

Local Journalism under Private Equity Ownership

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UNSW

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Another PE Paper? Newspapers are Different

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.”

- ▶ local, daily newspapers key source of local gov't news and investigative journalism

Media and news environment is changing in our sample period (2000-2019)

- ▶ Craigslist cannibalizing classified ads (*revenue sources / competition*)
- ▶ Internet for information acquisition (*news delivery*)
- ▶ “news” from social networks (*competition*)

Does Private Equity Ownership Spell Death for Local News, or A Second Chance?



Saving the Free Press From Private Equity

Navigating the digital transition is a huge challenge for newspapers. Absentee ownership by private equity predators makes it all but impossible.

BY ROBERT KUTTNER & HILDY ZENGER DECEMBER 27, 2017

The Desperate Last Days of Local News

From billionaire dilettantes to pension funds, profit-seeking just isn't compatible with the media's core democratic functions.

Does Private Equity Ownership Spell Death for Local News, or A Second Chance?



“Michael Bush led the creation of Civitas Media through the consolidation of Heartland Publications, Ohio Community Media, Impressions Media and certain newspapers from Freedom Central. Under his leadership, the 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.”

PE's Operational Changes and Financial Engineering

Such changes' impacts likely different for local newspapers:

- ▶ family ownership and non-pecuniary benefits common
- ▶ industry undergoing several disruptions

How PE could theoretically add value:

- ▶ extract value and then shut down newspapers, leading to higher closure rates
- ▶ use their plentiful capital to invest in rejuvenating newspapers (e.g., PE in manuf.)
- ▶ Operational changes to incorporate new business models (e.g., internet)
- ▶ make newspapers more viable economically by shifting news production...with implications for democracy.

PE Ownership Associated with Costs to Local News, but Improved Survival + Digital Circulation

- ▶ **Research Question:** How does PE ownership impact newspaper operations, local news coverage, and community outcomes?

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 - ▶ Local political awareness and turnout ↓

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Nuanced impacts of PE—cost-cutting hurts local news production with consequences for stakeholders, but improve digital reach and newspaper viability

1. Data

Assemble Novel Comprehensive Newspaper Data



We Digitize Editor & Publisher Census Books through 2001

U.S. Daily Newspapers

Wire Ed. Melissa Cospier
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/OmniPage; Typesetters — HP/4MV Printer, AG/Avantra 25 XTS, Taipan/RIP; Photomechanical plate exposure units — 1-Nu/Flip Top FT40APRNS, 1-Nu/Flip Top FT40V6UPNS; Plate processors — 1-Nat/A-340; Electronic picture desk — Li/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;

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/OmniPage 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(OO): 723,248 (HH 286,938)

ABC-RTZ(OO): 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 Suburban Inc./Newhouse

Mgmt. Info Servs. Dir.
Data Processing Mgr.

PRODN./OPNS.

Prodn. Dir., Opns.
Prodn. Asst. Dir., Opns.
Prodn. Mgr., Dispatch
Prodn. Mgr., Mailroom/Post Press
Prodn. Mgr., Maintenance
Prodn. Mgr., Pressroom/Newsprint

Dayne Romaine
David Ferrell

Thomas P. Grillo
Mimi M. Allen
Pam Yarley
Shane Weeks
Jackie Nivens
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 8.01. PRODUCTION: Pagination software — HI; Typesetters — 2-AU/3850, 1-AU/APS 6; Photomechanical plate exposure units — 2-WL/III, 1-BKY; Plate processors — 2-W/38D; Electronic picture desk — Li/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/LD24L, Micro/3; Film transporters — 2-C.

PRESSROOM: Line 1 — 21-G/Metroliner w/12 half decks; Press Drives — Fin: Folders —

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(OO): 13,995 (HH 6,059)

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

The Cullman Times

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

The Cullman Times; 300 4th Ave. SE, Cullman, AL 35055-3511; gen tel (256) 734-2131; gen fax (256) 737-1020; adv fax (256) 737-1006; gen email cullman@cullmantimes.com; adv email ads@cullmantimes.com; ed email 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);

We Generate Novel Comprehensive Data on Newspaper Content, Ownership, and Political Outcomes

Summary Statistics

► Editor & Publisher:

- 1,610 daily newspapers, comprehensive nationwide sample
- Circulation (supplemented by Alliance for Audited Media data)
- Ownership and parent group information (hand classified into type)
- PE deal information validated by hand checking deals, PitchBook

► NewsLibrary:

- Full newspaper text classified into local, national content for 45% of newspapers by circulation

Scraping LinkedIn

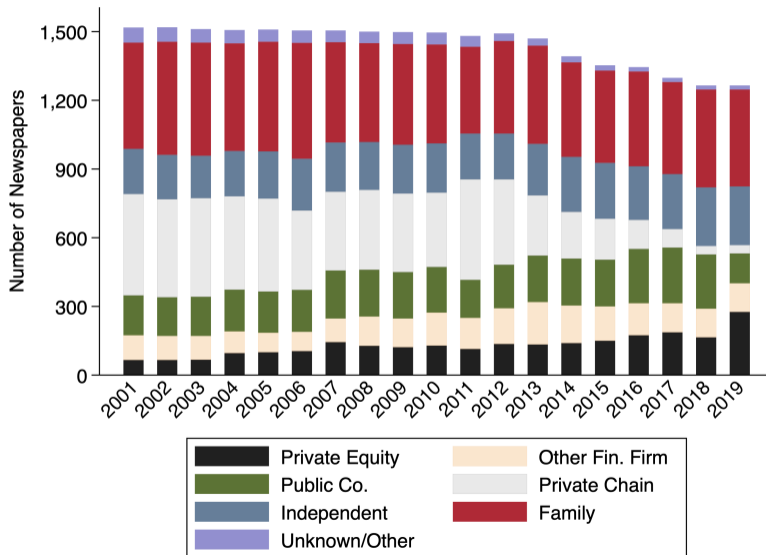
► LinkedIn:

