper. The effect is similar, at 12.4%, when we use the log of total votes in column 2. Most important is the third dependent variable, which is turnout measured as the number of votes divided by the county’s population. Here we see a decline of 0.82%, which is 9.4% of the mean. The fully saturated differences-in-differences event studies for these council outcomes are shown in Figure 6. They indicate no pre-trends, consistent with our identifying assumption, but they also contain a considerable amount of noise.

One way to assess whether the results in Table 6 Panel A are spurious is to test whether effects occur in the same direction for different outcomes. The pattern is similar for mayoral elections, where there is less coverage (Table 6 columns 4–6). Total votes declined by 16%, and turnout also appears to decline, though this effect was not significant. In Appendix Table A.4 Panel A, we further consider sheriff elections. Here we have far fewer observations, and the results are not statistically significant. However, the coefficients are negative across all models. For example, in column 1 the nearly-significant coefficient implies a decline of 7% in sheriff election votes.

Finally, in Panel B of Table 6, we consider a different type of real political outcome, information about news interest and political engagement based on survey responses in the Cooperative Congressional Election Study (CCES), across 2006–2019. First, we ask whether private equity buyouts lead to a change in interest in news generally. We find that they do not (column 1), although the coefficient is negative. Next, we ask whether the individual has an opinion about the elected official who represents them in the U.S. House of Representatives. Here we find a strong effect; having a private equity-owned paper in the county increases the chances of “No Opinion” by 2 percentage points, about 11% of the mean. As a control comparison, we consider in columns 3–5 higher levels of government, which are more likely to be independently covered by TV and other news outlets (Senator, Governor, and President). In all cases, there are no effects. Collectively, these results lend some credibility to the results in Table 6 Panel A. This link is also supported by the large body of literature establishing that local newspapers in the U.S. have been measurably

important to political participation, discussed in Section 1.1.

**Discussion.** Overall, our results suggest declining participation in local democracy after private equity buyouts. While people appear to become less engaged with their local representatives, they are no less interested in politicians with a broader state- or nation-wide presence. This result is consistent with the idea that deteriorating local news coverage impacts accountability in government at the local level. Our results highlight important trade-offs associated with private equity ownership and paint a nuanced picture of newspapers under private equity ownership. While local content deteriorates under private equity ownership, papers may avoid closure and may even increase digital reach under private equity ownership. In sum, the welfare effects are clearly ambiguous and deserving of further research.

## 4.2 Ownership Types Beyond Private Equity

While this paper is primarily concerned with private equity, it is useful to explore how private equity compares with other ownership types, both to understand how private equity fits into the industry's broader context, and to assess whether the effects of private equity reflect corporatization or scale. As depicted in Figure 2 Panel B, 21% of newspaper-years in our sample occur under private chain ownership, 14% under public ownership, 31% under family ownership, and 16% under independent ownership. In Table 7, we assess the relationships between our main outcomes and these other major types of ownership, excluding the small category of unknown ownership from this analysis. In all cases, the base (omitted) group is private equity, so the coefficients should be interpreted relative to private equity. We show two models for each outcome. The first excludes newspaper fixed effects, so the coefficient indicates the average for each ownership type in the whole sample relative to private equity. The second column includes newspaper fixed effects, thus the coefficient is identified only off of newspapers that change to or from the ownership type, but is still relative to private equity.

Panel A of Table 7 reports estimates for the local and national policy content of articles,

with share in columns 1–4 and log number in columns 5–7. All other ownership types have a significantly higher share of local articles than private equity. In the models with newspaper fixed effects, we find that transitions to independent and family ownership are accompanied by significant increases in the share and number of articles about local government (columns 2 and 6). In these within-newspaper models, we do not find that any other ownership types have significant relationships to national content.

The patterns are somewhat similar for employee outcomes, shown in Panel B of Table 7. Except for other financial firms, all other ownership types are on average associated with more employees, particularly public companies. Within-newspaper, we also find that family-owned and independent newspapers have significantly more employees. Transitions to independent ownership are associated with more reporters, with an effect of about 10% (column 4), while transitions to family ownership increase the number of editors, with an effect of 7.8% (column 6). In the models with newspaper fixed effects, we also observe significant positive effects for private chains. In contrast, the strong positive correlation for public companies disappears.

The other operational outcomes are reported in Panel C of Table 7. On average (i.e., without newspaper fixed effects in the odd columns), other major types of ownership appear correlated with lower digital circulation, higher print circulation, and higher rates of closure. Focusing on the columns with newspaper fixed effects (i.e., the even columns), transitions to family ownership are associated with largest increases in print circulation relative to private equity transitions. The negative within-newspaper coefficients for digital circulation in column 2 indicate that transitions to private equity ownership increase digital circulation more than any other ownership type.

Finally, in Panel D we consider the key political outcome of voter turnout for council elections (columns 1–2) and mayoral elections (columns 3–4). On average, other ownership types are strongly correlated with higher turnout. However, when we look within-newspaper (columns 2 and 4), we see no strong evidence of effects from any other types of ownership, although the coefficient is large and significant at the 10% level for other financial firms. However, given the small sample these results should be interpreted with caution. These

results are generally consistent with our results on private equity; suggesting that alternative ownership types are associated with local news coverage, more newspaper employment, and higher local turnout—but higher closure rates.

Overall, these results are relevant to understanding ownership types in media. First, private equity ownership impacts newspapers in ways that are not mirrored by any other ownership type, suggesting the results do not simply reflect corporatization or scale. To the contrary, public firms and chains are associated with significantly more employees and local government news coverage. Second, our results add to the existing literature on family firms. This is particularly relevant because family ownership has traditionally been a dominant form for newspapers worldwide. Consistent with non-pecuniary benefits from governance that family ownership might entail, family firms do have more employees – especially senior ones. This contributes to the debate in the literature about labor contracts in family firms (Bertrand and Schoar, 2006; Villalonga and Amit, 2006; Sraer and Thesmar, 2007; Bach and Serrano-Velarde, 2015).

### **4.3 Robustness Tests**

In this section, we describe a number of robustness tests on the main results from Section 4.1. First, we replace the true buyout year with one five years previously, and drop observations after the true buyout. The results are presented in Table 8. There are no significant effects except for circulation, where we see evidence of a large pre-trend; circulation appears to have been declining pre-buyout at target newspapers. This suggests that the smaller negative effect on circulation we saw in Table 5 could actually be interpreted as a mitigation; in other words, it is possible that circulation would have declined even more in the absence of the buyout. The data are too sparse in advance of the buyout to assess digital circulation with any degree of confidence.

Second, we examine the raw mean changes in key variables around buyouts, within the target sample of firms. Observing similar results using this simple event study confirms that nothing about our parametric models biases the general direction of effects. Appendix

Figure A.3 shows the mean of the outcome variable for each year around the year of the buyout for four key variables. Panel A contains the share of articles on local policy. Similar to the dynamic differences-in-differences results, we see no pre-trends and a dramatic decline after the buyout. In Panel B, the share of articles on national politics does not exhibit the same strong upward trend, suggesting that the comparison with other newspapers is important to the regression estimate. Newspapers have generally increased their national content over time, which muddies the waters for this figure. For employees, we observe a marked decline in the first three years after the buyout (Panel C). Last, in Panel D, there is a significant decline in circulation after the buyout, which appears to begin in year three, but we also see some evidence of the pre-trend discussed previously. These figures are helpful given the noise in the dynamic differences-in-differences figures (e.g., Figure 5).

We also considered endogeneity in acquisition by private equity, and partially address this issue by adding deal fixed effects in Appendix Table A.1. The inclusion of these additional controls means that our analysis now compares changes in local news outcomes among newspapers bought by a private equity company, against other newspapers bought by that same firm as part of the same overall transaction. This specification allowed us to control for all unobserved characteristics in common with newspapers commonly purchased (at the potential cost of “overcontrolling”) for part of the treatment effect itself. Despite the strong nature of this control, we continued to observe large changes for all our main outcome variables. The effects on local elections in fact became stronger than in the main model.

Our next robustness tests concern article content. First, in Appendix Table A.2 Panel A, we show the results using a fractional logit GLM, following Papke and Wooldridge (2008). This addresses the concern with binary outcome variables in a panel data setting. The results are robust to this approach, and the effect on news content about international issues (using the words “China” and “Russia” as a proxy) grows stronger (column 4). A second concern with the content results is that given the different match rates to employment and article data, our employment results could stem from a different set of newspapers than the

content results. In Appendix Table A.2 Panel B, we show that the effects on local governance article content are robust to restricting the sample to those papers in which we also observed employment, though the national politics result is not. We also show that the results in which we log the outcome variables are robust to using levels in Appendix Table A.3.

Finally, we conduct a robustness test of the political participation results. We are concerned that because these outcomes are defined at the county level, and there may be more than one newspaper in a county, it is possible that our results reflect some spurious factor at the county level. Therefore, in Appendix Table A.4 Panel B, we add county level fixed effects and remove newspaper fixed effects. The results become weaker without the newspaper effects. However, the coefficients remain large and negative, and the key county council turnout effect remains significant at the 10% level.

Overall, these tests, as well as the main tables and figures, support the main results on news content and employees. Our model estimates exhibit no pre-trends or control test effects in either dynamic differences-in-differences event studies (Figures A.2–4) or raw mean event studies (Appendix Figure A.3) and they pass the control and other robustness tests. The operational results around circulation and closure are less compelling, because either the event study or control test is suggestive of a pre-trend, or the event study does not clearly indicate a discontinuous change post-buyout. We are relatively more confident in the political participation results, as these exhibit no pre-trend (Figure 6) and offer consistent results in terms of coefficient direction across many alternative outcomes that are measured at different times and using different geographies. They are, however, sparse and somewhat noisy.

Finally, we conduct heterogeneity tests to better understand which parts of the sample drive the main effects on employment and local government news content. One reason this is important is that since our results are estimated in-sample on the set of newspapers targeted by private equity firms, they may not generalize broadly to the set of all newspapers – that is, in a counterfactual experiment where private equity investors randomly acquired newspapers. We therefore divide the sample around the median in two dimensions. The first

is on print circulation, where we take the average for each newspaper across its life and then calculate the median across newspapers. The second dimension is local news share, which is the ratio of news items which are local compared with national news. We similarly compare newspapers that are below and above median in this local news ratio across their life. Panel A of Table A.5 shows that private equity ownership reduces employment more at newspapers with a smaller local news share and below-median circulation. Panel B shows that local government news content is more negatively affected at newspapers with below-median circulation but above-median local news shares. These results suggest that the consolidation motives for private equity may be felt especially strongly for papers at a smaller scale, and which were previously supplying a high degree of local news content.

## 5 Conclusion

The importance of media to political outcomes in the U.S. has never been more apparent. The newspaper industry has been in decline for decades, and newspaper failures have accelerated over the past ten years. These failures have generated substantial alarm among political scientists; for example, following the January 2021 insurrection at the U.S. Capitol, Timothy Snyder wrote that “the financial crisis of 2008 did to American newspapers what the Great Depression did to German ones” (Snyder, 2021). While much attention falls on partisan ownership (e.g. DellaVigna and Kaplan (2007)), and despite a large literature on the role of competition in media markets (e.g. Cagé (2020)), there has been little focus on how the degree to which incentives to maximize profits are high-powered affects information provision.

Private equity brings exceptionally high-powered and short-term incentives to increase firm value. This paper offers the first assessment, to our knowledge, of how private equity ownership affects media content. We find that following buyouts of daily newspapers, there is a shift in the composition of news away from local policy issues and toward national topics. The absolute amount of local news declines as well. We document real effects of these changes, in the form of lower voter turnout and lower awareness of local politicians.

This civic engagement result is unambiguously negative, as voter knowledge of local policy issues and participation in the political process are crucial for local government accountability and, ultimately, a functioning democracy.

At the same time, however, we find that private equity buyouts reduce the chances that a newspaper closes, and seem accompanied by higher digital subscriptions, suggesting increased investment in digital platforms. These results point to a more nuanced welfare picture, as the newspaper's survival and reader's utility from the changing mix of content may be substantially beneficial. It is beyond the scope of this paper to quantify these opposing forces. Moreover, further research is needed both to confirm our results using higher-quality data on outcomes and to understand whether alternative business models being suggested for the newspaper industry, such as non-profits—as exemplified by the Salt Lake Tribune's conversion in 2019—might be able to achieve better outcomes (Times, 2020).



