

Financing Dies in Darkness? The Impact of Newspaper Closures on Public Finance

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The State of the Newspaper

- Local newspapers have been on a steady decline since the early 2000s
- According to Pew, circulation numbers were down about 27% (55M to 40M) from 2003 to 2014
- During the same period, the number of full-time, statehouse reporters was down about 35%



The State of the Newspaper

- As a result, the monitoring of local governments has significantly weakened
 - An FCC report in 2011: *"...in many communities, we now face a shortage of local, professional, accountability reporting. This is likely to lead to ... more government waste, more local corruption, less effective schools, and other serious community problems"*



Motivation

- Last Week Tonight host John Oliver on television/online journalism in 2016:
 - *“Those places are often just repackaging the work of newspapers.”*
 - *“Watch how often TV news ends up citing print sources.”*
 - *“Not having reporters at governor meetings is like a teacher leaving her room of 7th graders to supervise themselves.”*

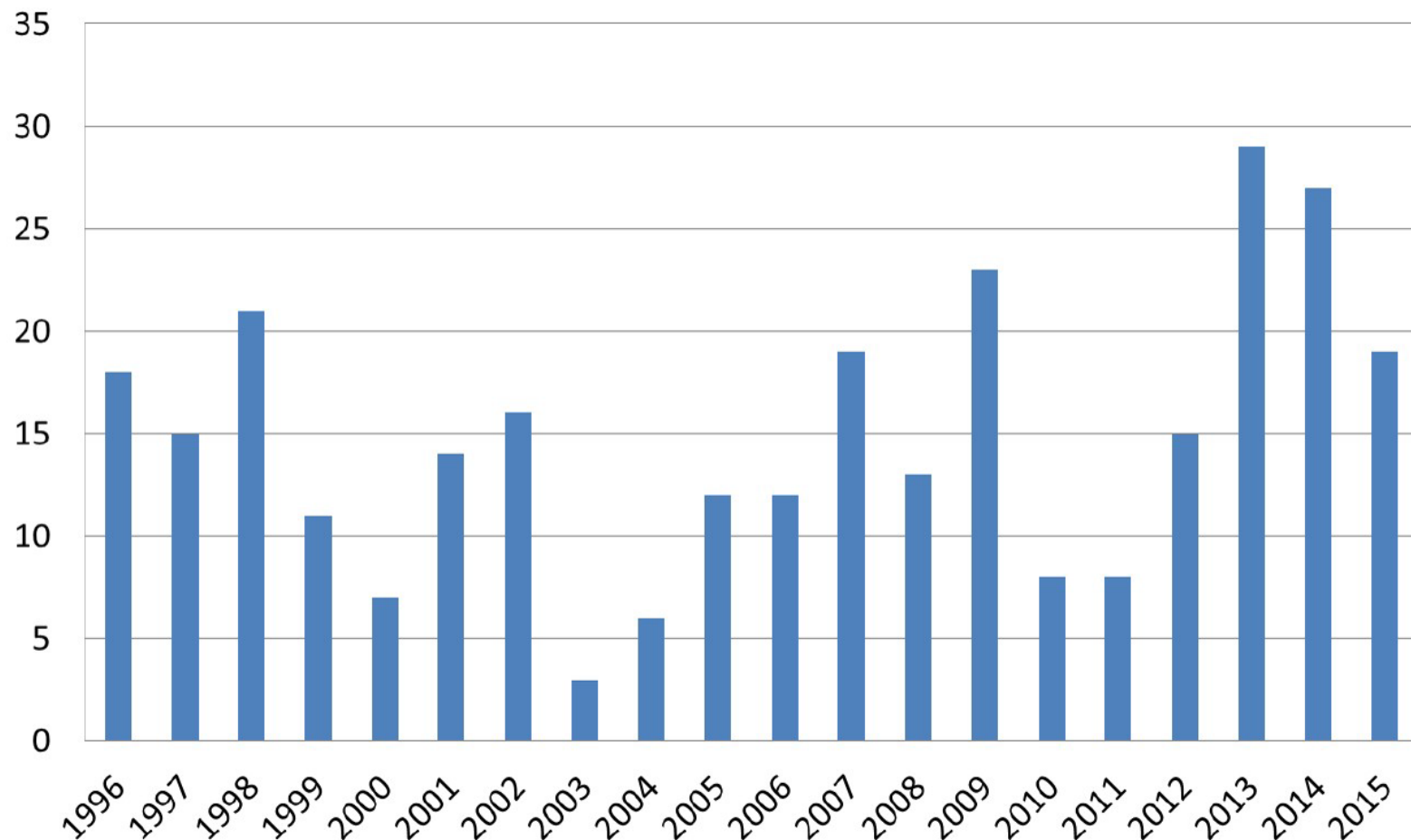


Motivation

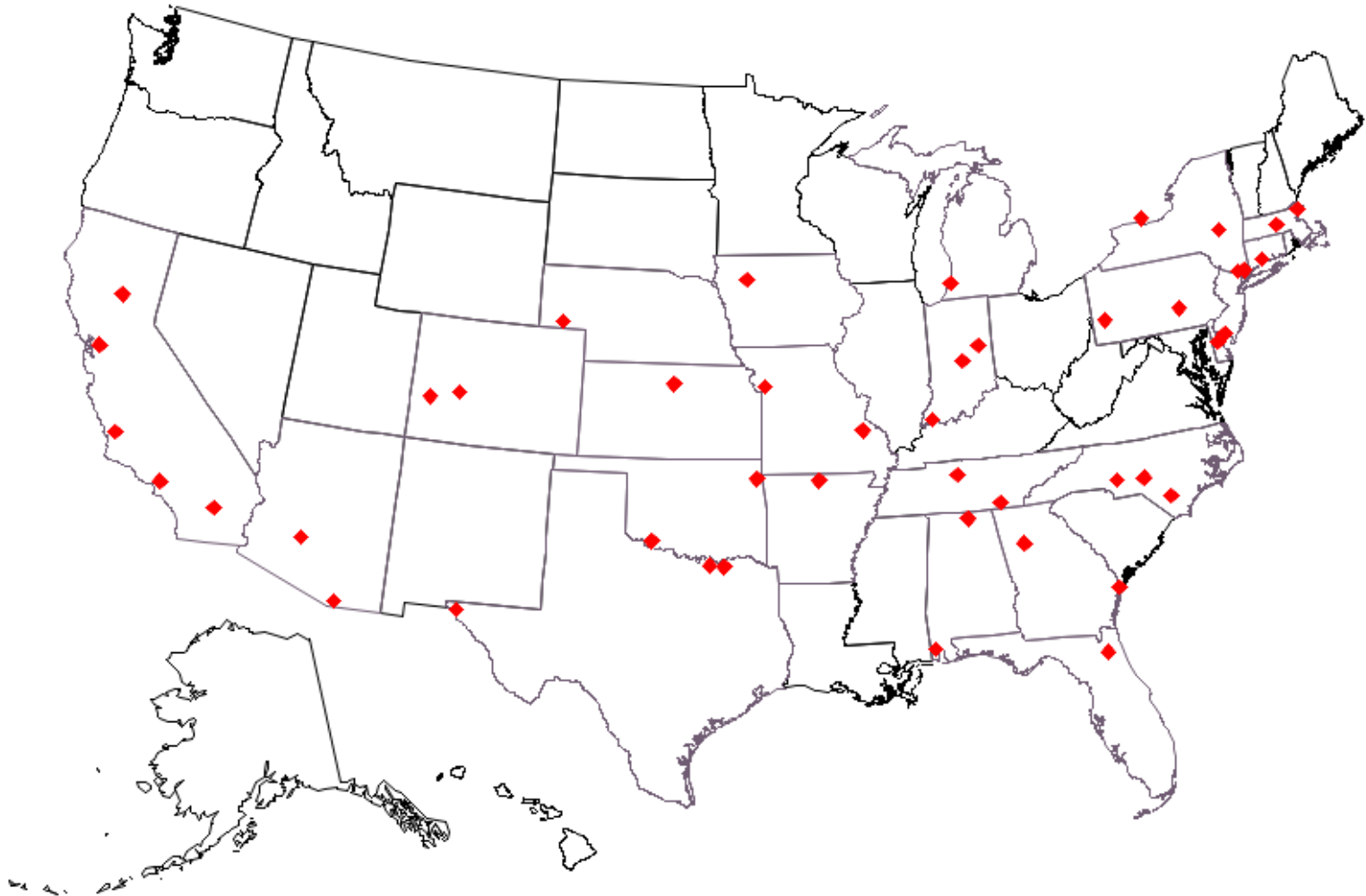
- David Simon in 2009
Senate Hearings on the
future of journalism:
 - *“... You do not in my city run into bloggers or so-called citizen journalists at city hall, or in the court house hallways or at the bars where police officers gather.”*
 - *“... The next ten or twenty years in this country are going to be a halcyon era for state and local political corruption. It is going to be one of the great times to be a corrupt politician. I really envy them.”*



