# Competition and Idoelogical Diversity: Historical Evidence from US Newspapers

Caio Figueiredo

Penn State

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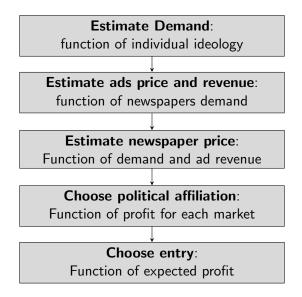
#### Introduction

▶ Objective: Formulate a model of newspaper demand, entry, and political affiliation choice.

#### Context

- ► The year is 1924.
- ▶ (Most) newspapers openly declare political affiliation.
- ► There is no TV and Radio is at its infancy. Which for us means that the outside option is "No News", simplifying treatment.

#### Model Sketch



#### Data

- For the supply side (Entry and affiliation), data on the number, affiliations, and circulation prices of individual newspaper are used.
- Collected from the US Newspaper Panel
- Vote share is used as proxy of consumers political affiliation.
- For the demand side, data on circulation per town and newspaper is used.
- Collect from Audit Bureau of Circulations.
- Supplementary datasets on newspaper revenue and costs, alongside readership surveys, are used to calibrate the model
- ▶ Note: The process of matching data from the different databases is complex and a considerable ammount of data is lost.

# Data Summary for markets - US Newspaper Panel

TABLE 1—SUMMARY STATISTICS FOR NEWSPAPER MARKETS

Number of newspapers	0	1	2	3+	All
Mean population	5,944	10,688	24,049	36,832	10,943
Share of newspapers that are Republican Share of multipaper markets that are diverse		0.60	0.50 0.53	0.68 0.61	0.57 0.54
Republican vote share Mean Standard deviation	0.52 0.15	0.51 0.15	0.50 0.12	0.55 0.09	0.51 0.15
Number of markets Number of diverse markets Number of newspapers	960	612 612	297 158 594	41 25 132	1,910 183 1,338

*Notes:* Data are from the cross-section of daily newspaper markets in 1924 defined in Section IB. Diverse markets are those with at least one Republican and at least one Democratic newspaper. Republican vote share is the average Republican share of the two-party vote in presidential elections from 1868 to 1928.

- Number of papers is highly correlated to population
- ► The share of Republican Newspapers (57%) is slightly higher than the share of Republican votes (51%)

# Data Summary for towns - ABC x Panel

TABLE 2—SUMMARY STATISTICS FOR TOWNS WITH CIRCULATION DATA

Number of circulating newspapers	1	2	3+	All
Mean population	447	390	566	472
Share of newspapers that are Republican Share of multipaper towns that are diverse	0.52	0.54 0.38	0.57 0.67	0.55 0.53
Republican vote share Mean Standard deviation	0.49 0.16	0.51 0.16	0.54 0.15	0.51 0.16
Number of towns Number of diverse towns Number of newspaper-towns	4,144 4,144	3,737 1,418 7,474	4,307 2,876 17,161	12,188 4,294 28,779

*Notes:* Data are from the cross-section of news-reading towns in 1924 defined in Section IC. Diverse towns are those with at least one Republican and at least one Democratic newspaper. Republican vote share is the average Republican share of the two-party vote in presidential elections from 1868 to 1928.

- Mostly the same conclusions as before.
- ▶ Data lost by the matching process causing the share of Republican newspaper to fall to (55%)

- ▶ Data shows that increasing the fraction Republican among voters by 10 percentage points increases the relative circulation of Republican papers by 10 percent.
- ▶ And that adding a second Republican paper to a market with one Republican and one Democratic newspaper reduces the relative circulation of the existing Republican paper by 4%.

TABLE 3—DEMAND FOR PARTISANSHIP

Dependent variable: Average log(circulation) of R papers – average log(circulation) of D papers	(1)	(2)	(3)
Republican vote share	0.8517 (0.1910)		0.9510 (0.1980)
Number of Republican papers		-0.0187 $(0.0134)$	-0.0360 $(0.0136)$
Number of Democratic papers		$0.0066 \ (0.0152)$	0.0174 (0.0154)
$R^2$ Number of counties Number of towns	0.0101 1,219 4,294	0.0007 1,219 4,294	0.0127 1,219 4,294

*Notes:* Data are from the cross-section of news-reading towns in 1924 defined in Section IC. The dependent variable is the difference in mean log circulation of Republican and Democrat newspapers. Republican vote share is the average Republican share of the two-party vote in the county in presidential elections from 1868 to 1928. Sample is all towns with at least one paper of each affiliation. Standard errors in parentheses are clustered at the county level.

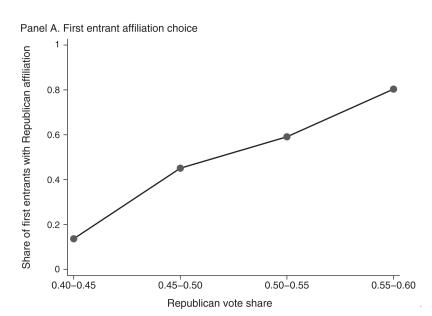
- ▶ Data shows that a 10 percentage point increase in the fraction of Republican among the households increases the likelihood of a Republican affiliation by 23%
- ▶ But facing a Republican incumbent, instead of a Democratic one, reduces the likelihood by 28%.

TABLE 4—DETERMINANTS OF NEWSPAPER AFFILIATION

Dependent variable: Dummy for newspaper choosing R affiliation	(1)	(2)	(3)
Republican vote share	2.1824 (0.0557)		2.3356 (0.0611)
Number of Republican incumbents		-0.0168 $(0.0318)$	-0.1525 $(0.0342)$
Number of Democratic incumbents		$-0.0190 \ (0.0377)$	0.1260 (0.0297)
$R^2$	0.3561	0.0004	0.3819
Number of markets	950	950	950
Number of newspapers	1,338	1,338	1,338

Notes: Data are from the cross-section of daily newspaper markets in 1924 defined in Section IB. The unit of analysis is the newspaper. Republican vote share is the average Republican share of the two-party vote in presidential elections from 1868 to 1928. The number of Republican/Democratic incumbents is the number of sample newspapers of the given affiliation that entered prior to the newspaper in question. Sample is all markets with at least one paper. Standard errors in parentheses are clustered at the market level.

# Descriptive Evidence: Summary



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Panel B. Second entrant affiliation choice

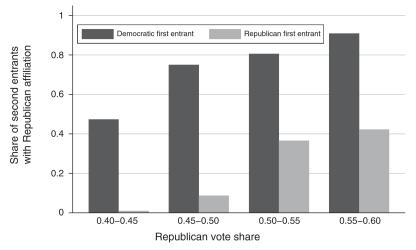


FIGURE 1. DETERMINANTS OF NEWSPAPER AFFILIATIONS