## References

- Abramowitz, Alan I and Steven Webster**, “The rise of negative partisanship and the nationalization of US elections in the 21st century,” *Electoral Studies*, 2016, 41, 12–22.
- Acharya, Viral V, Oliver F Gottschalg, Moritz Hahn, and Conor Kehoe**, “Corporate governance and value creation: Evidence from private equity,” *The Review of Financial Studies*, 2013, 26 (2), 368–402.
- Agrawal, Ashwini and Prasanna Tambe**, “Private equity and workers’ career paths: The role of technological change,” *The Review of Financial Studies*, 2016, 29 (9), 2455–2489.
- Allcott, Hunt and Matthew Gentzkow**, “Social media and fake news in the 2016 election,” *Journal of economic perspectives*, 2017, 31 (2), 211–36.
- , **Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow**, “The welfare effects of social media,” *American Economic Review*, 2020, 110 (3), 629–76.
- Almond, Douglas, Hilary W Hoynes, and Diane Whitmore Schanzenbach**, “Inside the war on poverty: The impact of food stamps on birth outcomes,” *The Review of Economics and Statistics*, 2011, 93 (2), 387–403.
- Angelucci, Charles, Julia Cagé, and Michael Sinkinson**, “Media Competition and News Diets,” Technical Report, National Bureau of Economic Research 2020.
- Ardia, David, Evan Ringel, Victoria Smith Ekstrand, , and Ashley Fox**, “Addressing the decline of local news, rise of platforms, and spread of mis- and disinformation online,” *UNC Center for Media Law and Policy*, 2020.
- Autor, David H**, “Outsourcing at will: The contribution of unjust dismissal doctrine to the growth of employment outsourcing,” *Journal of labor economics*, 2003, 21 (1), 1–42.
- Axelson, Ulf, Tim Jenkinson, Per Strömberg, and Michael S Weisbach**, “Borrow cheap, buy high? The determinants of leverage and pricing in buyouts,” *The Journal of Finance*, 2013, 68 (6), 2223–2267.
- Bach, Laurent and Nicolas Serrano-Velarde**, “CEO identity and labor contracts: Evidence from CEO transitions,” *Journal of Corporate Finance*, 2015, 33, 227–242.
- Bakshy, Eytan, Solomon Messing, and Lada A Adamic**, “Exposure to ideologically diverse news and opinion on Facebook,” *Science*, 2015, 348 (6239), 1130–1132.
- Barthel, Michael, Jesse Holcomb, Jessica Mahone, and Amy Mitchell**, “Civic engagement strongly tied to local news habits,” *Pew Research Center*. Accessed September, 2016, 10, 2019.
- Bernstein, Shai and Albert Sheen**, “The operational consequences of private equity buyouts: Evidence from the restaurant industry,” *Review of Financial Studies*, 2016, 29 (9), 2387–2418.
- Bertrand, Marianne and Antoinette Schoar**, “The role of family in family firms,” *Journal of economic perspectives*, 2006, 20 (2), 73–96.
- Boucly, Quentin, David Sraer, and David Thesmar**, “Growth LBOs,” *Journal of Financial Economics*, 2011, 102 (2), 432–453.
- Brav, Alon, Wei Jiang, and Hyunseob Kim**, “The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes,” *The Review of Financial Studies*, 2015, 28 (10), 2723–2769.
- , —, **Song Ma, and Xuan Tian**, “How does hedge fund activism reshape corporate innovation?,” *Journal of Financial Economics*, 2018, 130 (2), 237–264.
- Bursztyn, Leonardo, Georgy Egorov, Ruben Enikolopov, and Maria Petrova**, “Social media and xenophobia: evidence from Russia,” Technical Report, National Bureau of

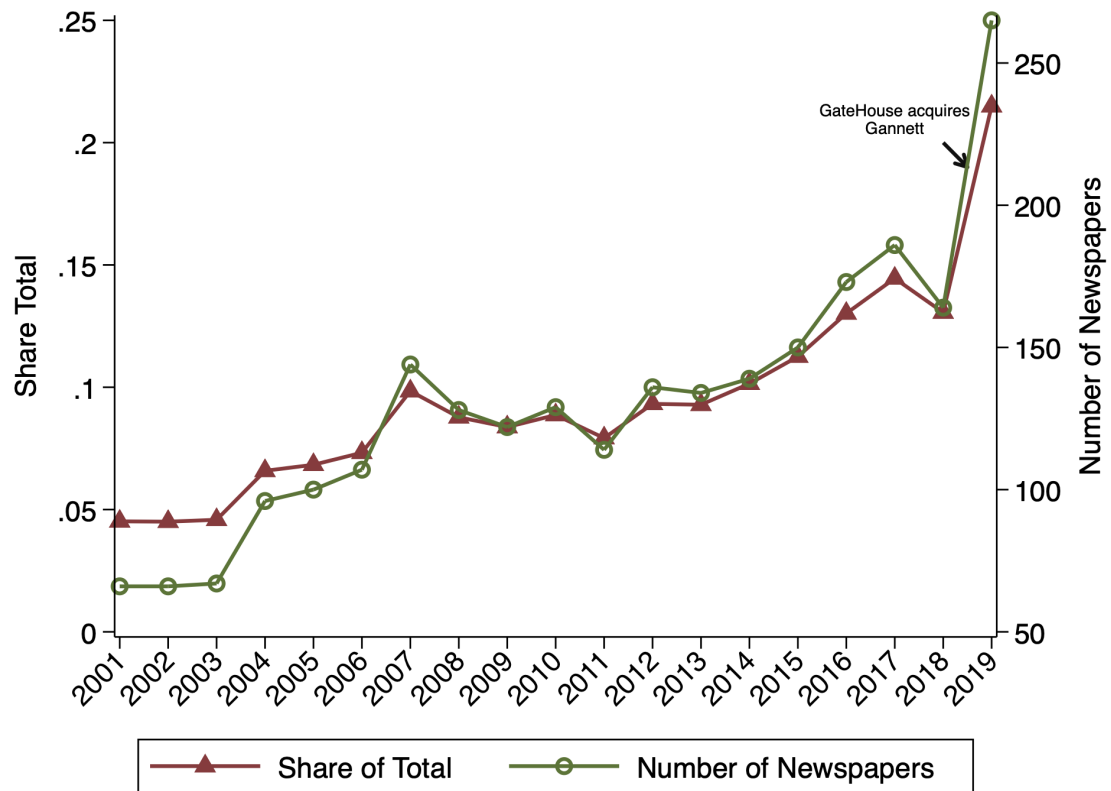
- Economic Research 2019.
- Cagé, Julia**, *Saving the media*, Harvard University Press, 2016.
- , “Media competition, information provision and political participation: Evidence from French local newspapers and elections, 1944–2014,” *Journal of Public Economics*, 2020, 185, 104077.
- Carpenter, Jennifer N**, “Does option compensation increase managerial risk appetite?,” *The Journal of finance*, 2000, 55 (5), 2311–2331.
- Darr, Joshua P, Matthew P Hitt, and Johanna L Dunaway**, “Newspaper closures polarize voting behavior,” *Journal of Communication*, 2018, 68 (6), 1007–1028.
- Davis, Steven J, John C Haltiwanger, Kyle Handley, Ben Lipsius, Josh Lerner, and Javier Miranda**, “The economic effects of private equity buyouts,” Technical Report, National Bureau of Economic Research 2019.
- , **John Haltiwanger, Kyle Handley, Ron Jarmin, Josh Lerner, and Javier Miranda**, “Private equity, jobs, and productivity,” *The American Economic Review*, 2014, 104 (12), 3956–3990.
- de Benedictis-Kessner, Justin and Christopher Warshaw**, “Politics in forgotten governments: the partisan composition of county legislatures and county fiscal policies,” *The Journal of Politics*, 2020, 82 (2), 460–475.
- DellaVigna, Stefano and Ethan Kaplan**, “The Fox News effect: Media bias and voting,” *The Quarterly Journal of Economics*, 2007, 122 (3), 1187–1234.
- , **Ruben Enikolopov, Vera Mironova, Maria Petrova, and Ekaterina Zhuravskaya**, “Cross-border media and nationalism: Evidence from Serbian radio in Croatia,” *American Economic Journal: Applied Economics*, 2014, 6 (3), 103–32.
- Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer**, “Who owns the media?,” *The Journal of Law and Economics*, 2003, 46 (2), 341–382.
- Drago, Francesco, Tommaso Nannicini, and Francesco Sobbrío**, “Meet the press: How voters and politicians respond to newspaper entry and exit,” *American Economic Journal: Applied Economics*, 2014, 6 (3), 159–88.
- Durante, Ruben, Paolo Pinotti, and Andrea Tesei**, “The political legacy of entertainment tv,” *American Economic Review*, 2019, 109 (7), 2497–2530.
- Dyck, Alexander, Natalya Volchkova, and Luigi Zingales**, “The corporate governance role of the media: Evidence from Russia,” *The Journal of Finance*, 2008, 63 (3), 1093–1135.
- Eaton, Charlie, Sabrina Howell, and Constantine Yannelis**, “When investor incentives and consumer interests diverge: Private equity in higher education,” *The Review of Financial Studies*, 2019.
- Enikolopov, Ruben, Alexey Makarin, and Maria Petrova**, “Social media and protest participation: Evidence from Russia,” *Econometrica*, 2020, 88 (4), 1479–1514.
- , **Maria Petrova, and Ekaterina Zhuravskaya**, “Media and political persuasion: Evidence from Russia,” *American Economic Review*, 2011, 101 (7), 3253–85.
- Falck, Oliver, Robert Gold, and Stephan Heblich**, “E-lelections: Voting Behavior and the Internet,” *American Economic Review*, 2014, 104 (7), 2238–65.
- Fan, Ying**, “Ownership consolidation and product characteristics: A study of the US daily newspaper market,” *American Economic Review*, 2013, 103 (5), 1598–1628.
- Ferraz, Claudio and Frederico Finan**, “Exposing corrupt politicians: the effects of Brazil’s publicly released audits on electoral outcomes,” *The Quarterly journal of economics*, 2008, 123 (2), 703–745.

- Filla, Jackie and Martin Johnson**, “Local news outlets and political participation,” *Urban Affairs Review*, 2010, 45 (5), 679–692.
- Fracassi, Cesare, Alessandro Previtero, and Albert W Sheen**, “Barbarians at the store? Private equity, products, and consumers,” Technical Report, National Bureau of Economic Research 2020.
- Gao, Pengjie, Chang Lee, and Dermot Murphy**, “Municipal borrowing costs and state policies for distressed municipalities,” *Journal of Financial Economics*, 2019, 132 (2), 404–426.
- Gavazza, Alessandro, Mattia Nardotto, and Tommaso Valletti**, “Internet and politics: Evidence from uk local elections and local government policies,” *The Review of Economic Studies*, 2019, 86 (5), 2092–2135.
- Gentzkow, Matthew**, “Television and voter turnout,” *The Quarterly Journal of Economics*, 2006, 121 (3), 931–972.
- and **Jesse M Shapiro**, “What drives media slant? Evidence from US daily newspapers,” *Econometrica*, 2010, 78 (1), 35–71.
- , — , and **Michael Sinkinson**, “The effect of newspaper entry and exit on electoral politics,” *American Economic Review*, 2011, 101 (7), 2980–3018.
- , — , and — , “Competition and ideological diversity: Historical evidence from us newspapers,” *American Economic Review*, 2014, 104 (10), 3073–3114.
- Gerber, Alan S, Dean Karlan, and Daniel Bergan**, “Does the media matter? A field experiment measuring the effect of newspapers on voting behavior and political opinions,” *American Economic Journal: Applied Economics*, 2009, 1 (2), 35–52.
- Goetzmann, William N, Jonathan E Ingersoll Jr, and Stephen A Ross**, “High-water marks and hedge fund management contracts,” *The Journal of Finance*, 2003, 58 (4), 1685–1718.
- Grinblatt, Mark and Sheridan Titman**, “Adverse risk incentives and the design of performance-based contracts,” *Management science*, 1989, 35 (7), 807–822.
- Groseclose, Tim and Jeffrey Milyo**, “A measure of media bias,” *The Quarterly Journal of Economics*, 2005, 120 (4), 1191–1237.
- Grossman, Guy, Yotam Margalit, and Tamar Mitts**, “Media Ownership as Political Investment: The Case of Israel Hayom,” *Working Paper*, 2020.
- Guo, Shourun, Edith S Hotchkiss, and Weihong Song**, “Do buyouts (still) create value?,” *The Journal of Finance*, 2011, 66 (2), 479–517.
- Gupta, Atul, Sabrina Howell, Constantine Yannelis, and Abhinav Gupta**, “Does private equity investment in healthcare benefit patients? evidence from nursing homes,” *Evidence from Nursing Homes*, 2020.
- Gurun, Umit G and Alexander W Butler**, “Don’t believe the hype: Local media slant, local advertising, and firm value,” *The Journal of Finance*, 2012, 67 (2), 561–598.
- Hayes, Danny and Jennifer L Lawless**, “As local news goes, so goes citizen engagement: Media, knowledge, and participation in US House Elections,” *The Journal of Politics*, 2015, 77 (2), 447–462.
- and — , “The decline of local news and its effects: New evidence from longitudinal data,” *The Journal of Politics*, 2018, 80 (1), 332–336.
- Hopkins, Daniel J**, *The increasingly United States: How and why American political behavior nationalized*, University of Chicago Press, 2018.
- Jacobson, Gary C**, “It’s nothing personal: The decline of the incumbency advantage in US House elections,” *The Journal of Politics*, 2015, 77 (3), 861–873.

- Jensen, Michael C and William H Meckling**, “Theory of the firm: Managerial behavior, agency costs and ownership structure,” *Journal of financial economics*, 1976, 3 (4), 305–360.
- Kaplan, Steven N and Per Stromberg**, “Leveraged buyouts and private equity,” *Journal of Economic Perspectives*, 2009, 23 (1), 121–46.
- Kouwenberg, Roy and William T Ziemba**, “Incentives and risk taking in hedge funds,” *Journal of Banking & Finance*, 2007, 31 (11), 3291–3310.
- Kuttner, Robert and Hildy Zenger**, “Saving the Free Press from Private Equity,” *The American Prospect*, 2017.
- Lelkes, Yphtach, Gaurav Sood, and Shanto Iyengar**, “The hostile audience: The effect of access to broadband internet on partisan affect,” *American Journal of Political Science*, 2017, 61 (1), 5–20.
- Levy, Roee**, “Social Media, News Consumption, and Polarization: Evidence from a Field Experiment,” *American Economic Review*, 2020.
- Lewis, Adam**, “Don’t count on private equity to save newspapers,” *PitchBook*, 2018, p. April 27.
- Martin, Gregory J and Joshua McCrain**, “Local news and national politics,” *American Political Science Review*, 2019, 113 (2), 372–384.
- Martin, Nicole**, “How Social Media Has Changed How We Consume News,” *Forbes*, 2018.
- Moskowitz, Daniel J**, “Local news, information, and the nationalization of US Elections,” Technical Report, Working Paper, <https://bit.ly/2W15rjp> 2018.
- Müller, Karsten and Carlo Schwarz**, “From hashtag to hate crime: Twitter and anti-minority sentiment,” Available at SSRN 3149103, 2019.
- Oberholzer-Gee, Felix and Joel Waldfogel**, “Media markets and localism: Does local news en Espanol boost Hispanic voter turnout?,” *American Economic Review*, 2009, 99 (5), 2120–28.
- Palomino, Frédéric and Andrea Prat**, “Risk taking and optimal contracts for money managers,” *RAND Journal of Economics*, 2003, pp. 113–137.
- Papke, Leslie E and Jeffrey M Wooldridge**, “Panel data methods for fractional response variables with an application to test pass rates,” *Journal of econometrics*, 2008, 145 (1-2), 121–133.
- Puglisi, Riccardo and James M Snyder**, “The balanced US press,” *Journal of the European Economic Association*, 2015, 13 (2), 240–264.
- Qin, Bei, David Strömberg, and Yanhui Wu**, “Social media, information networks, and protests in china,” *Work. Pap., Stockholm Univ., Stockholm, Swed*, 2019.
- Schaub, Max and Davide Morisi**, “Voter mobilisation in the echo chamber: Broadband internet and the rise of populism in Europe,” *European Journal of Political Research*, 2019.
- Shearer, Elisa and Amy Mitchell**, “News Use Across Social Media Platforms in 2020,” *Pew Research Center*, 2021.
- Shephard, Alex**, “Finance Is Killing the News,” *The New Republic*, 2018.
- Smith, Gerry and K Chiglinsky**, “Wall Street Has Plans for Newspapers, and They Aren’t Pretty,” *Bloomberg Quint*, 2020.
- Snyder, James M and David Strömberg**, “Press coverage and political accountability,” *Journal of political Economy*, 2010, 118 (2), 355–408.
- Snyder, Timothy**, “The American Abyss: A historian of fascism and political atrocity on Trump, the mob and what comes next,” *The New York Times*, 2021.