- Employment outcomes for newspapers at employee-level

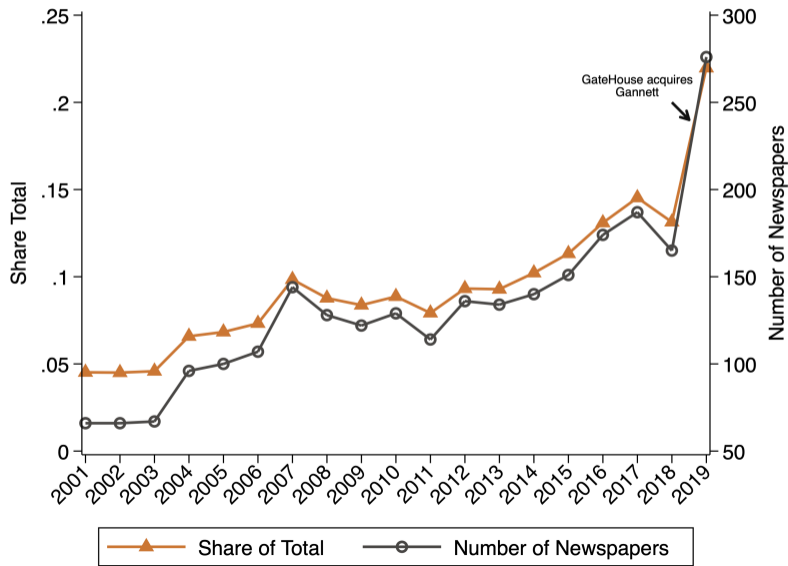
► Political Data:

- Cooperative Congressional Election Study (CCES) from 2006–2019
- Local political election (sheriff, county council, mayor) race information

We Measure Firm Categorization for Entire Newspaper Industry 2001-2019

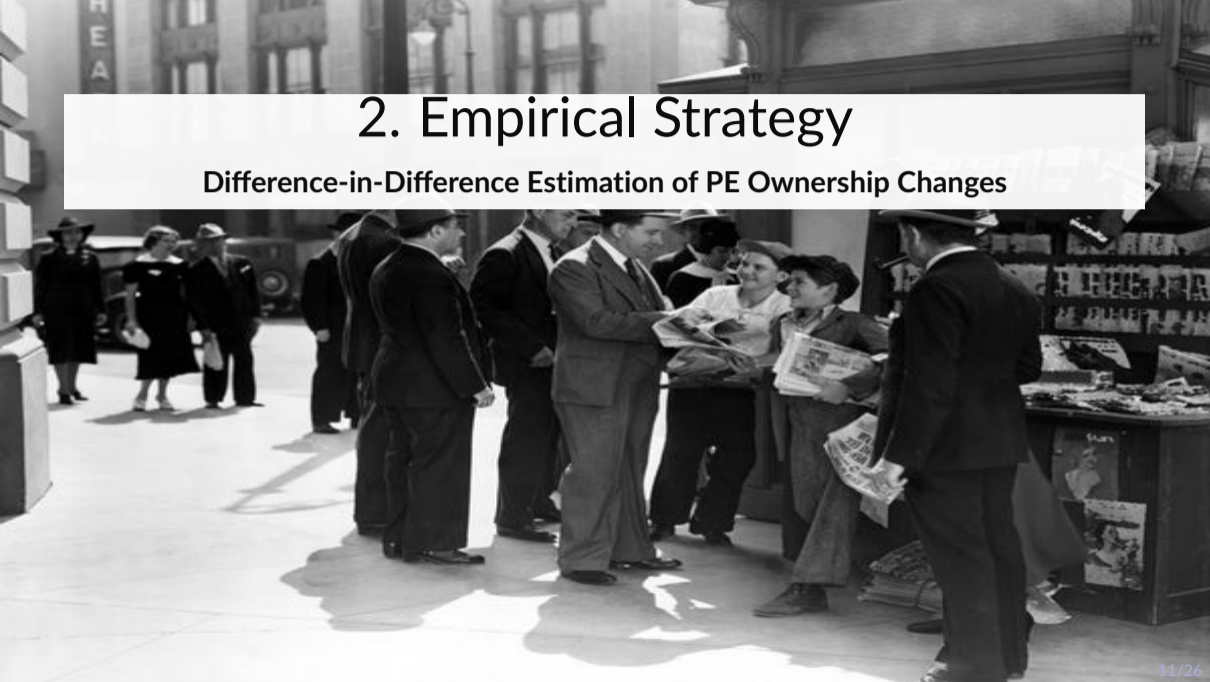


Private Equity Has Seen Growing Ownership in Context of Declining Industry



2. Empirical Strategy

Difference-in-Difference Estimation of PE Ownership Changes



Diff-in-Diff Specification

DiD:

$$y_{it} = \alpha_t + \alpha_i + \beta PE_{it} + \varepsilon_{it}$$

Event Study:

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

- ▶ y_{it} = Circulation, local news content, employment, survival in year t for newspaper i
- ▶ α_t = year fixed effect
- ▶ α_i = newspaper fixed effect
- ▶ T_i = deal year, after which $PE_{it} = 1$
- ▶ β_s = Impact of year relative to deal on outcome
- ▶ **Timing of deal assumed conditionally exogenous:** Selection

$$E(\varepsilon_{it} | x_{it}, \alpha_t, \alpha_i) = 0$$

3. Results

Document Impacts of Digital Investment and Cost-Cutting



Buyouts Increases Digital Subscription (Reflecting Digital Investments)

Event Study

Buyouts increase digital subscriptions by **43%** = $(\exp(0.36) - 1) \times 100$

Dependent Variable:	Log Circulation			
	No Stale	All	Digital	All
Post deal \times PE	-0.084*** (0.016)	-0.118*** (0.019)	0.363* (0.206)	-0.066*** (0.019)
Observations	15039	22792	3292	3419
R^2	0.568	0.426	0.101	0.754
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	9.775	9.427	5.033	10.101

Survival Rates Also Increase

Buyouts Lower Failure Rate by **33%** = $\frac{0.004}{0.012}$

Dependent Variable:	Any Closure	Shut Down	Merged & New Name	Became Weekly
Post deal \times PE	-0.004** (0.002)	-0.002** (0.001)	0.001 (0.001)	-0.003** (0.001)
Observations	25487	25495	25492	25492
R^2	0.023	0.008	0.008	0.015
Year FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Outcome Mean	0.012	0.004	0.003	0.005