Newspaper Closures, 1996 to 2015



Newspaper Closures, 1996-2000



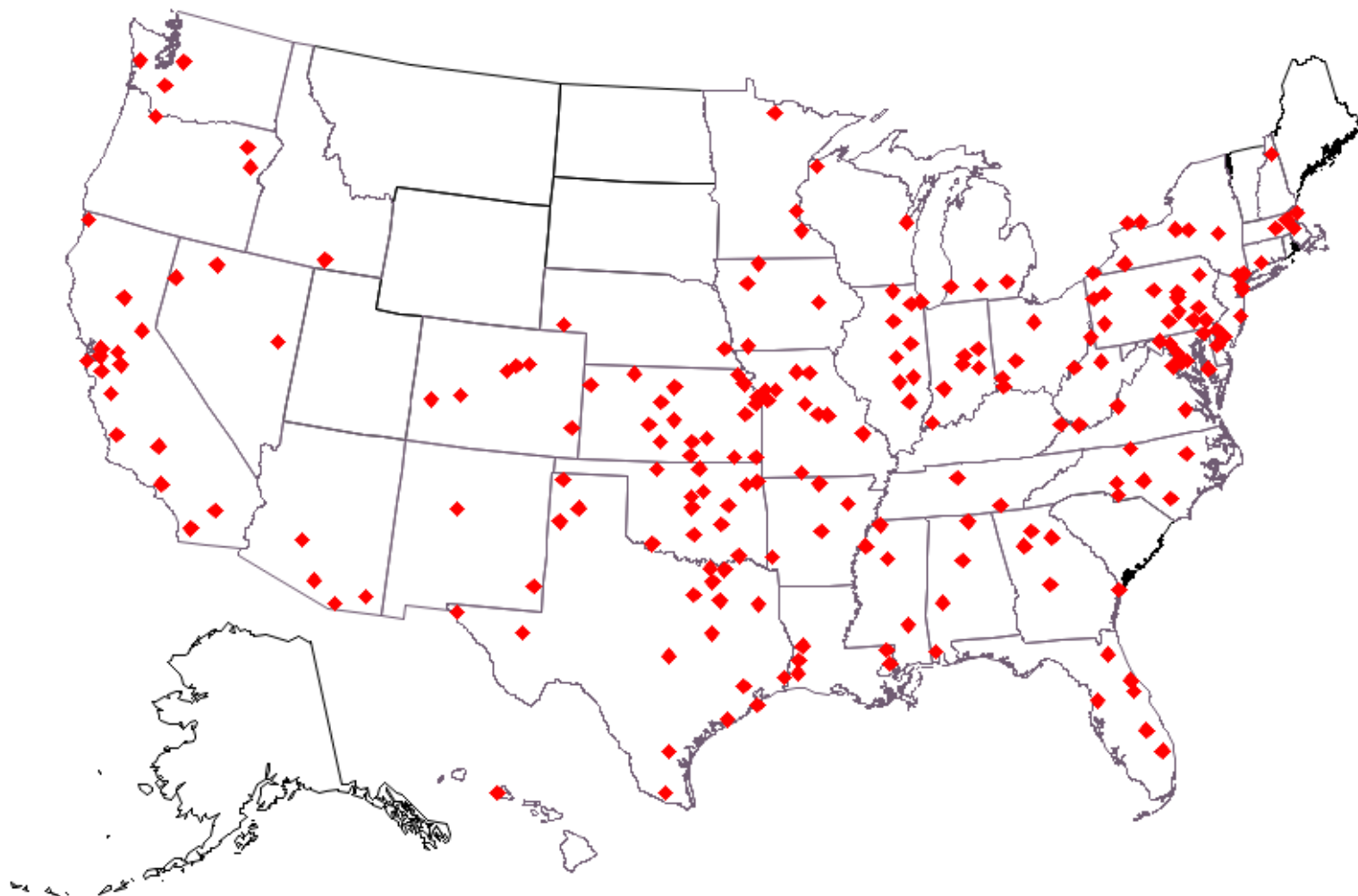
Newspaper Closures, 1996-2005



Newspaper Closures, 1996-2010



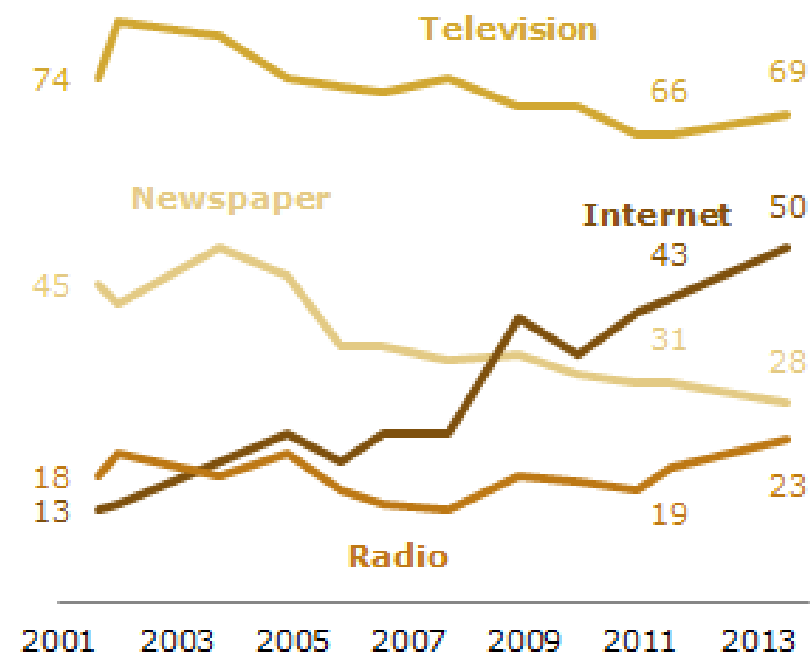
Newspaper Closures, 1996-2015



Why Do Newspapers Close?

- Decline in readership
 - Internet as an alternative outlet for news, especially among young people
- Erosion of newspaper advertising revenue
 - Search engines
 - Craigslist, which cost the newspaper industry \$5.4 billion from 2000-2007 (Seamans and Zhu (2014))

Main Source for News



PEW RESEARCH CENTER July 17-21, 2013. Q46.
Respondents were allowed to name up to two sources.

Closure Example

- The *Rocky Mountain News* operated out of Denver with a circulation base of about 250,000 subscribers
- Closed in 2009 due to declining circulation numbers and advertising revenues
- Provided valuable coverage of local issues such as:
 - A potentially illegal deal between the city and Lufthansa Airlines
 - A lack of oversight of “special taxing districts” in the Denver area