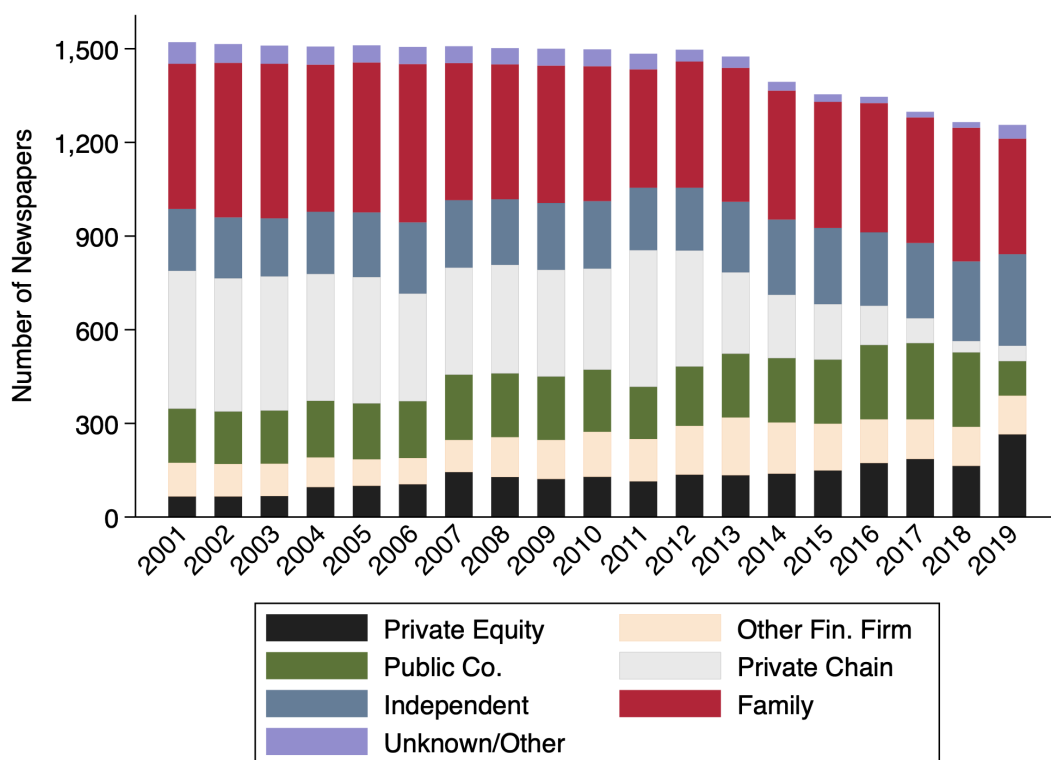
- Sraer, David and David Thesmar**, “Performance and behavior of family firms: Evidence from the French stock market,” *Journal of the european economic Association*, 2007, 5 (4), 709–751.
- Strömberg, David**, “Radio’s impact on public spending,” *The Quarterly Journal of Economics*, 2004, 119 (1), 189–221.
- Sunstein, Cass R.**, # *Republic: Divided democracy in the age of social media*, Princeton University Press, 2018.
- Times, Los Angeles**, “Editorial: Local newspapers are dying. Here’s how we can save them,” *Los Angeles Times*, 2020.
- Tocqueville, Alexis De**, *Democracy in america*, Regnery Publishing, 1835.
- Turkel, Eray, Anish Saha, Rhett Carson Owen, Gregory J Martin, and Shoshana Vasserman**, “A method for measuring investigative journalism in local newspapers,” *Proceedings of the National Academy of Sciences*, 2021, 118 (30).
- Villalonga, Belen and Raphael Amit**, “How do family ownership, control and management affect firm value?,” *Journal of financial Economics*, 2006, 80 (2), 385–417.
- Vosoughi, Soroush, Deb Roy, and Sinan Aral**, “The spread of true and false news online,” *Science*, 2018, 359 (6380), 1146–1151.

Figure 1: **Private Equity Ownership of Daily Newspapers (2001–2019)**

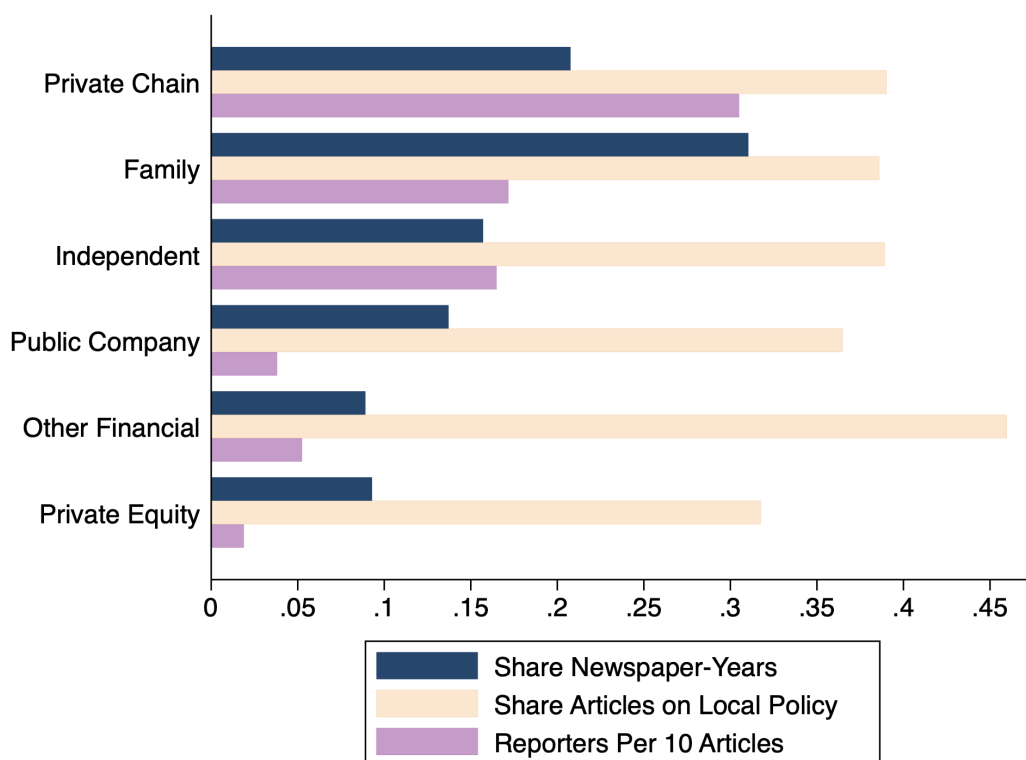


**Note:** This figure shows the share of all newspapers and the number of newspapers owned by private equity firms over time in our sample of daily newspapers.

Figure 2: **Private Equity Compared with Other Major Ownership Types (2001–2019)**



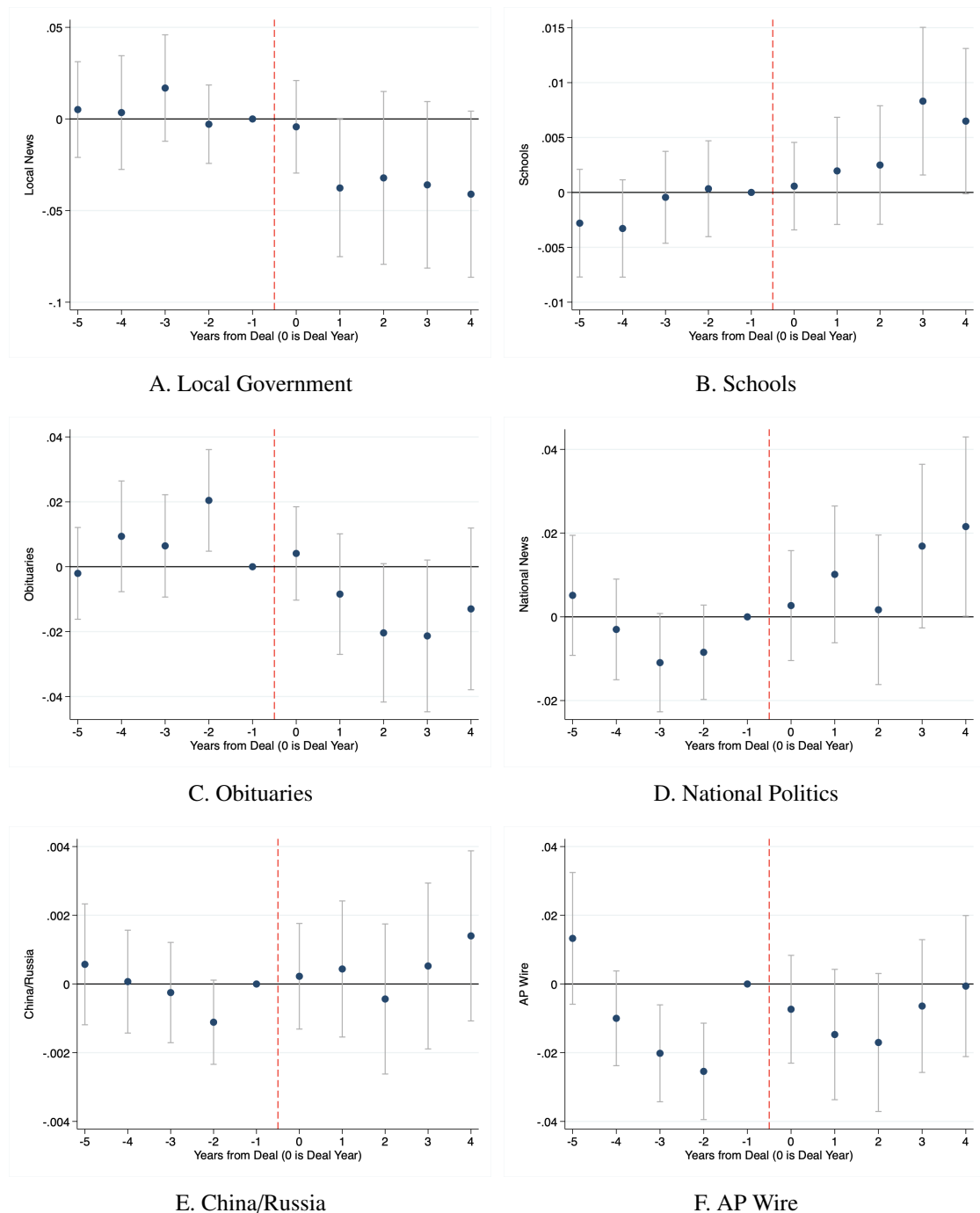
A. Major Ownership Types as Fraction of Total in Study Sample



B. Comparison of Key Statistics Across Ownership Types

**Note:** This figure shows ownership dynamics and key relative characteristics in our sample of daily newspapers. We include the major ownership types. Ownership types are mutually exclusive. If a newspaper is identified as family-owned, that status takes precedence vis-a-vis chain or independent status.