Survival Rates Also Increase

Buyouts Lower Failure Rate by **33%** = $\frac{0.004}{0.012}$

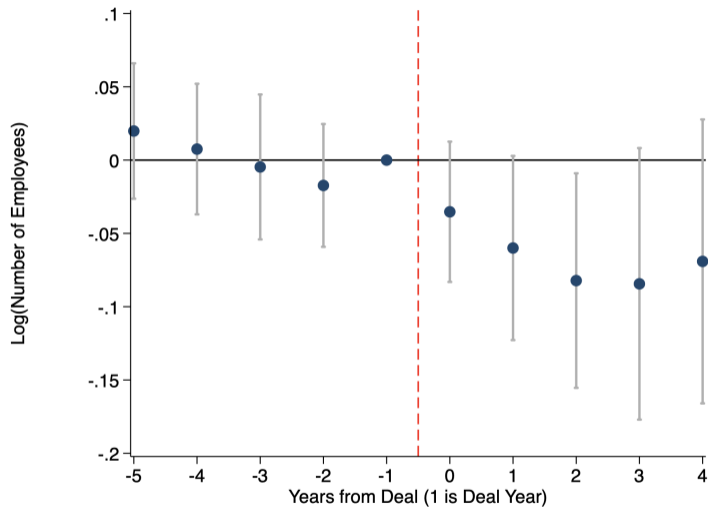
Dependent Variable:	Any Closure	Shut Down	Merged & New Name	Became Weekly
Post deal \times PE	-0.004** (0.002)	-0.002** (0.001)	0.001 (0.001)	-0.003** (0.001)
Observations	25487	25495	25492	25492
R^2	0.023	0.008	0.008	0.015
Year FE	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Outcome Mean	0.012	0.004	0.003	0.005

However, PE Buyouts → Declining Employment

Reporters

Editors

Interns/Freelancers

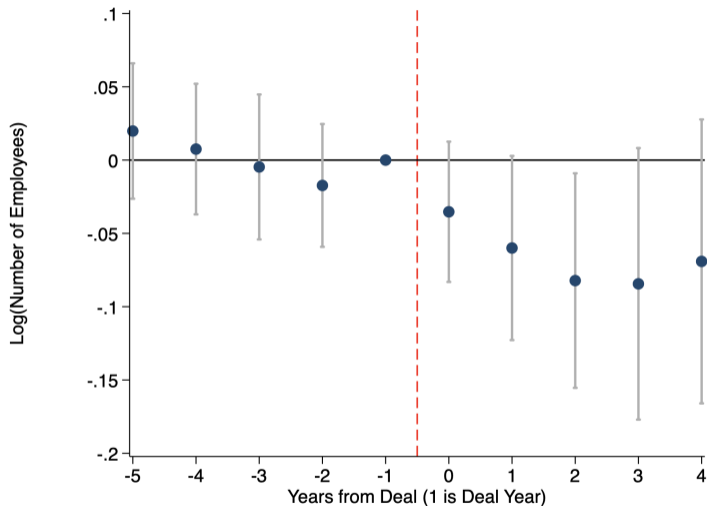


However, PE Buyouts → Declining Employment

Reporters

Editors

Interns/Freelancers



8% decline in employees by year 3 after buyout

Employment Decline

7% in total employees; less effect on casual workforce. Data from LinkedIn.

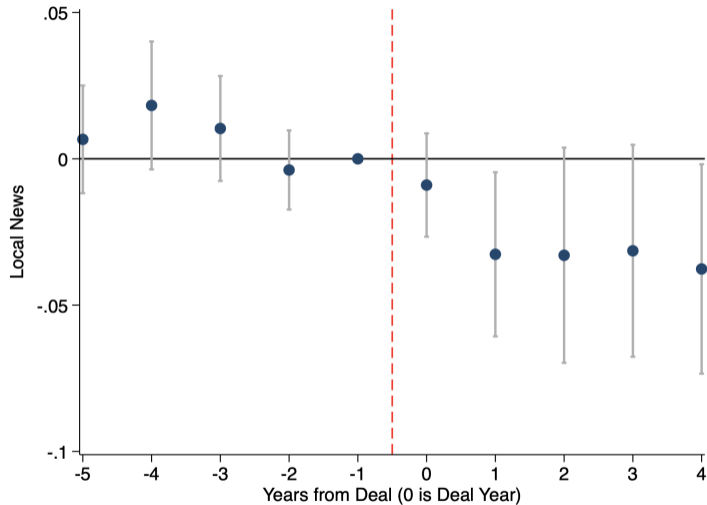
Dependent Variable:	Reporters	Editors	Interns & Freelancers	Employees
	(1)	(2)	(3)	(4)
Post deal \times PE	-0.076* (0.040)	-0.093*** (0.035)	-0.004 (0.041)	-0.074** (0.038)
Observations	12641	12641	12641	12641
R^2	0.092	0.045	0.130	0.181
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	1.188	1.717	0.518	2.531