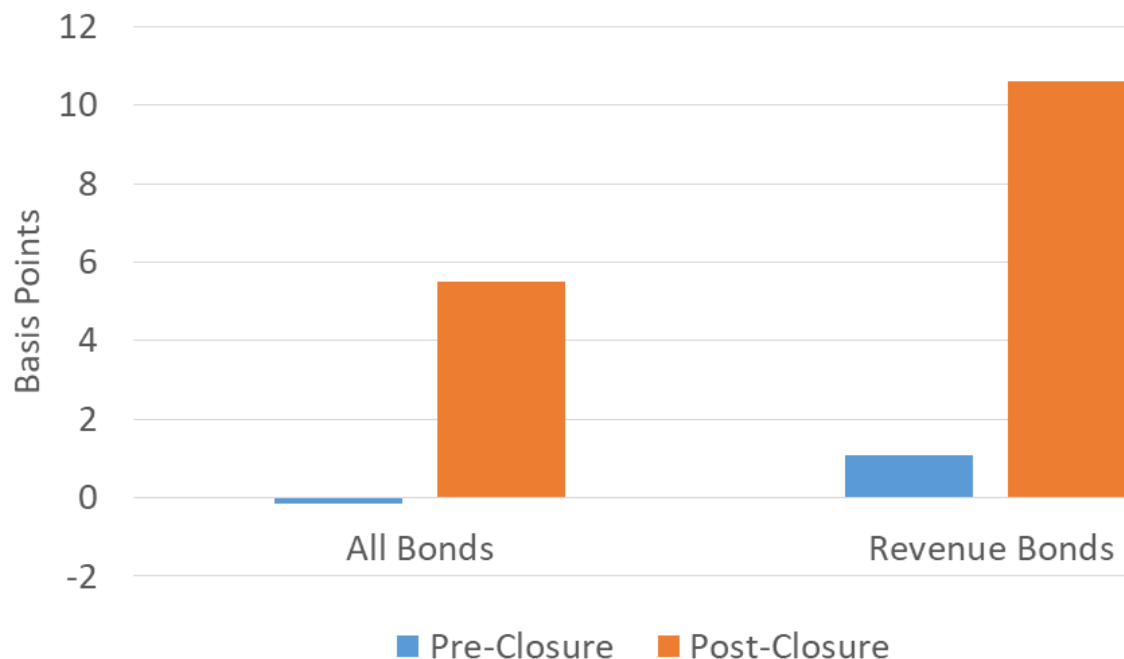


Our Main Question

- How do local newspaper closures affect public finance outcomes in the long run?
- Proposed channel:
 - The loss of a local government watchdog means that the government is more likely to engage in bad behavior
 - Municipal lenders ask for higher interest rates to compensate for lending to riskier governments
- Closure data: Editor and Publisher Yearbooks
- Municipal Bond Data: Mergent (1999 to 2015)

Baseline Results

Yield Differences, Pre-Closure and Post-Closure



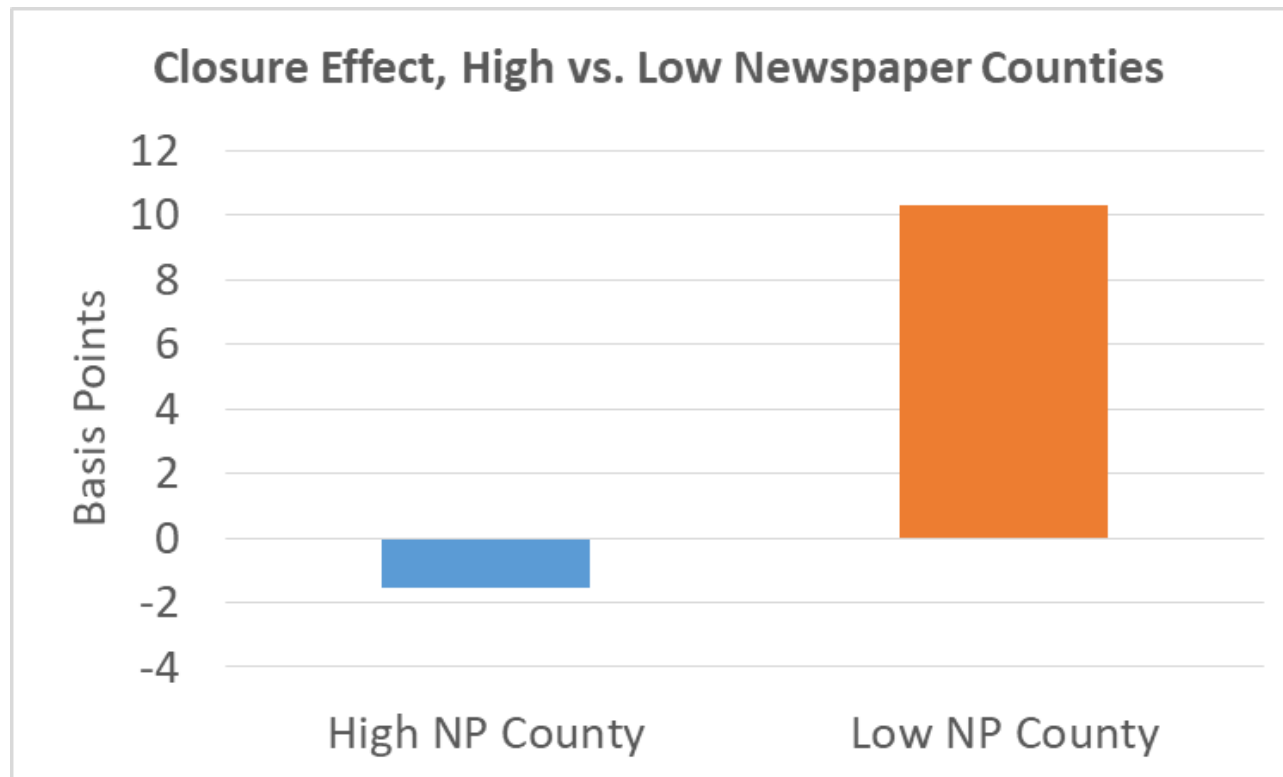
- Yields are significantly higher in closure counties compared to matched non-closure counties **(5 basis points)**
- Effect is even stronger for revenue bonds **(10 basis points)**
- Latter effect represents about 25% of the yield premium on riskier bonds

Baseline Results: Dollar Terms

- In dollar terms, the newspaper closure effect leads to an additional **\$650K** in interest on the average loan
- This is a lower bound estimate:
 - Municipalities take out many loans over time
 - Interest rates can get higher if coverage worsens