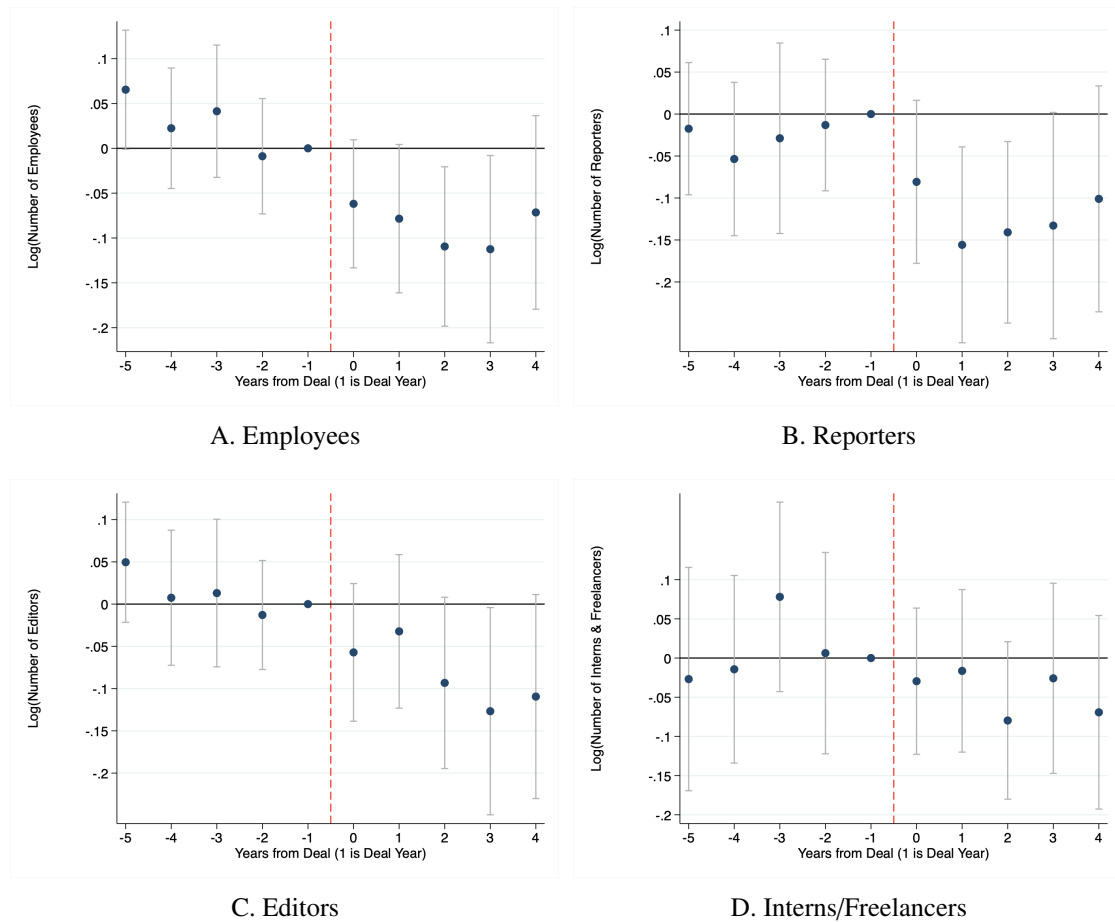
**Figure 3: Difference-in-differences Event Study of Private Equity Ownership and Share of Articles by Content**



**Note:** This figure presents the differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal (−1). The regression includes year and newspaper fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. Local policy articles (Panel A) include any of the following words: city council, city hall, mayor, state senate, state legislature, zoning, planning board, board of education, school board, school district, municipal, sheriff, police, local policy. Schools (Panel B) report the share of articles that have any mention of: board of education, school board, school district. Obituaries (Panel C) include any of the following words: died, finally at peace, or passed away. China/Russia articles (Panel E) include any mentions of China or Russia. AP Wire (Panel F) refers to syndicated articles from the Associated Press. The final graph shows the total number of articles. For parsimony, we show the most important outcomes in our analysis. 95% confidence intervals shown.

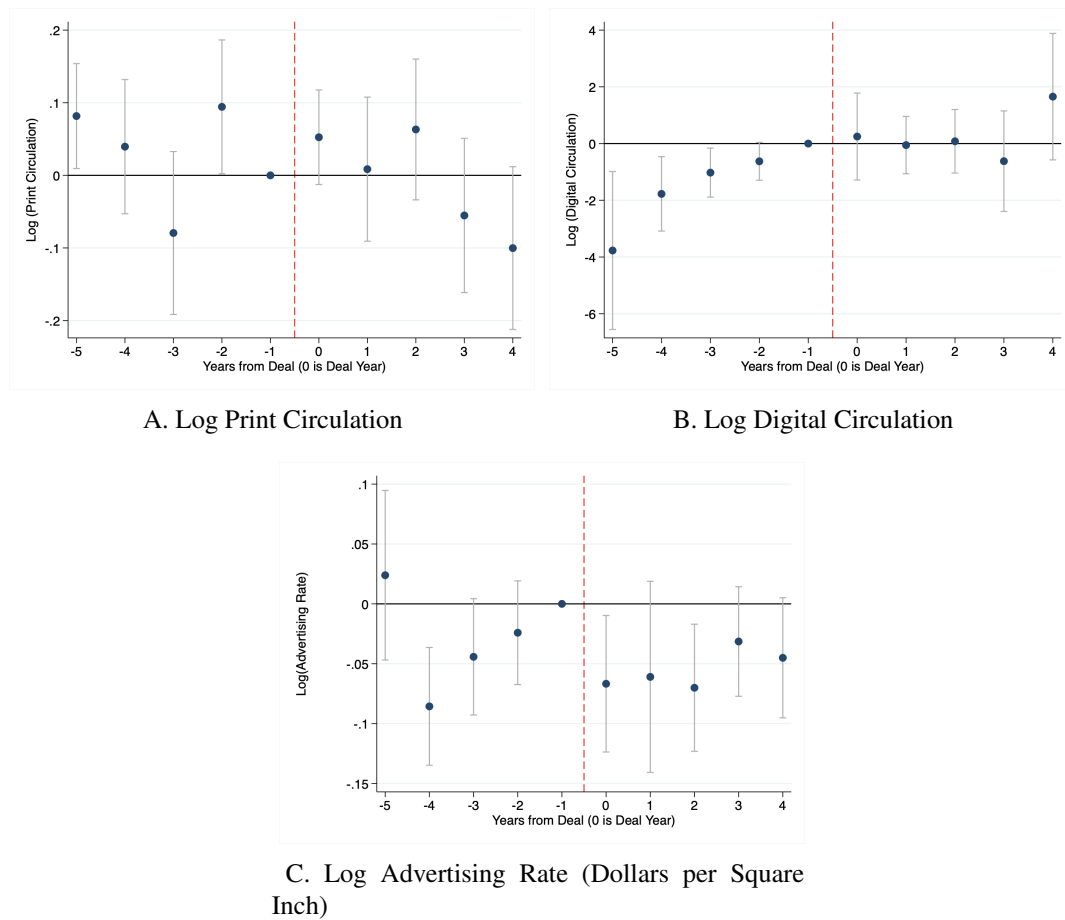


Figure 4: DiD Event Study of Private Equity Ownership and Employment Outcomes



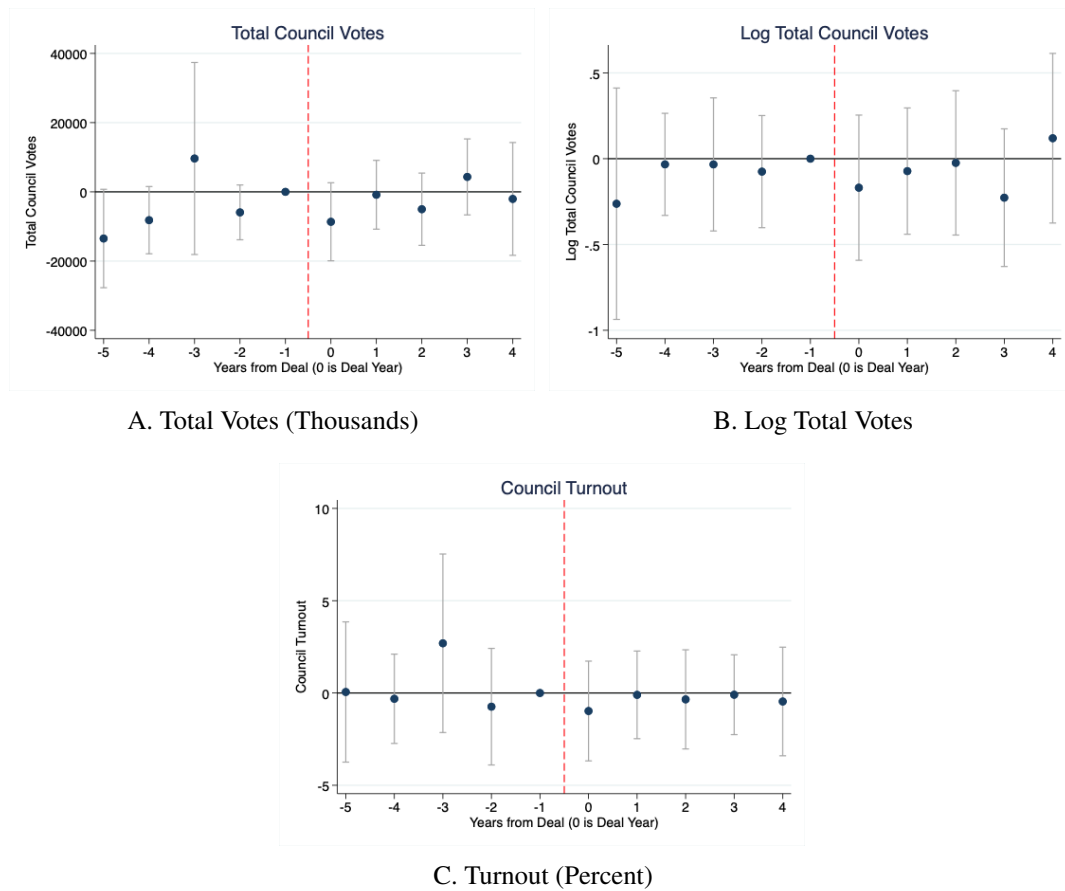
**Note:** This figure presents the differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal ( $-1$ ). The regression includes year and newspaper fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. In each figure, the dependent variable is the log number of employees in a certain occupational category. 95% confidence intervals shown.

**Figure 5: Difference-in-Differences Event Study of Private Equity Ownership and Operational Outcomes**



**Note:** This figure presents differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal (−1). The regression includes year and newspaper fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. In the Panel A, the dependent variable is log print circulation, and digital circulation is shown in Panel B. In Panel C, the dependent variable is the log advertising rate in dollars per open inch. As there is concern that circulation are imputed from year to year, leading to stale data, we estimate the effects in the sample in which there is an observed change in circulation from the previous year. 95% confidence intervals shown.

Figure 6: **Difference-in-Differences Event Study of Private Equity Ownership and Political Outcomes**



**Note:** This figure presents the differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal ( $-1$ ). The regression includes year and newspaper fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. 95% confidence intervals shown.

Table 1: Summary Statistics

	All		Non-Private Equity		Pre-Private Equity		Post-Private Equity	
	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Share Articles:								
Local Policy - Govt	11449	0.33 ( 0.17)	7681	0.34 ( 0.18)	1331	0.35 ( 0.19)	2220	0.28 ( 0.13)
Local Policy - Schools	11449	0.05 ( 0.03)	7681	0.05 ( 0.03)	1331	0.05 ( 0.03)	2220	0.05 ( 0.03)
Obituary	11449	0.14 ( 0.10)	7681	0.14 ( 0.10)	1331	0.15 ( 0.10)	2220	0.13 ( 0.09)
China/Russia	11449	0.02 ( 0.01)	7681	0.02 ( 0.01)	1331	0.01 ( 0.01)	2220	0.02 ( 0.02)
Natl Govt	11449	0.16 ( 0.17)	7681	0.16 ( 0.17)	1331	0.15 ( 0.15)	2220	0.16 ( 0.19)
AP Wire	11449	0.05 ( 0.08)	7681	0.05 ( 0.09)	1331	0.06 ( 0.09)	2220	0.03 ( 0.05)
Number Articles:								
All	11449	13999 ( 14026)	7681	14924 ( 14669)	1331	17462 ( 15029)	2220	8894 ( 9217)
Local Policy	11449	4934 ( 5189)	7681	5292 ( 5353)	1331	6500 ( 5832)	2220	2789 ( 3172)
Local Policy - Govt	11449	4346 ( 4678)	7681	4658 ( 4799)	1331	5778 ( 5381)	2220	2433 ( 2880)
Local Policy - Schools	11449	580 ( 592)	7681	622 ( 629)	1331	718 ( 573)	2220	356 ( 369)
Obituary	11449	1831 ( 2210)	7681	1947 ( 2259)	1331	2425 ( 2507)	2220	1120 ( 1625)
China/Russia	11449	277 ( 385)	7681	305 ( 416)	1331	309 ( 378)	2220	165 ( 234)
Natl Govt	11449	2273 ( 2911)	7681	2484 ( 3177)	1331	2500 ( 2521)	2220	1447 ( 1907)
AP Wire	11449	1072 ( 2432)	7681	1185 ( 2568)	1331	1547 ( 2958)	2220	376 ( 883)
Employees								
Reporters	13122	36.47 ( 60.31)	10819	37.14 ( 61.63)	885	45.11 ( 60.83)	1369	25.58 ( 47.10)
Reporters No Interns	13122	5.46 ( 8.74)	10819	5.60 ( 8.98)	885	6.36 ( 8.40)	1369	3.77 ( 6.70)
Editors	13122	5.09 ( 8.19)	10819	5.23 ( 8.42)	885	5.90 ( 7.88)	1369	3.47 ( 6.22)
Editors	13122	6.69 ( 10.98)	10819	6.72 ( 11.12)	885	9.27 ( 11.96)	1369	4.70 ( 8.55)
Interns and Freelancers	13122	1.57 ( 3.06)	10819	1.58 ( 3.10)	885	1.77 ( 2.88)	1369	1.31 ( 2.81)
Circulation								
Digital Circulation	22792	22037 ( 28021)	17066	20933 ( 27454)	3005	35667 ( 32547)	2721	13910 ( 20037)
Advertising (Max open inch rate)	3419	32392 ( 217200)	2333	37412 ( 258649)	643	14558 ( 33155)	443	31841 ( 98274)
Advertising (Max open inch rate)	22192	46.51 ( 86.21)	16745	43.93 ( 86.90)	2858	72.47 ( 89.82)	2589	34.48 ( 70.94)
Closed								
Shut Down	27474	0.01 ( 0.10)	20697	0.01 ( 0.11)	3511	0 ( 0.02)	3050	0.01 ( 0.10)
Merged & Changed Name	27933	0.003 ( 0.06)	21060	0.004 ( 0.06)	3512	0 ( 0)	3053	0.003 ( 0.05)
Changed to Weekly	27856	0.003 ( 0.05)	21013	0.003 ( 0.06)	3511	0 ( 0.02)	3052	0.004 ( 0.07)
Changed to Weekly	27781	0.005 ( 0.07)	20918	0.01 ( 0.08)	3512	0 ( 0)	3051	0.004 ( 0.06)
County-Level Elections:								
Council Votes (Thou)	2119	32.35 ( 36.81)	1714	34.12 ( 37.70)	191	32.66 ( 32.70)	214	17.93 ( 29.17)
Council Turnout	2117	8.72 ( 12.19)	1712	8.86 ( 12.06)	191	12.04 ( 16.34)	214	4.66 ( 6.69)
Mayor Votes (Thou)	1960	26.11 ( 58.65)	1663	25.76 ( 58.35)	127	36.44 ( 68.31)	170	21.85 ( 52.96)
Mayor Turnout	1960	4.64 ( 5.53)	1663	4.72 ( 5.54)	127	5.44 ( 6.78)	170	3.24 ( 4.05)
Sheriff Votes (Thou)	487	47.55 ( 57.14)	389	47.23 ( 56.98)	47	62.82 ( 67.25)	51	35.89 ( 44.95)
Sheriff Turnout	487	30.01 ( 7.43)	389	30.17 ( 7.54)	47	30.13 ( 7.34)	51	28.62 ( 6.54)

**Note:** This table shows summary statistics about our data at the newspaper-year level. Variables are defined in Section 2. The left-most three columns include the whole sample, the middle three columns include newspaper-years under private equity ownership, and the right-most three columns include newspaper-years not under private equity ownership (including targets pre-buyout). The samples differ based on matching to the source of characteristic data, which is content from NewsLibrary (first two blocks of variables), employment outcomes (third block), circulation and advertising where populated in E&P (fourth block), and political variables (fifth block). The whole sample is included in the final block.