Local News Content Declines

Keywords

Schools

Obituaries

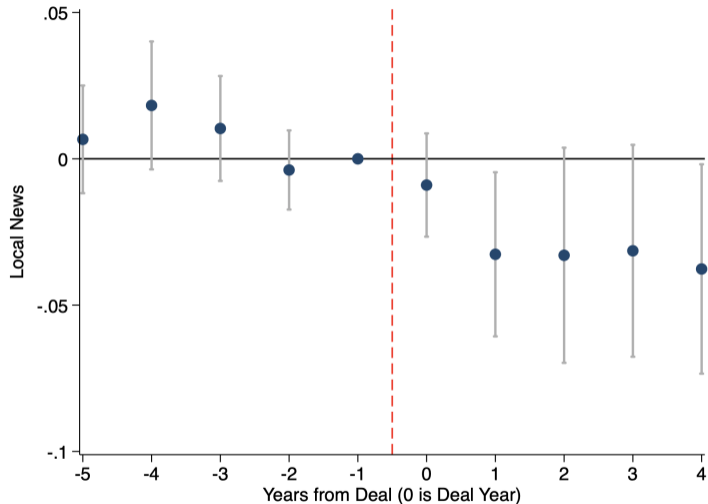


Local News Content Declines

Keywords

Schools

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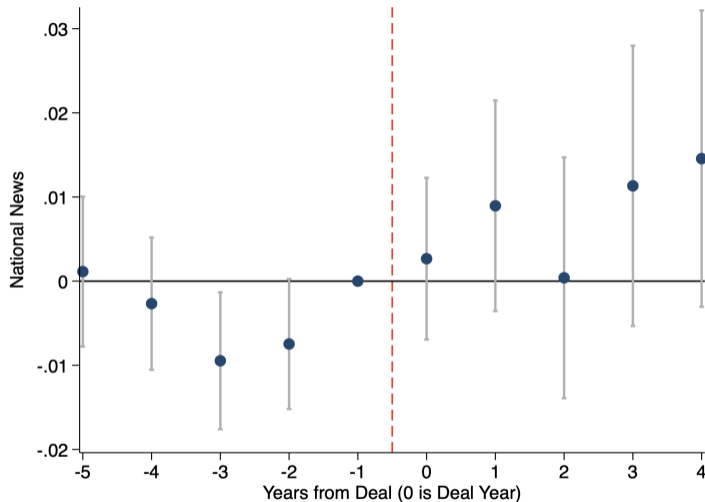


Local news: 1) Local Government, 2) Schools, 3) Obituaries

While National News Content Increases

China/Russia

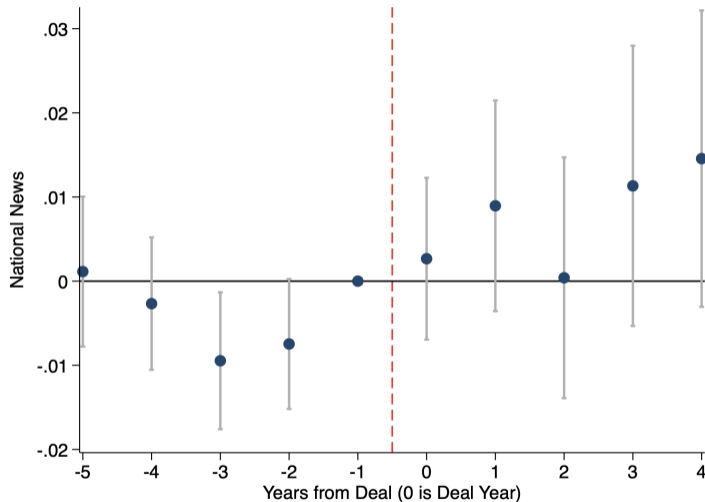
AP Wire



While National News Content Increases

China/Russia

AP Wire



National news: Bush, Congress, Obama, Trump, White House, Democrat, Republican

Decline of Local News with Buyouts Article Counts

Dependent Variable:	Local Government	Obituaries	National Politics	AP Wire
	(1)	(2)	(3)	(4)
Post deal \times PE	-0.036** (0.014)	-0.013* (0.007)	0.013** (0.007)	-0.008 (0.007)
Observations	10952	10952	10952	10952
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.332	0.139	0.157	0.050

Decline of Local News with Buyouts

Article Counts

Dependent Variable:	Local Government	Obituaries	National Politics	AP Wire
	(1)	(2)	(3)	(4)
Post deal \times PE	-0.036** (0.014)	-0.013* (0.007)	0.013** (0.007)	-0.008 (0.007)
Observations	10952	10952	10952	10952
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.332	0.139	0.157	0.050

10.8% decrease in local government news relative to mean; increase in national news.

Citizen Engagement with Local Politics Declines

Dependent Variable:	High News Interest	No Opinion Of			
		House Rep	Senator	Governor	President
PE Paper in County	-0.013 (0.009)	0.020*** (0.008)	0.004 (0.008)	0.005 (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

Citizen Engagement with Local Politics Declines

Dependent Variable:	High News Interest	No Opinion Of			
		House Rep	Senator	Governor	President
PE Paper in County	-0.013 (0.009)	0.020*** (0.008)	0.004 (0.008)	0.005 (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

11% increase in “No Opinion” of local representatives; no impact on national politicians

Citizen Engagement with Local Politics Declines

Election Type:	County Council			Mayor		
Dependent Variable:	Total Votes	Log Votes	Turnout (%)	Total Votes	Log Votes	Turnout (%)
Post deal \times PE	-3.005* (1.730)	-0.133* (0.079)	-0.821** (0.407)	-1.545 (4.091)	-0.175* (0.098)	-0.198 (0.293)
Observations	2124	2124	2122	1960	1960	1960
R^2	0.299	0.196	0.076	0.156	0.085	0.035
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	32.283	9.492	8.745	26.090	8.846	4.630

Citizen Engagement with Local Politics Declines

Election Type:	County Council			Mayor		
Dependent Variable:	Total Votes	Log Votes	Turnout (%)	Total Votes	Log Votes	Turnout (%)
Post deal \times PE	-3.005* (1.730)	-0.133* (0.079)	-0.821** (0.407)	-1.545 (4.091)	-0.175* (0.098)	-0.198 (0.293)
Observations	2124	2124	2122	1960	1960	1960
R^2	0.299	0.196	0.076	0.156	0.085	0.035
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	32.283	9.492	8.745	26.090	8.846	4.630

9.3% decrease in county council turnout

But What About...

- ▶ Other Ownership Types?
- ▶ A Placebo Test?
- ▶ Deal Fixed Effects?

Our Work Extends Literatures Spanning Finance, Media Economics,

- ▶ **Media and Politics:** Gao et al. (2019), Abernathy (2018), Snyder and Strömberg (2010), Gentzkow et al. (2011), Ferraz and Finan (2008), Strömberg (2004), Dyck et al. (2008), DellaVigna and Kaplan (2007), Enikolopov et al. (2011), Gerber et al. (2009), DellaVigna et al. (2014), Fan (2013)

We contribute to this literature by highlighting an important supply-side force of PE ownership which impacts news content and political outcomes

- ▶ **Social Media:** Levy (2020), Vosoughi et al. (2018), Allcott and Gentzkow (2017), Gentzkow (2006), Falck et al. (2014), Gavazza et al. (2019), Chen and Yang (2019), Allcott et al. (2020), Qin et al. (2019), Enikolopov et al. (2020), Bakshy et al. (2015)

We contribute to this literature by emphasizing that traditional news sources are not completely substitutable by social media

- ▶ **Private Equity:** Davis et al. (2014), Agrawal and Tambe (2016), Bernstein and Sheen (2016), Fracassi et al. (2020), Eaton, Howell and Yannelis (2019), Gupta et al. (2020)

We contribute to this literature by emphasizing that traditional news sources are not completely substitutable by social media

We Document Nuanced Impacts of Private Equity Buyouts on Newspapers

- ▶ Positive Impacts:
 - ▶ Digital Subscription Increases, possibly reflecting greater digital investment
 - ▶ Survival Rate Increases
- ▶ Negative Impacts:
 - ▶ Cost-saving and consolidation measures result in layoffs of journalists, particularly those that specialize in local news content
 - ▶ Local news coverage worsens relative to more easily scalable national news
 - ▶ These effects spill over into political knowledge and engagement

Thanks!