Effect on Low Newspaper Counties

- The effect of newspaper closures on public borrowing costs is high for counties with a low number of newspapers
- That is, the effect is most pronounced for “news deserts”



“Nearest Neighbor” Test

- To further establish causality, we compare borrowing costs in a county that experienced a newspaper closure to a matched neighboring county with its own newspaper and still find a significant difference



Closure \times Treatment	0.064*** (4.07)
Closure \times Neighbor	-0.009 (-0.37)
<hr/>	
Closure \times (Treat - Neighbor)	0.073**
p-value	0.012

Two-Stage Craigslist Test

- Craigslist sites were gradually introduced to different geographic areas in the 2000s
- Research has shown that Craigslist had a significantly negative effect on newspaper advertising revenues
 - (Although by no means was Craigslist solely responsible for the decline in local journalism)
- We find that Craigslist entry increases the probability of a newspaper closure by **10%**
- Subsequent effect on yields: about **4 bps**

[illegible]

Closure Effects by State Type (1)

- First test: differential effect by political isolation
 - Campante and Do (2014) show that states with higher political isolation from population are associated with more corruption (e.g. Illinois)
 - Closures should have a stronger effect on yields in states with higher isolation
- We find that the closure effect is much stronger in high isolation states compared to low isolation states (12.3 bps versus 5.5 bps)

(1)	
Closure × Low Isolation	0.0552*** (2.69)
Closure × High Isolation	0.123*** (4.89)
Low Isolation	-0.0219** (-2.06)
Closure × (Low - High)	-0.0678**
p-value	0.027

Closure Effects by State Type (2)

- Second test: differential effect by internet usage
 - If the internet is a good substitute for local journalism, then the effect should be less pronounced for states with high internet usage
 - Internet usage data collected from NTIA
- Although the effect is a little stronger in the low usage states, it is not statistically different from the effect in the high usage states

	(2)
Closure × Low Internet Usage	0.0897*** (4.65)
Closure × High Internet Usage	0.0658** (2.12)
Low Internet Usage	0.00141 (0.18)
Closure × (Low - High)	0.0239
p-value	0.497

Government Inefficiencies

- We also find strong evidence of increased government inefficiencies after newspaper closures:
 - Higher likelihood of negotiated sales
 - Higher likelihood of costly advance refundings
 - Higher government wages (approx. \$1.4 million)
 - More government employees (4 per 1,000 workers)
 - Higher taxes per capita (\$85 per person)

Conclusion

- Public borrowing costs increase and government inefficiencies become more pronounced following a newspaper closure
- Takeaway: local newspapers play an important watchdog role for local governments that is not easily substitutable by other sources
- Policy implications: state funding for local journalism initiatives?
- David Simon: “The day I run into a Huffington Post reporter at a Baltimore Zoning Board hearing is the day that I will be confident that we’ve actually reached some sort of equilibrium.”

Extra 1: Bond Summary Statistics

Panel A: Municipal Bond Summary Statistics

	Closure Counties	No Closure Counties
Number of Bonds	92,397	257,112
Number of Issuers	4,516	15,262
Bond Size (\$M)	4.68	4.8
Issue Size (\$M)	63.67	69.79
Years to Maturity	13.2	13.02
Insured (%)	51.86	55.26
Investment Grade (%)	87.72	88.31
Non-Investment Grade (%)	0.34	0.33
Unrated (%)	11.94	11.35
General Obligation (%)	50.21	50.89
Callable (%)	61.31	60.55

Extra 2: Bond Summary Statistics

Panel B: Municipal Bond Offering Yield Statistics

	Closure Counties	Matched Counties	Difference
Pre-Closure Yield (%)	4.047	4.062	-0.015***
Post-Closure Yield (%)	3.556	3.526	0.030***
Difference (Post minus Pre)	-0.491***	-0.536***	0.045***
Pre-Closure Yield Spread (%)	-0.264	-0.245	-0.019***
Post-Closure Yield Spread (%)	0.157	0.121	0.036***
Difference (Post minus Pre)	0.421***	0.366***	0.055***

Extra 3: County Summary Statistics

	Counties with No Closures	Counties with Closures
Number of Counties	1,062	204
Average Number of Newspapers	1.18	1.1
Average Per Capita Income (\$K)	33.44	35.21
Median Population (K)	70.54	76.63
Average Population Change (%)	0.6	0.67
Average Employment Change (%)	0.59	0.75
Average Wage Change (%)	1.61	1.94