Table 2: Predictors of Private Equity Ownership

Dependent Variable: Private Equity $t + 1$						
	(1)	(2)	(3)	(4)	(5)	(6)
Circulation $t-1$	-0.007*** (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.054*** (0.008)	-0.009*** (0.003)	-0.007*** (0.003)
Circ. audit $t-1$	0.005*** (0.002)	0.006*** (0.002)	0.007*** (0.002)	0.004* (0.002)	0.000 (.)	0.006** (0.003)
Log(Advertising Rate)	0.007*** (0.002)	0.004* (0.002)	0.003* (0.002)	-0.002 (0.003)	0.010*** (0.003)	0.007*** (0.003)
Public Co.	0.033*** (0.004)	0.031*** (0.004)	0.032*** (0.004)	0.012* (0.007)	0.034*** (0.004)	0.031*** (0.005)
Private Chain	0.012*** (0.002)	0.016*** (0.002)	0.016*** (0.002)	0.014*** (0.003)	0.016*** (0.003)	0.016*** (0.003)
Independent	0.004*** (0.001)	0.003** (0.001)	0.002 (0.002)	0.005 (0.007)	0.005*** (0.002)	0.004*** (0.001)
Family	0.016*** (0.002)	0.015*** (0.002)	0.015*** (0.002)	0.011** (0.005)	0.018*** (0.002)	0.016*** (0.002)
Unknown/Other	0.013 (0.011)	0.013 (0.012)	0.017 (0.013)	0.008 (0.011)	0.004*** (0.001)	0.018 (0.015)
Log(Number of Employees)						-0.001 (0.001)
Observations	14351	14351	14351	14351	9981	9058
$R^2$	0.010	0.039	0.046	0.053	0.009	0.008
Year FE	No	Yes	Yes	Yes	Yes	Yes
State FE	No	No	Yes	No	No	No
Newspaper FE	No	No	No	Yes	Yes	Yes
Outcome Mean	0.014	0.014	0.014	0.014	0.017	0.015

**Note:** This table shows the OLS regression estimates where the dependent variable is one if a newspaper transitions to private equity ownership in the next year. After this transition, the newspaper is no longer tracked. The controls include circulation, the log of advertising rates and dummy variables of the current year ownership type. “Year FE”, “State FE” and “Newspaper FE” are fixed effects for the year, newspaper state and newspaper, respectively. State FE are not identified separately for models with newspaper FE, so we list them as excluded. Column (5) subsets on non-state circulation data. Standard errors are clustered by newspaper. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table 3: **Private Equity Ownership and Article Content**

Panel A: Share of Articles						
Dep Var:	Local Policy		Obituaries	China/Russia	Natl Govt	AP Wire
	Govt	Schools				
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-0.036** (0.014)	0.002 (0.002)	-0.013* (0.007)	0.001 (0.001)	0.013** (0.007)	-0.008 (0.007)
Observations	10952	10952	10952	10952	10952	10952
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	0.332	0.049	0.139	0.017	0.157	0.050

Panel B: Log Number of Articles							
Dep Var:	Local Policy		Obit	China/Russia	Natl Govt	AP Wire	
	Total	Govt					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post deal X PE	-0.183*** (0.054)	-0.256*** (0.054)	-0.127** (0.051)	-0.345*** (0.081)	-0.120 (0.084)	-0.122 (0.081)	-0.240* (0.129)
Observations	10952	10952	10952	10952	10952	10952	10952
R <sup>2</sup>	0.746	0.761	0.746	0.718	0.753	0.758	0.697
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	9.122	7.895	5.926	6.930	4.809	6.972	5.274

**Note:** This table shows the effect of private equity buyouts on the share (Panel A) and log number (Panel B) of a newspaper's total articles that fall into a particular topic area (a single article can cover multiple topics). Local policy "government" articles (Panel A, column 1) include any of the following words: city council, city hall, mayor, state senate, state legislature, zoning, and planning board. Local policy "school" articles (column 2) include: board of education, school board, and school district. Obituaries (column 3) are articles including any of the following words: died, finally at peace, or passed away. China/Russia (column 4) articles include either the words China or Russia. National government articles (column 5) include any of the following words: Bush, Congress, Obama, Trump, White House, democrat, or republican. AP Wire (column 6) refers to syndicated articles from the Associated Press. Total articles are in Column B, column 1. Standard errors are clustered by newspaper. Article counts are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table 4: **Private Equity Ownership and Employees**

Dependent Variable:	Employees	Reporters	Editors	Interns & Freelancers
	(1)	(2)	(3)	(4)
Post deal X PE	-0.071* (0.038)	-0.069* (0.040)	-0.090** (0.035)	-0.004 (0.041)
Observations	12386	12386	12386	12386
R <sup>2</sup>	0.175	0.087	0.043	0.130
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	2.528	1.190	1.720	0.522

**Note:** This table shows the effect of private equity buyouts on the logged number of employees. The sample is restricted to newspaper-years with at least one reporter. Employee data are from LinkedIn, and occupations are derived from job titles. Standard errors are clustered by newspaper. Employee counts are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table 5: **Private Equity Ownership and Operations**

Panel A: Circulation & Advertising						
Dependent Variable:	Circulation				Advertising Rate	
	No Stale (1)	All (2)	Digital (3)	All (4)	No Stale (5)	All (6)
Post deal X PE	-0.109*** (0.016)	-0.118*** (0.019)	0.363* (0.206)	-0.066*** (0.019)	-0.039 (0.030)	-0.042* (0.024)
Observations	15039	22792	3292	3419	10549	22192
R <sup>2</sup>	0.568	0.426	0.101	0.754	0.088	0.087
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	9.775	9.427	5.033	10.101	3.200	3.183

Panel B: Closure or Change of Status				
Dependent Variable:	Any Closure (1)	Shut Down (2)	Merged & New Name (3)	Became Weekly (4)
Post deal X PE	-0.004** (0.002)	-0.002** (0.001)	0.001 (0.001)	-0.003** (0.001)
Observations	26720	26736	26730	26730
R <sup>2</sup>	0.024	0.008	0.008	0.016
Year FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Outcome Mean	0.011	0.004	0.003	0.005

**Note:** Panel A of this table shows the effect of private equity buyouts on log print circulation (number of subscribers) and log advertising rate (dollars per open inch, which is the rate charged to a new advertiser who does not have an existing discount per square inch). In column 1 and 3, the sample is restricted to newspaper-years in which circulation or advertising rates change from year to year, in case the absence of change represents stale data. Panel B of this table shows the effect of private equity buyouts on three newspaper outcomes: closure (columns 1–2), merger and change of name (columns 3–4), and a switch from being a daily newspaper to a weekly (column 5–6). Note only dailies, not weeklies, comprise the main sample. We show models both with and without newspaper fixed effects as these events can happen only once in a newspaper's life. Standard errors are clustered by newspaper. Circulation estimates are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.



Table 6: **Private Equity Ownership and Political Outcomes**

Panel A: Local Election Participation						
Election Type:	County Council			Mayor		
Dependent Variable:	Total Votes	Log Total Votes	Turnout (%)	Total Votes	Log Total Votes	Turnout (%)
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-3.005* (1.730)	-0.133* (0.079)	-0.821** (0.407)	-1.545 (4.094)	-0.175* (0.098)	-0.198 (0.293)
Observations	2124	2124	2122	1960	1960	1960
R <sup>2</sup>	0.299	0.196	0.076	0.155	0.083	0.034
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	32.283	9.492	8.745	26.111	8.848	4.637

Panel B: Survey-Based Measures of News Interest and Government Knowledge					
Dependent Variable:	No Opinion Of				
	High News Interest	House Rep	Senator	Governor	President
	(1)	(2)	(3)	(4)	(5)
PE Paper in County	-0.013 (0.009)	0.020*** (0.008)	0.004 (0.008)	0.006 (0.006)	0.002 (0.003)
Observations	22170	22170	22170	22170	22170
Year FE	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes
Outcome Mean	0.500	0.183	0.182	0.102	0.030

**Note:** This table shows the relationship between private equity ownership and political outcomes. In Panel A, we consider two types of local elections: county legislature (columns 1-3) and mayoral (columns 4-6) elections. Total votes are in thousands. Turnout is defined as total votes divided by the local population (based on U.S. Census data). The specification is the same as in previous tables. In Panel B, we examine survey responses from the Cooperative Congressional Election Study (CCES) across the 2006–2019 waves. Column 1 asks individuals if they have a strong ideology; column 2 asks about high news interest; and columns 3–6 examine response rates of individuals who have “No Opinion” about a range of elected officials from their district. The key independent variable is whether newspapers serving that county-year are owned by private equity. In this panel, standard errors are clustered at the county level. Total votes are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

**Table 7: Private Equity Relative to Other Types of Ownership**

Panel A: Article Content by Ownership Type with Private Equity as Base Group								
Dependent Variable:	Share of Articles on				Number of Articles on			
	Local Policy		National Politics		Local Policy		National Politics	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Other Fin. Firm	0.153*** (0.015)	0.056*** (0.020)	0.018 (0.023)	0.005 (0.009)	0.560*** (0.089)	0.046 (0.066)	0.336*** (0.126)	-0.070 (0.098)
Public Co.	0.045*** (0.014)	0.018 (0.019)	0.005 (0.022)	-0.008 (0.007)	0.936*** (0.094)	0.105 (0.070)	0.970*** (0.130)	-0.012 (0.083)
Private Chain	0.057*** (0.013)	0.023 (0.014)	0.024 (0.018)	-0.006 (0.006)	0.644*** (0.084)	0.110** (0.052)	0.729*** (0.108)	0.026 (0.074)
Independent	0.072*** (0.017)	0.042** (0.018)	0.003 (0.018)	-0.014** (0.006)	0.604*** (0.084)	0.121* (0.063)	0.562*** (0.126)	-0.064 (0.089)
Family	0.063*** (0.011)	0.030** (0.013)	-0.011 (0.015)	-0.010* (0.006)	0.755*** (0.084)	0.144*** (0.051)	0.659*** (0.111)	0.008 (0.074)
Observations	10892	10886	10892	10886	10892	10886	10892	10886
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes	No	Yes	No	Yes
Outcome Mean	0.380	0.380	0.157	0.157	8.045	8.045	6.972	6.972

**Panel B: Employees by Ownership Type with Private Equity as Base Group**

Dependent Variable:	Employees		Reporters		Editors	
	(1)	(2)	(3)	(4)	(5)	(6)
Other Fin. Firm	0.056 (0.166)	-0.070 (0.047)	0.026 (0.120)	-0.014 (0.048)	-0.048 (0.122)	-0.069 (0.050)
Public Co.	1.429*** (0.192)	0.018 (0.044)	1.046*** (0.139)	0.069 (0.047)	0.990*** (0.151)	0.003 (0.049)
Private Chain	0.495*** (0.147)	0.084** (0.035)	0.348*** (0.107)	0.073** (0.036)	0.282** (0.113)	0.054 (0.033)
Independent	0.173 (0.166)	0.075* (0.042)	0.176 (0.121)	0.093** (0.045)	0.055 (0.129)	0.074* (0.043)
Family	0.447*** (0.146)	0.076** (0.038)	0.310*** (0.106)	0.053 (0.039)	0.249** (0.111)	0.075** (0.036)
Observations	12295	12287	12295	12287	12295	12287
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes	No	Yes
Outcome Mean	2.523	2.523	1.189	1.189	1.149	1.149

**Note:** This table shows the relationship between major newspaper ownership types and article content in Panel A, and employment in Panel B, relative to the article content under private equity ownership (the base group). Local policy is measured as a composite of government and school keywords. For each outcome, the first column does not include newspaper fixed effects, so the coefficients show the average for each ownership type in the whole sample. The second column includes newspaper fixed effects, which means that the coefficient is identified only from newspapers that change to or from the ownership type. The dependent variables are either the share of articles with a particular type of content or the log number of articles with a particular type of content. Standard errors are clustered by newspaper. Article counts, circulation, and employment are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Panel C: Operations by Ownership Type with Private Equity as Base Group

Dependent Variable:	Digital circulation		Circulation		Shut Down	
	(1)	(2)	(3)	(4)	(5)	(6)
Other Fin. Firm	-1.757** (0.783)	-0.854** (0.382)	-0.009 (0.092)	0.033 (0.031)	0.002 (0.002)	-0.000 (0.003)
Public Co.	-0.383 (0.553)	-0.424** (0.214)	0.617*** (0.084)	0.098*** (0.019)	0.003* (0.002)	0.003 (0.003)
Private Chain	-0.554 (0.628)	-0.463* (0.251)	0.190** (0.082)	0.086*** (0.019)	0.013*** (0.002)	0.010*** (0.003)
Independent	-0.757 (0.756)	-0.339 (0.296)	0.050 (0.094)	0.104*** (0.023)	0.006*** (0.002)	0.008* (0.004)
Family	-1.329** (0.574)	-0.251 (0.272)	0.174** (0.079)	0.122*** (0.019)	0.003** (0.001)	0.006*** (0.002)
Observations	3286	3244	15214	15109	26858	26827
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	No	Yes	No	Yes
Outcome Mean	5.036	5.087	9.777	9.783	0.007	0.006