Dependent Variable: Private Equity $t + 1$

	(1)	(2)	(3)	(4)	(5)	(6)
Circulation t-1	-0.008*** (0.002)	-0.004* (0.002)	-0.003 (0.002)	-0.028*** (0.005)	-0.005** (0.002)	-0.009*** (0.003)
Circ. audit t-1	-0.004 (0.002)	0.001 (0.003)	0.001 (0.003)	-0.003 (0.003)	0.000 (.)	-0.005 (0.004)
Log(Advertising Rate)	0.010*** (0.002)	0.006*** (0.002)	0.006*** (0.002)	-0.003 (0.004)	0.005** (0.002)	0.011*** (0.003)
Public Co.	0.033*** (0.004)	0.032*** (0.004)	0.032*** (0.004)	0.006 (0.007)	0.021*** (0.003)	0.032*** (0.005)
Private Chain	0.013*** (0.002)	0.016*** (0.002)	0.016*** (0.002)	0.011*** (0.003)	0.015*** (0.003)	0.017*** (0.003)
Independent	0.003*** (0.001)	0.002* (0.001)	0.002 (0.002)	0.000 (0.007)	0.005** (0.002)	0.003* (0.001)
Family	0.017*** (0.002)	0.016*** (0.002)	0.016*** (0.002)	0.007 (0.005)	0.019*** (0.002)	0.017*** (0.002)
Unknown/Other	0.015 (0.011)	0.013 (0.012)	0.019 (0.013)	0.002 (0.010)	0.002** (0.001)	0.020 (0.015)
Log(Number of Employees)						-0.000 (0.001)
Observations	14295	14295	14295	14295	9563	9012
R^2	0.011	0.041	0.048	0.054	0.004	0.010
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	0.015	0.015

Local News:

1. Local Government: City Council, City Hall, Mayor, State Senate, State Legislature, Zoning, Planning Board, Board of Education, School Board, School District, Municipal, Sheriff, Police, Local Policy
2. Schools: Board of Education, School Board, School District
3. Obituaries: Died, Finally at peace, or Passed away

National News:

1. Bush, Congress, Obama, Trump, White House, Democrat, Republican

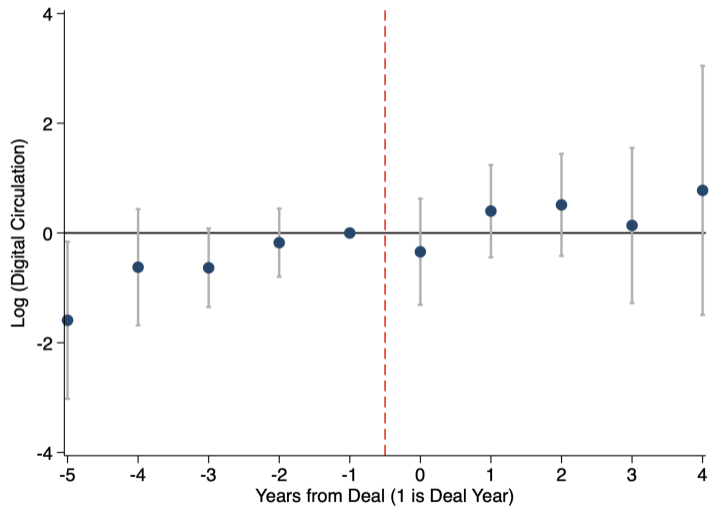
Summary Statistics [Back](#)