Panel D: Local Election Participation

Election Type:	County Council		Mayor	
	Turnout (%)	Turnout (%)	Turnout (%)	Turnout (%)
Dependent Variable:	(1)	(2)	(3)	(4)
Other Fin. Firm	4.293** (1.774)	1.519* (0.811)	0.839 (0.664)	0.581 (0.365)
Public Co.	4.686*** (1.368)	0.610 (0.598)	1.819** (0.753)	0.375 (0.310)
Private Chain	3.746*** (1.055)	0.309 (0.403)	0.284 (0.611)	0.161 (0.286)
Independent	4.474*** (1.434)	-0.103 (0.834)	0.646 (0.657)	-0.252 (0.422)
Family	5.977*** (1.289)	0.176 (0.567)	2.975*** (0.702)	0.115 (0.324)
Observations	2116	2088	1959	1929
R <sup>2</sup>	0.095	0.823	0.106	0.652
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes
Outcome Mean	8.721	8.689	4.635	4.633

**Note:** This table shows the relationship between major ownership types and article content, relative to the article content under private equity ownership (the base group). For each outcome, the first column does not include newspaper fixed effects, so the coefficients show the average for each ownership type in the whole sample. The second column includes newspaper fixed effects, which means that the coefficient is identified only from newspapers that change to or from the ownership type. The dependent variable in columns 1–2 is the advertising rate in log dollars per open inch. The dependent variable in columns 3–4 is log print circulation. The dependent variable in columns 5–6 is an indicator for the newspaper closing in a particular year. Standard errors are clustered by newspaper. Article counts, circulation, and employment are winsorized at the 2.5% level in both directions before being logged. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table 8: **Placebo Tests**

## Panel A: Article Content

Dependent Variable:	Share of Articles on		Number of Articles on	
	Local (1)	National (2)	Local (3)	National (4)
Post Placebo Deal X PE	0.002 (0.011)	-0.001 (0.004)	0.035 (0.045)	0.015 (0.057)
Observations	8730	8730	8730	8730
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.393	0.156	8.191	7.101

## Panel B: Employees and Operations

Dependent Variable:	Reporters (1)	Editors (2)	Circ (3)	Circ No Stale (4)
Post Placebo Deal X PE	-0.017 (0.039)	0.003 (0.036)	-0.140*** (0.014)	-0.090*** (0.013)
Observations	11753	11753	20045	13550
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	2.571	1.213	9.482	9.810

## Panel C: Local Election Participation

Election Type: Dependent Variable:	County Council		Mayor	
	Log Total Votes (1)	Turnout (%) (2)	Log Total Votes (3)	Turnout (%) (4)
Post Placebo Deal X PE	0.058 (0.084)	1.013 (0.753)	0.062 (0.092)	0.725 (0.513)
Observations	1905	1903	1790	1790
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	9.589	9.176	8.895	4.770

**Note:** This table shows placebo tests for the main outcomes. We replace the true buyout year with one five years previously, and drop observations after the true buyout. Standard errors are clustered by newspaper. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

## Appendix: For Online Publication

Figure A.1: Example of E&P Raw Data

### U.S. Daily Newspapers

**Wire Ed.** Melissa Cosper  
**Women's Ed.** Catherine Downing  
**PRODN/OPNS.**  
**Prodn. Mgr.** Jerry Thornton  
**Prodn. Mgr., Distr.** Tom LaPlant  
**Prodn. Foreman, Pressroom** Jimmy Box

**Market Information:** TMC; Split run; Electronic edition.  
**Mechanical available:** Offset; Black and 3 ROP colors; insert accepted - preprinted; page cut-offs - 22".

**Mechanical specifications:** Type page 11 5/8" x 21 1/4"; E - 6 cols, 2 1/16", 1/8" between; A - 6 cols, 2 1/16", 1/8" between; C - 9 cols, 1 3/8", 1/16" between.

**Commodity consumption:** Newsprint 2,255 short tons; widths 12 1/2", 25"; black ink 50,242 pounds; color ink 5,645 pounds; single pages printed 10,221; average pages per issue 30(d), 62(S); single plates used 25,288.

**Equipment:** EDITORIAL: Front-end software — Microsoft/Windows, Microsoft/Word. CLASSIFIED: Front-end software — Baseview/Classified. DISPLAY: Layout software — MEI; Ad make-up applications — Microsoft/Word, APP/Mac Appleshare. PRODUCTION: Pagination software — QPS 4.1, Aldus/PageMaker 6.5; Optical character recognition software — Caere/OmiPage; Typesetters — HP/AMV Printer, AG/Avantia 25 XTS, Talpan/RIP; Photomechanical plate exposure units — 1-Nu/Flip Top FT40APRNS, 1-Nu/Flip Top FT40V6UPNS; Plate processors — 1-Nat/A-340; Electronic picture desk — L/AP Leaf System; Scanners — HP/ScanJet IV, Copy Dot Scanner.  
**Pressroom:** Line 1 — 6-G; Folders — 1-G; Reels and Stands — 6-Cline. MAILROOM: Counter stackers — 2-RKW/257, G; Inserters and stuffers — 2-Mueller/227; Bundle tying machines — 3-Strapack; Other equipment — MM/Minuteman. WIRE SERVICES: News — AP; Receiving dishes — AP.

### ATHENS

#### Limestone County

'00 U.S. Census- 18,967; E&P '09 Est. 20,348  
**ABC-CZ(00):** 18,967 (HH 7,742)  
**ABC-RTZ(00):** 46,709 (HH 16,946)

#### The News-Courier

(m-tues to sat; S)

The News-Courier, 410 W. Green St., 35611; PO Box 670, Athens, AL 35612; gen tel (256) 232-2720; gen fax (256) 233-7753; adv email advertising@athensnews-courier.com; web site <http://www.athensnews-courier.com>

**Group:** Community Newspaper Holdings, Inc.  
**Circulation:** 6,411(m); 6,411(m-sat); 7,557(S); ABC Sept. 30, 2008.

**Price:** \$0.35(d); \$0.35(sat); \$1.00(S); \$52.00/yr (local), \$78.00/yr (elsewhere).

**Advertising:** Open inch rate \$10.42(m); \$10.42(m-sat); \$10.92(S).

**News Services:** AP.

**Politics:** Independent. Established: 1968.

**Advertising not accepted:** Beer and liquor.

**Special Editions:** Senior Citizens (Quarterly).

**Special Weekly Sections:** Business, Home Solutions (Tues); Farm Page, Food Day (Wed); Kid's Corner (Thur); Church Page, School Zone, TV Times (Fri).

**Magazines:** TV Tab (Fri); USA WEEKEND Magazine (S); Relish (Monthly); American Profile (Weekly).

#### CORP. MGMT./GEN. MGMT.

**Pub.** Ann Laurence

#### ADVERTISING SALES MGMT.

**Adv. Mgr., Classified** Angela McElroy

#### CIRCULATION MGMT.

**Circ. Mgr.** Connie Witt

#### NEWS EXECUTIVES

**Ed.** Kelly Kazek

**Market Information:** TMC; Zoned editions.  
**Mechanical available:** Offset; Black and 3 ROP colors; insert accepted - preprinted; page cut-offs - 22 3/4".

**Mechanical specifications:** Type page 13" x 21 1/2"; E - 6 cols, 2 1/16", 1/8" between; A - 6 cols, 2 1/16", 1/8" between; C - 8 cols, 1 3/4", 1/8" between.

**Commodity consumption:** Newsprint 44 short tons; widths 14", 28"; black ink 13,000 pounds; color ink 1,750 pounds; single pages

printed 4,784; average pages per issue 24(d), 48(S); single plates used 9,000.

**Equipment:** EDITORIAL: Front-end software — QPS/QuarkXPress 4.0, Adobe/Photoshop 5.0. CLASSIFIED: Front-end software — Baseview. DISPLAY: Ad make-up applications — Multi-Ad/Creator 4.0, Adobe/Photoshop 5.0. PRODUCTION: Optical character recognition software — Caere/OmiPage 6.0. WIRE SERVICES: News — AP.

### AUBURN

See OPELIKA

### BIRMINGHAM

#### Jefferson County

'00 U.S. Census- 242,820; E&P '09 Est. 235,090

**ABC-CZ(00):** 723,248 (HH 286,938)

**ABC-RTZ(00):** 669,519 (HH 263,891)

#### The Birmingham News

(m-mon to fri; m-sat; S)

The Birmingham News, 2201 4th Ave. N., 35203; PO Box 2553, Birmingham, AL 35202; gen tel (205) 325-2222; adv tel (205) 325-2261; ed tel (205) 325-2444; gen fax (205) 325-2283; adv fax (205) 325-3217; web site <http://www.bhamnews.com>.

**Group:** Advance Publications, Inc.

**Circulation:** 131,133(m); 134,410(m-sat); 163,825(S); ABC Sept. 30, 2008.

**Price:** \$0.35(d); \$0.35(sat); \$1.50(S); \$135.20/yr (m&S).

**Advertising:** Open inch rate \$176.75(m); \$183.60(m-fri); \$183.60(m-sat); \$198.60(S).

**Representatives:** Metro Suburbia Inc./Newhouse Newspapers.

**News Services:** AP, Independent News Service, MCT, NNS.

**Politics:** Independent. Established: 1888.

**Advertising not accepted:** NC-17 movies.

**Special Editions:** Bridal Guide (Jan); Alabama Inc., Prime Time Living (Mar); Aarons 499/Talladega, Bruno's Memorial Golf Classic, Spring Gulf Coast Guide (Apr); Summer Golf Guide (May); Prime Time Living (Jun); Fall Gulf Coast Guide, FLW Fishing Championship, Football (Aug); Best of Birmingham, EA Sports 500/Talladega, Prime Time Living (Sept); Holiday Gift Catalog (Nov); Prime Time Living (Dec).

**Special Weekly Sections:** City Scene-entertainment (Fri); Punch-TV listing (S).

**Magazines:** Parade (S).

#### CORP. MGMT./GEN. MGMT.

**Pub.** V.H. Hanson, III

**Vice Pres., Sales/Mktg.** Maggie Krost

**Dir., HR** Ellen Williams

**Credit Mgr.** Milicent Yeager

**Mgr., Purchasing** Wade Walker

**Recruitment Team Leader** Victoria Howell

**Research Mgr.** Stephanie Y. Handy

#### ADVERTISING SALES MGMT.

**Adv. Dir.** Roland Weeks

**Adv. Dir., Bus. Devel.** Carl Bates

#### MARKETING MGMT.

**Mktg. Dir.** Robert West

#### CIRCULATION MGMT.

**Circ. Vice Pres.** Troy Nidzy

**Circ. Asst. Dir.** Jim Keable

**Circ. Mgr., South Zone** Patti Bearden

**Circ. Mgr., State** Jerry Reynolds

#### NEWS EXECUTIVES

**Ed.** Thomas W. Scarritt

**Exec. Ed.** Hunter George

**Asst. Mng. Ed.** Pamela Dugan

**Asst. Mng. Ed.** Scott Walker

#### EDITORIAL MGMT.

**Art Dir.** Wayne Marshall

**Bus./Finance Ed.** Jerry Underwood

**Editorial Page Ed.** Bob Blalock

**Features Ed.** Alec Harvey

**Librarian** Ann Hobbs

**Metro Ed.** Wayne Hester

**News Ed.** Stan Diehl

**Photo Dir.** Walter Stricklin

**Spons. Ed.** Tom Arenberg

**State Ed.** Glenn Stephens

#### MIS/INTERACTIVE SERVS.

**Mgmt. Info Servs. Mgr.** David Ferrell

**Mgmt. Info Servs. Dir.** Dayne Romaine

**Data Processing Mgr.** David Ferrell

#### PRODN/OPNS.

**Prodn. Dir., Opns.** Thomas P. Grillo

**Prodn. Asst. Dir., Opns.** Mimi M. Allen

**Prodn. Mgr., Dispatch** Pam Varley

**Prodn. Mgr., Mailroom/Post Press** Shane Weeks

**Prodn. Mgr., Maintenance** Jackie Nivens

**Prodn. Mgr., Pressroom/Newsprint** Alan Pidcock

**Market Information:** TMC; Split run; Zoned editions; Operate database; Operate audiotex.  
**Mechanical available:** Offset; Black and 3 ROP colors; insert accepted - preprinted; page cut-offs - 22 3/4".

**Mechanical specifications:** Type page 12 1/2" x 21 3/4"; E - 6 cols, 2 1/16", 1/8" between; A - 6 cols, 2 1/16", 1/8" between; C - 10 cols, 1 3/8", 1/16" between.

**Commodity consumption:** Newsprint 33,500 short tons; widths 25", 31 1/4", 43 3/4", 50"; black ink 742,000 pounds; color ink 189,000 pounds; single pages printed 39,000; average pages per issue 58(d), 140(S); single plates used 183,219.

**Equipment:** EDITORIAL: Front-end software — Hi/Informix Database. CLASSIFIED: Front-end software — PPI/Classified 3.0. DISPLAY: Layout software — 4-HI/8900 Display Ad Sys, 6-HI/Workstation, 2-HI/2100; Ad make-up applications — GEAC/Advertising 8.0.1. PRODUCTION: Pagination software — Hi; Typesetters — 2-AU/3850, 1-AU/APS 6; Photomechanical plate exposure units — 2-WL/III, 1-BK; Plate processors — 2-W/38D; Electronic picture desk — L/AP Leaf Picture Desk; Scanners — 2-ECR/Autokon 1000, 1-LE/480, Kk/RSF 2035+; Automatic film processors — 2-LE/LD24, 1-LE/LD24A, 1-LE/LD24AC, 2-LE/L24L, Micro/3; Film transporters — 2-C.

**Pressroom:** Line 1 — 21-G/Metroliner w/12 half decks; Press Drives — Fin; Folders — 4-G/3-2; Pastors — 21-G; Press control system — EAE/Print 4 System; Press registration system — Micro Trak (3 per press). MAILROOM: Counter stackers — 3-HL/DUK-Carriers, 4-HL/Monitor, 6-QW/401; Inserters and stuffers — 3-S/72P; Bundle tying machines — 14-Dynaric/1500, 4-Power Strap. WIRE SERVICES: News — AP, PR Newswire; Syndicate — AP; Receiving dishes — AP.

### CLANTON

#### Chilton County

'00 U.S. Census- 7,800; E&P '09 Est. 8,155

#### Clanton Advertiser

(m-tues to sat; S)

The Clanton Advertiser, 1109 Seventh St. N., PO Box 1379, Clanton, AL 35046; gen tel (205) 755-5747; gen fax (205) 755-5857; gen email newsroom@clantonadvertiser.com; web site <http://www.clantonadvertiser.com>.

**Group:** Boone Newspapers, Inc.

**Circulation:** 5,000(m); 5,000(m-sat); 5,000(S); Est. Mar. 29, 2006.

**Price:** \$70.20; \$26.73/3mo, \$39.66/6mo.

**Advertising:** Open inch rate \$11.95(m); \$11.95(m-sat); \$11.95(S).

**Special Editions:** Bridal Guide (Jan); Progress (Feb); Life in the South (Mar); Senior Scene (Apr); Graduating Seniors (May); Peach Festival (Jun); Faces and Places (Jul); Football Preview (Aug); Home Folks (Sept); Holiday Cookbook (Oct); Christmas Songbook (Nov); Christmas Greetings (Dec).

**Magazines:** American Profile (Weekly).

#### CORP. MGMT./GEN. MGMT.

**Pres./Pub.** Michael R. Kelley

**Office Mgr.** Peggy Kelley

#### ADVERTISING SALES MGMT.

**Adv. Dir.** Zack Bates

**Adv. Mgr., Classified** Sheryl Smith

#### CIRCULATION MGMT.

**Circ. Dir.** Michelle Price

#### NEWS EXECUTIVES

**Mng. Ed.** Brent Maze

#### EDITORIAL MGMT.

**News Ed.** Scott Mims

**Sports Ed.** Stephen Dawkins

#### PRODN/OPNS.

**Prodn. Mgr.** Jimmy Ruff

**Prodn Supvr., Mailroom** Teresa Patterson

### Alabama

### I-3

**Mechanical specifications:** Type page 11 5/8" x 21 1/2"; E - 6 cols, 1 5/6", 1/8" between; A - 6 cols, 1 5/6", 1/8" between; C - 10 cols, 1 1/16", 7/64" between.

**Equipment:** PRESSROOM: Line 1 — G/Community.

### CULLMAN

#### Cullman County

'00 U.S. Census- 13,995; E&P '09 Est. 14,179

**ABC-CZ(00):** 13,995 (HH 6,059)

**ABC-RTZ(00):** 70,998 (HH 27,702)

#### The Cullman Times

(m-tues to fri; m-sat; S)

The Cullman Times, 300 4th Ave. SE, Cullman, AL 35055-3611; gen tel (256) 734-2131; gen fax (256) 737-1020; adv fax (256) 737-1006; gen email [cullmantimes.com](mailto:cullmantimes.com); adv email [ads@cullmantimes.com](mailto:ads@cullmantimes.com); ed email [news@cullmantimes.com](mailto:news@cullmantimes.com); web site <http://www.cullmantimes.com>.

**Group:** Community Newspaper Holdings, Inc.

**Circulation:** 11,086(m); 9,963(m-sat); 10,584(S); ABC Mar. 31, 2007.

**Price:** \$0.35(d); \$0.50(sat); \$1.25(S); \$9.00/mo; \$118.00/yr.

**Advertising:** Open inch rate \$14.33(m); \$14.33(m-sat); \$16.70(S).

**News Services:** AP.

**Politics:** Independent. Established: 1901 1961 (daily).

**Special Editions:** Better Business Bureau, Cullman On Sale, Prime Times (Jan); Bridal Guide, Sweetheart Tab (Feb); Profile, Relay For Life, Spring Fashion (Mar); Better Business Bureau, Consumer How To Guide, Home, Lawn & Garden, Prime Times (Apr); Classic Cullman, Graduation (May); Home Owned Business, Reader's Choice Awards (Jun); Back-To-School, Better Business Bureau, Prime Times, Summer Clearance (Jul); Football Fever, Sound Off (Aug); Fall Fashion, Hunting & Fishing, Oktoberfest (Sept); Better Business Bureau, Prime Times, Salute To Industry (Oct); Christmas Open House, Consumer How To Guide, Holiday Entertainment, Thanksgiving Day (Nov); Christmas Greetings, Holiday Gift Guide, Super Santa Ideas (Dec); Alabama Auto Guide (Monthly).

**Special Weekly Sections:** Outdoors (Tues); Best Food Day-Farm Page, Lifestyle (Wed); Business Page, Nascar Page, Opinion Page (Thur); Church Page, TV Spotlight (Fri); Business Profile Page, Used Auto Buyers Guide (Sat); Lifestyle, Opinion Page, Wedding Directory (S).

**Magazines:** USA WEEKEND Magazine (S); Relish (Monthly); American Profile (Weekly).

#### CORP. MGMT./GEN. MGMT.

**Pub.** Bill Morgan

**Bus. Mgr.** Pete Lewter

#### ADVERTISING SALES MGMT.

**Adv. Dir.** Kathy McLeroy

**Retail Adv. Mgr.** Burl Wilson

#### CIRCULATION MGMT.

**Circ. Mgr.** Sam Mazzara

#### NEWS EXECUTIVES

**Mng. Ed.** Derek Price

#### EDITORIAL MGMT.

**Lifestyles Ed.** Tiffany Green

**News Ed.** Amanda Shavers-Davies

**Sports Ed.** Justin Graves

**Market Information:** TMC; ADS.

**Mechanical available:** Offset; Black and 3 ROP colors; insert accepted - preprinted, hi-fi; page cut-offs - 22 3/4".

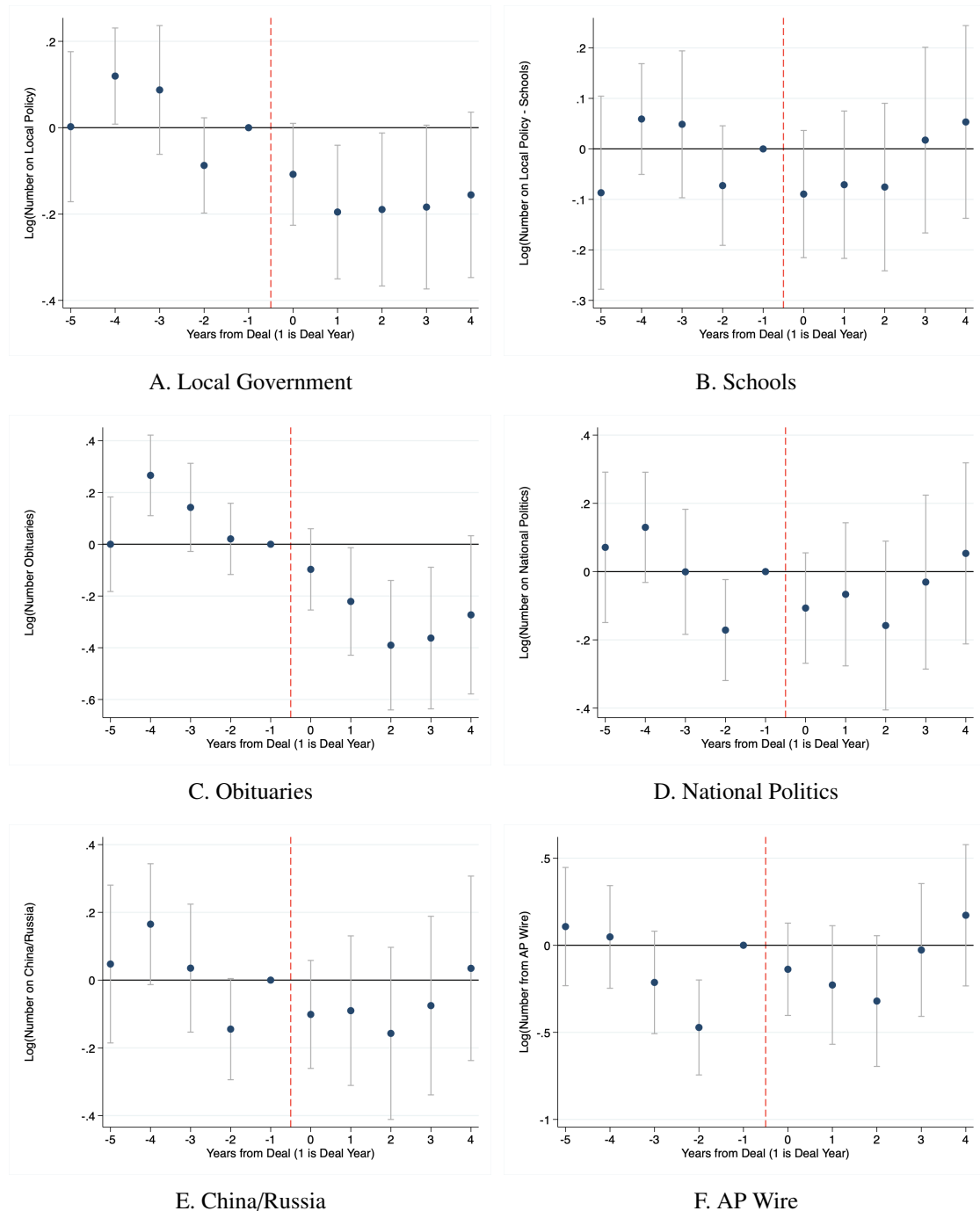
**Mechanical specifications:** Type page 12" x 21 1/2"; E - 6 cols, 1 7/8", 1/8" between; A - 6 cols, 1 7/8", 1/8" between; C - 8 cols, 1 1/3", 1/8" between.

**Commodity consumption:** Newsprint 1,189 short tons; widths 12 1/2", 25"; black ink 16,000 pounds; color ink 2,150 pounds; single pages printed 7,500; average pages per issue 20(d), 10(sat), 60(S); single plates used 11,000.

**Equipment:** EDITORIAL: Front-end software — Microsoft/Word 6.1, APP/Mac Write Now 4.0, QPS/QuarkXPress. CLASSIFIED: Front-end software — 5-Baseview/Ad Manager Pro, 2-Baseview/Class Flow. DISPLAY: Layout software — 6-APP/Mac. PRODUCTION: Typesetters — Pre Press/Panther Plus Imagesetter; Digital platesetting (CTP) — Graham Subtractive, GNS-28; Photomechanical plate exposure units — 1-Nu, Nu/FlipTop FT40APRNS; Plate proces-

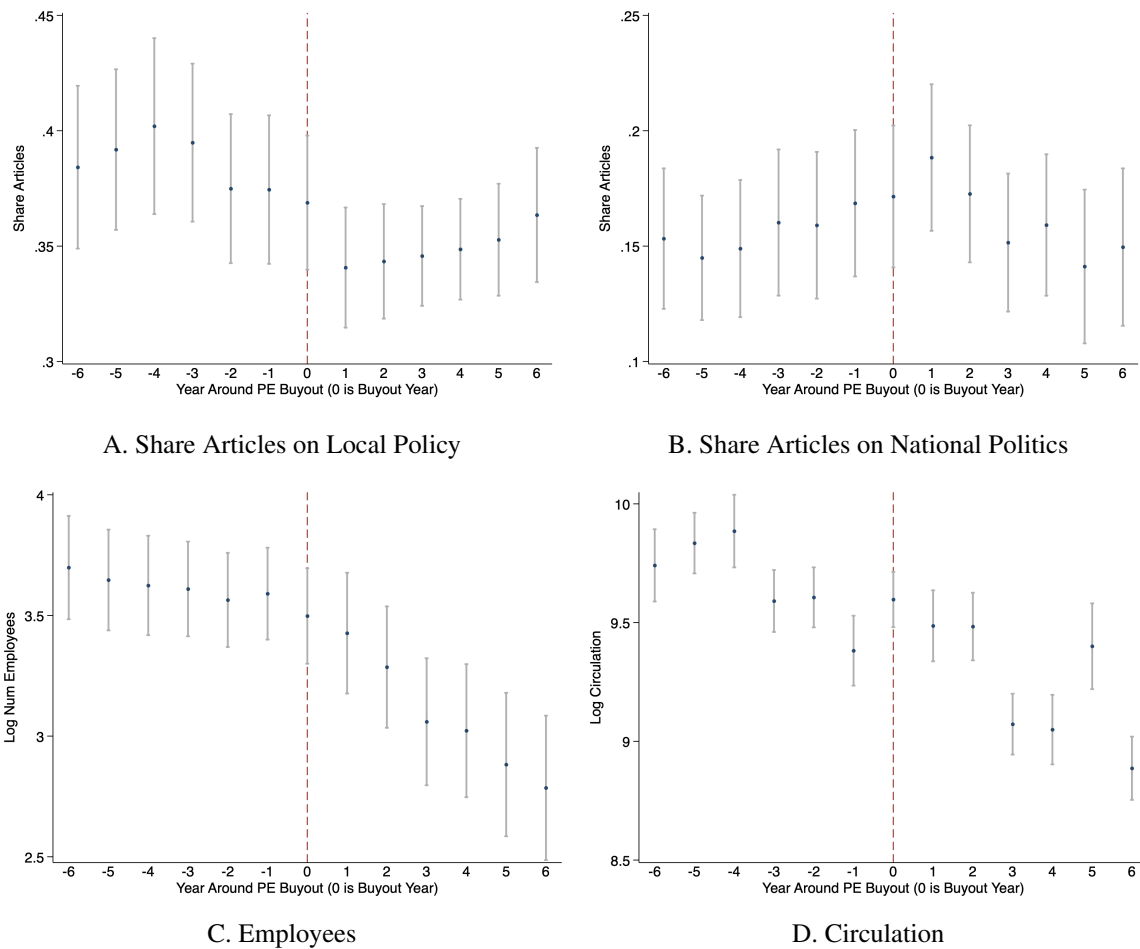
**Note:** This figure shows a page from the digitized E&P Yearbooks. This representative page concerns newspapers in Alabama in 2009.