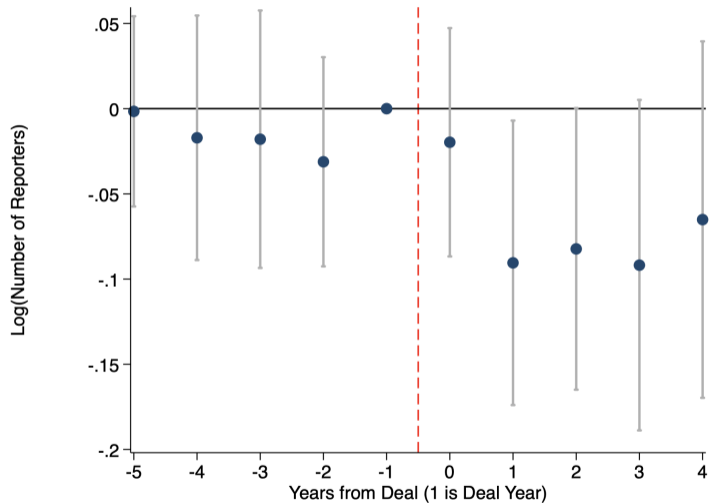
	All		Non-Private Equity		Pre-Private Equity		Post-Private Equity	
	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Share Articles:								
Local Policy	10748	0.38 (0.18)	7443	0.39 (0.19)	1087	0.40 (0.21)	2028	0.33 (0.15)
Local Policy - Govt	10748	0.32 (0.17)	7443	0.33 (0.18)	1087	0.34 (0.20)	2028	0.27 (0.13)
Local Policy - Schools	10748	0.05 (0.03)	7443	0.05 (0.03)	1087	0.05 (0.03)	2028	0.05 (0.03)
Obituary	10748	0.14 (0.10)	7443	0.14 (0.10)	1087	0.16 (0.10)	2028	0.13 (0.09)
China/Russia	10748	0.02 (0.01)	7443	0.02 (0.01)	1087	0.01 (0.01)	2028	0.02 (0.02)
Natl Govt	10748	0.16 (0.17)	7443	0.16 (0.16)	1087	0.15 (0.17)	2028	0.16 (0.19)
AP Wire	10748	0.05 (0.08)	7443	0.05 (0.09)	1087	0.06 (0.09)	2028	0.03 (0.05)
Number Articles:								
All	10748	14150 (14176)	7443	15398 (15044)	1087	15852 (13742)	2028	8759 (9131)
Local Policy	10748	4994 (5258)	7443	5484 (5512)	1087	5852 (5448)	2028	2732 (3144)
Local Policy - Govt	10748	4249 (4579)	7443	4678 (4792)	1087	4939 (4783)	2028	2300 (2759)
Local Policy - Schools	10748	588 (599)	7443	642 (640)	1087	668 (546)	2028	349 (361)
Obituary	10748	1860 (2244)	7443	2007 (2331)	1087	2298 (2349)	2028	1121 (1644)
China/Russia	10748	276 (387)	7443	312 (423)	1087	262 (326)	2028	157 (228)
Natl Govt	10748	2278 (2922)	7443	2535 (3196)	1087	2193 (2242)	2028	1408 (1888)
AP Wire	10748	1101 (2475)	7443	1255 (2659)	1087	1350 (2772)	2028	373 (852)
Employees								
Reporters	13377	36.18 (59.82)	11080	36.77 (61.01)	885	45.11 (60.83)	1369	25.58 (47.10)
Reporters No Interns	13377	5.42 (8.68)	11080	5.55 (8.90)	885	6.36 (8.40)	1369	3.77 (6.70)
Editors	13377	5.05 (8.13)	11080	5.18 (8.34)	885	5.90 (7.88)	1369	3.47 (6.22)
Interns and Freelancers	13377	6.63 (10.89)	11080	6.65 (11.01)	885	9.27 (11.96)	1369	4.70 (8.55)
	13377	1.55 (3.04)	11080	1.55 (3.07)	885	1.77 (2.88)	1369	1.31 (2.81)
Circulation								
Digital Circulation	21451	22145 (29235)	17619	22597 (29685)	1431	31160 (31837)	2401	13455 (20993)
Advertising (Max open inch rate)	1899	17137 (69226)	1575	17019 (70954)	97	9397 (25898)	227	21260 (69678)
	21024	46.61 (86.57)	17265	48.21 (89.81)	1465	50.80 (69.39)	2294	31.83 (68.22)
Closed								
Shut Down	26215	0.01 (0.11)	21553	0.01 (0.11)	1735	0 (0)	2734	0.01 (0.11)
Merged & Changed Name	26618	0.004 (0.06)	21880	0.004 (0.06)	1735	0 (0)	2735	0.003 (0.05)
Changed to Weekly	26555	0.003 (0.06)	21840	0.003 (0.06)	1735	0 (0)	2735	0.005 (0.07)
	26481	0.01 (0.07)	21750	0.01 (0.07)	1735	0 (0)	2734	0.004 (0.06)
County-Level Elections:								
Council Votes (Thou)	2119	32.35 (36.81)	1821	34.25 (37.59)	84	27.82 (27.64)	214	17.93 (29.17)
Council Turnout	2117	8.72 (12.19)	1819	9.12 (12.33)	84	10.46 (17.25)	214	4.66 (6.69)
Mayor Votes (Thou)	1960	26.09 (58.65)	1723	26.63 (59.34)	67	22.86 (54.87)	170	21.85 (52.96)
Mayor Turnout	1960	4.63 (5.53)	1723	4.83 (5.69)	67	2.97 (3.72)	170	3.24 (4.05)
Sheriff Votes (Thou)	487	47.55 (57.14)	409	49.42 (59.63)	27	41.16 (31.49)	51	35.89 (44.95)
Sheriff Turnout	487	30.01 (7.43)	409	30.23 (7.53)	27	29.30 (7.33)	51	28.62 (6.54)

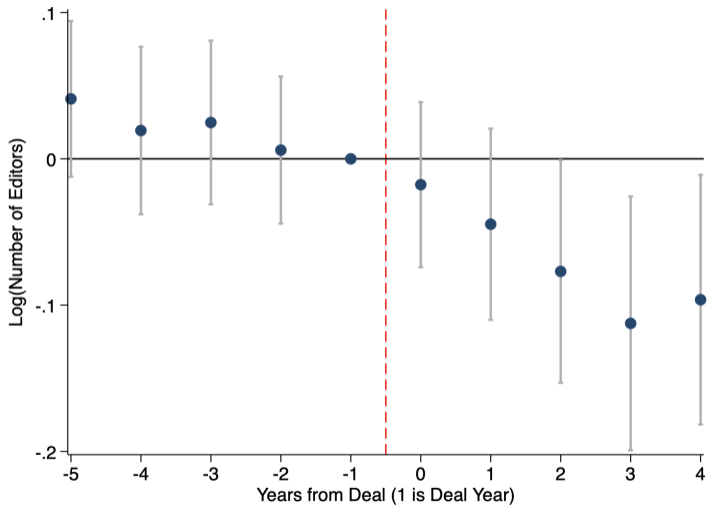
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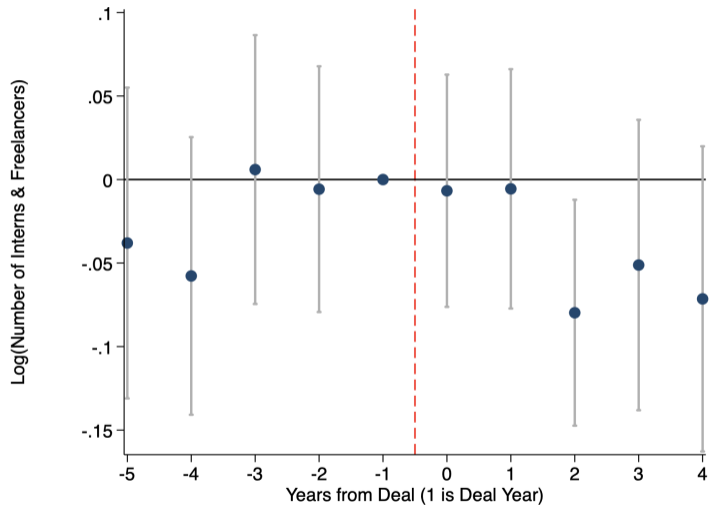
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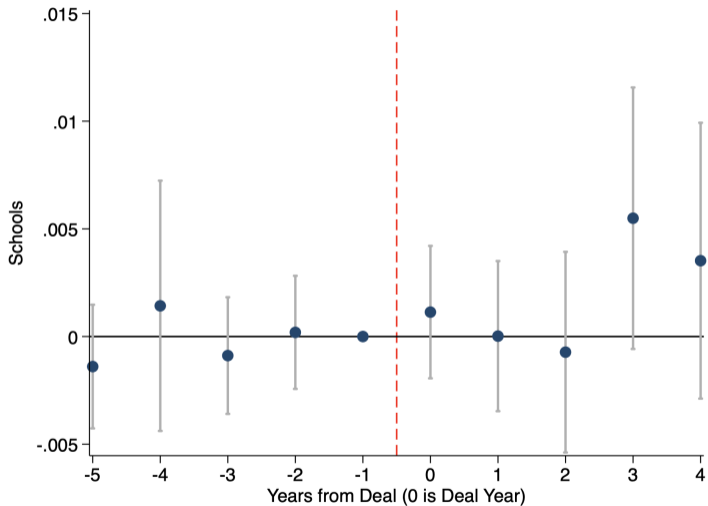