**Figure A.2: Difference-in-differences Event Study of Private Equity Ownership and Number of Articles by Content**



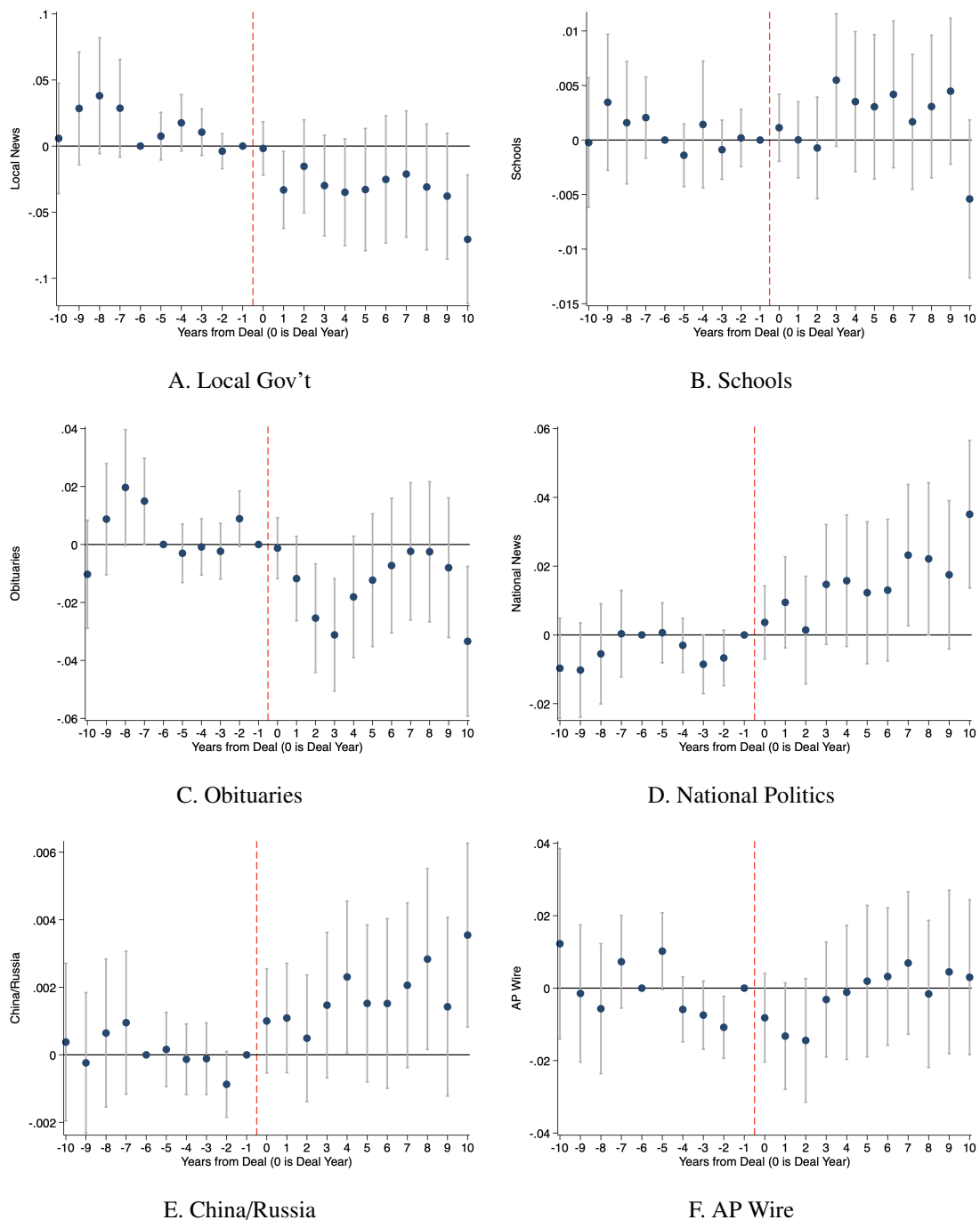
**Note:** This figure presents the differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal (−1). The regression includes year and newspaper fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. Local policy articles (Panel A) include any of the following words: city council, city hall, mayor, state senate, state legislature, zoning, planning board, board of education, school board, school district, municipal, sheriff, police, local policy. Schools (Panel B) report the share of articles that have any mention of: board of education, school board, school district. Obituaries (Panel C) include any of the following words: died, finally at peace, or passed away. China/Russia articles (Panel E) include any mentions of China or Russia. AP Wire (Panel F) refers to syndicated articles from the Associated Press. The final graph shows the total number of articles. For parsimony, we show the most important outcomes in our analysis. 95% confidence intervals shown.

Figure A.3: Raw Mean Event Study Private Equity Ownership for Key Outcomes



**Note:** This figure presents the event studies around the time a newspaper experiences a private equity buyout. The graph shows raw means of the dependent variable. For parsimony, we show only key outcomes, though results are similar to the main findings for other outcomes. The sample is restricted to newspapers acquired by private equity firms. 95% confidence intervals shown.

**Figure A.4: Difference-in-differences Event Study of Private Equity Ownership and Share of Articles by Content (longer time series)**



**Note:** This figure presents the differences-in-differences event studies around the time a newspaper experiences a private equity buyout. We leave out the year before the deal (−1). The regression includes year, newspaper, and deal fixed effects, as well as dummies for each year around the buyout (34 total dummies). Only the coefficients for the years immediately around the buyout are shown in the graph. In each figure, the dependent variable is the log number of articles with particular element of content, defined as in Figure A.2. The final graph shows the total number of articles. For parsimony, we show the most important outcomes in our analysis. 95% confidence intervals shown.



Table A.1: Main Results with Deal Fixed Effects

Panel A: Article Content

Dependent Variable:	Share of Articles on		Number of Articles on	
	Local (1)	National (2)	Local (3)	National (4)
Post deal X PE	-0.030** (0.014)	0.013** (0.007)	-0.226*** (0.053)	-0.120 (0.082)
Observations	10952	10952	10952	10952
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Deal FE	Yes	Yes	Yes	Yes
Outcome Mean	0.380	0.157	8.046	6.972

Panel B: Employees and Operations

Dependent Variable:	Employees (1)	Reporters (2)	Closed (3)	Print Circ (4)	Digital Circ (5)
Post deal X PE	-0.068* (0.039)	-0.071* (0.040)	-0.114*** (0.019)	-0.006*** (0.002)	0.379* (0.207)
Observations	12378	12378	22767	26707	3250
Year FE	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes
Deal FE	Yes	Yes	Yes	Yes	Yes
Outcome Mean	2.528	1.190	9.428	1.226	5.084

Panel C: Local Election Participation

Election Type: Dependent Variable:	County Council		Mayor	
	Total Votes (1)	Turnout (%) (2)	Total Votes (3)	Turnout (%) (4)
Post deal X PE	-2.956* (1.729)	-0.805** (0.402)	-1.640 (4.107)	-0.214 (0.295)
Observations	2124	2122	1960	1960
R <sup>2</sup>	0.299	0.077	0.155	0.035
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Deal FE	Yes	Yes	Yes	Yes
Outcome Mean	32.283	8.745	26.111	4.637

**Note:** This table shows the main results but including private equity deal fixed effects. Otherwise, models are as described in the main tables. Standard errors are clustered by newspaper. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table A.2: **Robustness Tests of Private Equity Ownership and Article Content**

Panel A: Fractional Share GLM						
Dep Var:	Local Policy			China/Russia	Natl Govt	AP Wire
	Govt	Schools	Obituaries			
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-0.182*** (0.068)	0.036 (0.043)	-0.110* (0.064)	0.087* (0.052)	0.106* (0.058)	-0.177 (0.140)
Observations	10952	10952	10952	10952	10952	10952
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	0.332	0.049	0.139	0.017	0.157	0.050

Panel B: Sample with Employment Data						
Dep Var:	Local Policy			China/Russia	Natl Govt	AP Wire
	Govt	Schools	Obituaries			
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-0.040** (0.016)	0.001 (0.002)	-0.013 (0.008)	0.001 (0.001)	0.009 (0.007)	-0.009 (0.007)
Observations	7865	7865	7865	7865	7865	7865
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	0.334	0.048	0.134	0.018	0.159	0.055

**Note:** This table shows the effect of private equity buyouts on the share (Panel A) of a newspaper's total articles that fall into a particular topic area (a single article can cover multiple topics). Panel A restricts the sample to that for which we observe employment outcomes. The model in Panel B is fractional logit GLM. Local policy "government" articles (column 1) include any of the following words: city council, city hall, mayor, state senate, state legislature, zoning, or planning board. Local policy "school" articles (column 2) include: board of education, school board, or school district. Obituaries (column 3) are articles including any of the following words: died, finally at peace, or passed away. China/Russia (column 4) articles include either the words China or Russia. National government articles (column 5) include any of the following words: Bush, Congress, Obama, Trump, White House, democrat, or republican. AP Wire (column 6) refers to syndicated articles from the Associated Press. Standard errors are clustered by newspaper. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table A.3: **Private Equity Ownership and Employees, Operations in Levels**

Panel A: Employment					
Dependent Variable:	Employees	Reporters	Reporters No Interns	Editors	Interns & Freelancers
	(1)	(2)	(3)	(4)	(5)
Post deal X PE	-4.884*** (1.639)	-0.763*** (0.281)	-0.726*** (0.271)	-0.883** (0.376)	-0.025 (0.132)
Observations	16452	16452	16452	16452	16452
$R^2$	0.960	0.930	0.928	0.923	0.829
Year FE	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes
Outcome Mean	2.638	1.269	1.226	1.794	0.585

Panel B: Circulation & Advertising					
Dependent Variable:	Circulation			Advertising Rate	
	No Stale (1)	All (2)	Digital (3)	No Stale (4)	All (5)
Post deal X PE	-3787.656*** (958.889)	-4013.069*** (830.142)	4966.516 (11871.322)	-0.326 (3.240)	-1.716 (2.494)
Observations	14931	22764	3369	10470	22152
$R^2$	0.933	0.930	0.495	0.788	0.848
Year FE	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes
Outcome Mean	9.781	9.427	5.261	3.200	3.183

**Note:** This table shows the effect of private equity buyouts on the level number of employees, rather than logs as in our main specification. Private equity is defined as both conventional private equity funds as well as hedge funds. The sample is restricted to newspaper-years with at least one reporter. Employee data are from LinkedIn, and occupations are derived from job titles. Standard errors are clustered by newspaper. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

**Table A.4: Robustness Tests of Private Equity Ownership and Political Outcomes**

Panel A: Local Participation in Sheriff Elections

Fixed Effects:	Newspaper			County		
Dependent Variable:	Total Votes	Log Total Votes	Turnout (%)	Total Votes	Log Total Votes	Turnout (%)
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-3.305 (2.531)	-0.017 (0.052)	-0.208 (1.338)	-1.953 (2.148)	-0.003 (0.044)	-0.160 (1.180)
Observations	489	489	489	461	461	461
$R^2$	0.263	0.466	0.537	0.983	0.986	0.835
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	No	No	No	Yes	Yes	Yes
Outcome Mean	47.368	10.253	29.964	47.467	10.254	29.954

Panel B: Local Election Participation with County Fixed Effects

Election Type:	County Council			Mayor		
Dependent Variable:	Total Votes	Log Total Votes	Turnout (%)	Total Votes	Log Total Votes	Turnout (%)
	(1)	(2)	(3)	(4)	(5)	(6)
Post deal X PE	-1.492 (0.914)	-0.065 (0.040)	-0.401* (0.208)	-1.980 (2.402)	-0.125* (0.064)	-0.220 (0.178)
Observations	2112	2112	2110	1947	1947	1947
$R^2$	0.781	0.838	0.830	0.481	0.770	0.651
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	32.364	9.499	8.749	26.188	8.850	4.628

**Note:** This table shows the relationship between private equity ownership and political outcomes. In Panel A, we consider sheriff elections, where the data are much sparser. The first three columns use the main specification with newspaper fixed effects, while the latter three use county fixed effects. In Panel B, we consider two types of local elections: county legislature (columns 1–3) and mayoral (columns 4–6) elections. Total votes are in thousands. Turnout is defined as total votes divided by the local population (based on U.S. Census data). The specification includes county fixed effects. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.

Table A.5: **Robustness Tests of Heterogeneity**

Panel A: Employment Effects by Distribution

Sample:	< Median Circulation	≥ Median Circulation	< Median Local News Share	≥ Median Local News Share
	(1)	(2)	(3)	(4)
Post deal X PE	-0.092 (0.063)	-0.040 (0.046)	-0.137** (0.055)	-0.063 (0.056)
Observations	5595	6731	3602	3470
R <sup>2</sup>	0.279	0.144	0.168	0.220
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	1.519	3.356	3.159	2.167

Panel B: Local News Content Changes Effects by Distribution

Sample:	< Median Circulation	≥ Median Circulation	< Median Local News Share	≥ Median Local News Share
	(1)	(2)	(3)	(4)
Post deal X PE	-0.316*** (0.082)	-0.194*** (0.070)	-0.158** (0.068)	-0.348*** (0.087)
Observations	5456	5485	5473	5479
R <sup>2</sup>	0.693	0.644	0.731	0.735
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	7.305	8.481	8.269	7.520

**Note:** This table shows the impact of private equity ownership and employment and news outcomes across the distribution. In Panel A, we consider employment outcomes and in Panel B we examine changes in local news content. We estimate the average circulation for newspapers over their life, and divide the sample into below and above median circulation. Similarly, we measure the ratio of news items which are local compared with national news, and compare newspapers which are below and above median in this local news ratio across their life. \*\*\* denotes p-value < .01, \*\* denotes p-value < .05, and \* denotes p-value < .1.