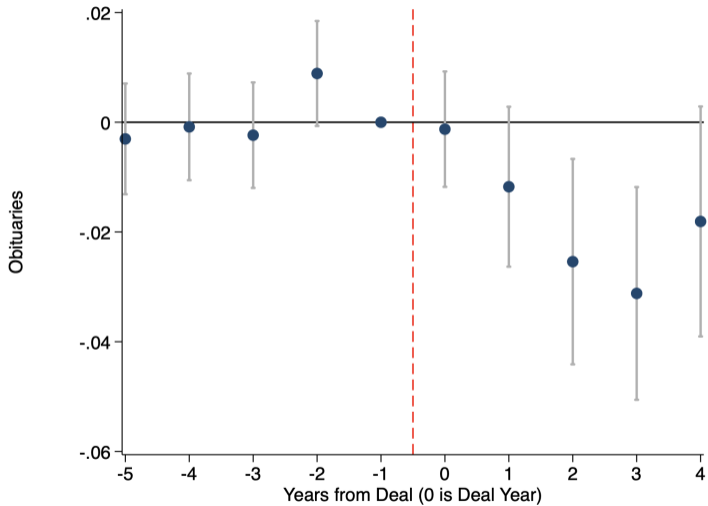


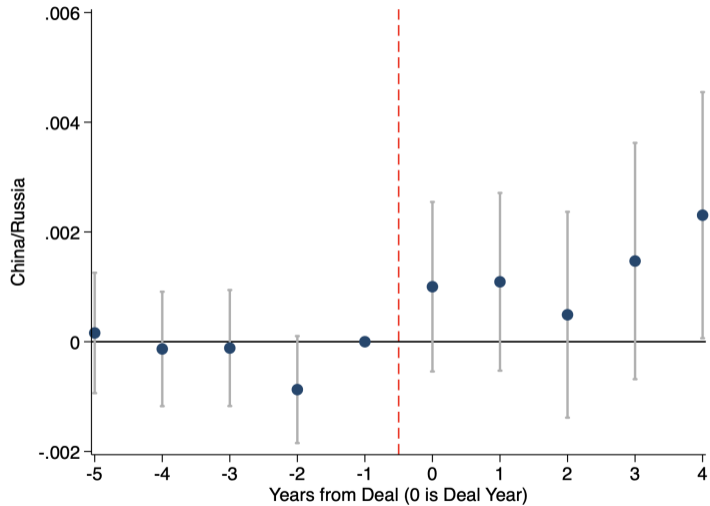
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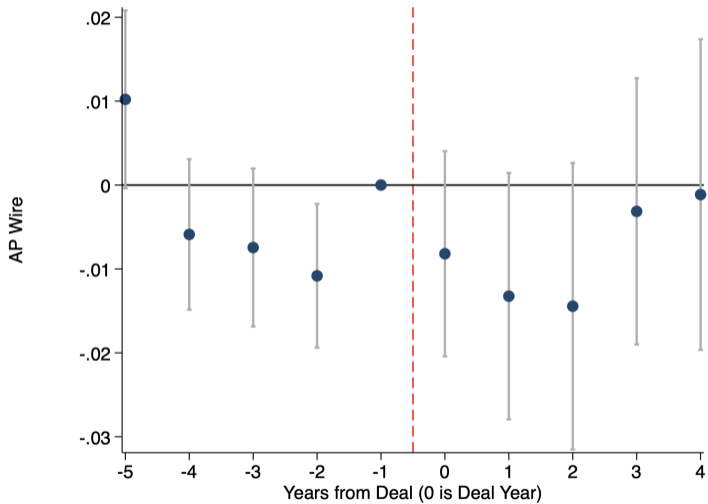


School Keywords

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Panel B: Log Number of Articles

Dep Var:	Local Policy			China/Russia (4)	Natl Govt (5)	AP Wire (6)	Total (7)
	Govt (1)	Schools (2)	Obit (3)				
Post deal X PE	-0.216*** (0.056)	-0.107** (0.053)	-0.311*** (0.084)	-0.095 (0.089)	-0.095 (0.085)	-0.191 (0.136)	-0.159*** (0.057)
Observations	10313	10313	10313	10313	10313	10313	10313
R^2	0.764	0.749	0.723	0.758	0.761	0.705	0.750
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outcome Mean	7.862	5.933	6.937	4.790	6.962	5.282	9.124

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	0.155*** (0.016)	0.049** (0.020)	0.017 (0.024)	0.004 (0.009)	0.582*** (0.091)	0.006 (0.067)	0.363*** (0.129)	-0.102 (0.101)
Public Co.	0.047*** (0.014)	0.010 (0.020)	0.006 (0.023)	-0.007 (0.008)	0.962*** (0.096)	0.048 (0.076)	1.008*** (0.134)	-0.046 (0.089)
Private Chain	0.058*** (0.013)	0.017 (0.015)	0.023 (0.018)	-0.005 (0.006)	0.680*** (0.085)	0.076 (0.053)	0.778*** (0.109)	0.012 (0.078)
Independent	0.071*** (0.017)	0.033* (0.019)	0.002 (0.019)	-0.010 (0.007)	0.638*** (0.086)	0.089 (0.067)	0.612*** (0.129)	-0.051 (0.098)
Family	0.063*** (0.011)	0.027* (0.014)	-0.011 (0.015)	-0.009 (0.006)	0.799*** (0.085)	0.117** (0.053)	0.722*** (0.114)	-0.006 (0.078)
Observations	10271	10266	10271	10266	10271	10266	10271	10266
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes	No	Yes	No	Yes
Outcome Mean	0.381	0.381	0.156	0.156	8.048	8.048	6.963	6.963

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)	-0.068 (0.047)	0.027 (0.120)	-0.012 (0.048)	-0.048 (0.122)	-0.068 (0.050)
Public Co.	1.428*** (0.192)	0.017 (0.044)	1.046*** (0.139)	0.069 (0.047)	0.989*** (0.151)	0.003 (0.049)
Private Chain	0.487*** (0.146)	0.089** (0.035)	0.341*** (0.106)	0.081** (0.036)	0.277** (0.112)	0.058* (0.033)
Independent	0.170 (0.165)	0.080* (0.042)	0.171 (0.120)	0.096** (0.045)	0.060 (0.128)	0.081* (0.042)
Family	0.467*** (0.145)	0.074* (0.038)	0.319*** (0.105)	0.055 (0.039)	0.256** (0.110)	0.073** (0.036)
Observations	12550	12542	12550	12542	12550	12542
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes	No	Yes
Outcome Mean	2.526	2.526	1.187	1.187	1.148	1.148

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

Dependent Variable:	Advertising Rate		Circulation		Shut Down	
	(1)	(2)	(3)	(4)	(5)	(6)
Other Fin. Firm	0.200*** (0.067)	0.032 (0.031)	0.288*** (0.082)	-0.038 (0.033)	0.003 (0.002)	-0.001 (0.004)
Public Co.	1.155*** (0.073)	0.027 (0.031)	1.093*** (0.084)	-0.010 (0.032)	0.003** (0.002)	0.003 (0.004)
Private Chain	0.340*** (0.064)	0.033 (0.026)	0.416*** (0.077)	0.037 (0.026)	0.013*** (0.002)	0.008*** (0.003)
Independent	0.007 (0.068)	0.048* (0.029)	0.171** (0.079)	0.041 (0.033)	0.006*** (0.002)	0.006 (0.005)
Family	0.338*** (0.058)	0.055** (0.025)	0.419*** (0.072)	0.093*** (0.026)	0.003** (0.001)	0.006** (0.003)
Observations	20908	20865	21338	21305	25365	25327
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes	No	Yes
Outcome Mean	3.183	3.184	9.378	9.379	0.007	0.006

Panel D: Local Election Participation

Election Type:	County Council		Mayor	
Dependent Variable:	Turnout (%)	Turnout (%)	Turnout (%)	Turnout (%)
	(1)	(2)	(3)	(4)
Other Fin. Firm	4.293** (1.774)	1.519* (0.811)	0.772 (0.662)	0.579 (0.364)
Public Co.	4.686*** (1.368)	0.610 (0.598)	1.820** (0.754)	0.378 (0.310)
Private Chain	3.746*** (1.055)	0.309 (0.403)	0.285 (0.611)	0.171 (0.286)
Independent	4.474*** (1.434)	-0.103 (0.834)	0.656 (0.657)	-0.248 (0.422)
Family	5.977*** (1.289)	0.176 (0.567)	2.976*** (0.702)	0.124 (0.324)
Observations	2116	2088	1959	1929
R^2	0.095	0.823	0.107	0.652
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	No	Yes	No	Yes
Outcome Mean	8.721	8.689	4.628	4.627

Replace the true buyout year with one five years previously, and drop observations after the true buyout

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	0.007 (0.012)	-0.001 (0.004)	0.046 (0.049)	0.026 (0.060)
Observations	8283	8283	8283	8283
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	0.393	0.155	8.195	7.096

Replace the true buyout year with one five years previously, and drop observations after the true buyout

Panel B: Employees and Operations

Dependent Variable:	Reporters (1)	Editors (2)	Circ (3)	Circ No Stale (4)
Post Placebo Deal X PE	-0.040 (0.042)	-0.019 (0.037)	-0.221*** (0.019)	-0.139*** (0.018)
Observations	12008	12008	19975	12907
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	2.573	1.211	9.423	9.746

Replace the true buyout year with one five years previously, and drop observations after the true buyout

Panel C: Local Election Participation

Election Type:	County Council		Mayor	
Dependent Variable:	Log Total Votes	Turnout (%)	Log Total Votes	Turnout (%)
	(1)	(2)	(3)	(4)
Post Placebo Deal X PE	0.046 (0.080)	0.817 (0.663)	0.082 (0.082)	0.504 (0.399)
Observations	1910	1908	1790	1790
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Outcome Mean	9.585	9.204	8.893	4.762

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	-0.025* (0.014)	0.014** (0.007)	-0.200*** (0.055)	-0.103 (0.086)
Observations	10313	10313	10313	10313
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Deal FE	Yes	Yes	Yes	Yes
Outcome Mean	0.380	0.156	8.049	6.962

Panel B: Employees and Operations

Dependent Variable:	Employees (1)	Reporters (2)	Closed (3)	Print Circ (4)
Post deal X PE	-0.068* (0.039)	-0.071* (0.040)	-0.006*** (0.002)	-0.113*** (0.019)
Observations	12378	12378	26707	22764
Year FE	Yes	Yes	Yes	Yes
Newspaper FE	Yes	Yes	Yes	Yes
Deal FE	Yes	Yes	Yes	Yes
Outcome Mean	2.528	1.190	1.226	9.427

ccccc

Panel C: Local Election Participation

Election Type:	County Council		Mayor	
Dependent Variable:	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^2	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