

Media and Partisanship

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Overview

Topic overview

Introduction

Model and Identification

Results

Conclusion and Discussion

Other papers

Snyder and Strömberg (2010)

Enikolopov et al. (2011)

DellaVigna et al. (2014)

Topic Summary

Topic overview

What determines newspaper slant/media bias?

- ▶ Gentzkow et al. (2010, ECTA), “What Drives Media Slant? Evidence from U.S. Daily Newspapers”

Does media affect voters' knowledge and the actions of politicians?

- ▶ Snyder et al. (2010, JPE): “Press Coverage and Political Accountability”

Does media affect voters' voting decisions?

- ▶ DellaVigna et al. (2014, AEJ:AE): “Cross-border Media and Nationalism: Evidence from Serbian Radio in Croatia”
- ▶ Enikolopov et al. (2011, AER): “Media and Political Persuasion: Evidence from Russia”

What drives media slant?

Evidence from U.S. daily newspapers

- ▶ **slant** - a particular point of view from which something is seen or presented; a bias.

Research question

What forces on the demand and on the supply side drive ideological slant in the media?

- ▶ **on the demand side:**
the role of consumers' preferences for newspapers' content matching their own ideology?
- ▶ **on the supply side:**
the role of the newspaper ownerships' political leaning?

Motivation

Rationale for government intervention and regulation of news media: is concentration of media ownership a problem?

- ▶ the public should be presented ideologically diverse content
- ▶ the unregulated markets (in terms of media ownership) will produce **too little ideological diversity**

However, **there is little evidence** on the incentives that shape media's ideological content and the role of ownership.

Contribution

- ▶ the first large-scale empirical evidence on the determinants of political slant in the news, distinguishing the demand-side and supply-side drivers of slant
- ▶ G&S propose **a new index of media slant** contributing to the literature on the measurement of the media slant

Approach to answer the question

How to measure ideological slant in news coverage?

- ▶ The new **index of media slant** measures the frequency with which newspapers use language that is used by politicians from left / right side of the political scene.

The index allows to compare newspapers to one another (but not to the ideal "unbiased" benchmark)

Approach and the main results

Estimate a model of newspaper's demand that incorporates slant explicitly

- ▶ **the main result:** consumer's demand respond strongly to the match between newspaper's slant and the ideology of potential readers

Identification strategy: within one market there are various zip codes that differ in terms of the ideology of potential readers. These differences can be connected to the newspaper's circulation.

- ▶ **the main result:** indeed right-wing newspapers circulate relatively more in zip codes with higher proportion of republican voters.

Approach and the main results

Estimate the slant that would be chosen by newspapers if they were independently maximizing their profits (as monopolists), then compare it to firm's actual choices

- ▶ **the main result:** the average profit-maximizing slant is close to the newspapers' actual slant level (indicating no distorting supply-side forces)

Estimate a model of the supply of slant, in which firms, choosing slant level, can respond both to the ideology of the customers and identity of the owner

- ▶ **the main result:** variation in slant across newspapers is strongly related to political views of potential readers; little evidence found that the identity of newspaper's owner affects its slant.

Evaluation

- + interesting and important research question
- + policy implications that contradict widely held beliefs
- + construction of the media slant index

- the relevance of the model
- the problem of endogeneity

Congressional Record and Congressperson Data

- ▶ the text of 2005 Congressional Record, parsed to identify the speaker (congress person) of each passage
- ▶ automatic script counted two- and three-word phrases used by each speaker to obtain the data on the specific phrases each congressman uses
- ▶ data on congressman's party identification and share of votes in congressman's constituency given to George W. Bush in 2004 presidential election

Newspaper Text and Characteristics

- ▶ total sample of 433 newspapers that represented 74% of the total circulation of daily newspapers in U.S.
 - ▶ excluded: *New York Times*, *Wall Street Journal*, *Christian Science Monitor* and *US Today*, leaving sample of 429 newspapers
- ▶ the frequency with which phrases appear in news coverage obtained from the NewsLibrary data base and the ProQuest Newsstand data base
- ▶ the ownerships of the newspapers and the zip code of the headquarter taken from 2001 Editor and Publisher (E&P) International Yearbook CD-ROM

Newspaper Text and Characteristics

- ▶ define each newspaper's geographic market as the primary metropolitan statistical area (PMSAs) or the county in which it is headquartered
- ▶ market's political leaning proxy: share of votes in each market going to George W. Bush
- ▶ proxy for a media firm's ideological leanings: data from the Center for Public Integrity on share of the firm's political contribution going to Republicans
- ▶ + the personal contributions of CEOs, Presidents, Chairmen and Managing Directors

Newspaper Circulation and Consumer Characteristics

- ▶ zip code-level data on newspaper circulation from the Audit Bureau of Circulation's Newspaper GeoCirc
- ▶ zip code demographics from the 2000 U.S. Census
- ▶ measuring ideology - complicated, since no data available at the zip code-level. They use FEC 2000, 2002 and 2004 Individual Contribution Files to get the share of donations contributed to Republicans / Democrats in particular area
- ▶ after all, the sample restricted to the 290 newspapers for which at least one zip code with positive circulation and sufficiently many donors observed

Measuring slant

"death tax" or "estate tax"?

- ▶ Republicans - "death tax" 365 times, "estate tax" 46 times
- ▶ Democrats - "death tax" 35 times, "estate tax" 195 times

There are phrases that indicate the ideology of a speaker.

Computing all the phrases from *Congressional Record* –
technically infeasible.

Therefore the authors first identify a set of phrases
that are **highly diagnostic** of the speaker's political party.

Selecting phrases to analysis

Step 1:

- ▶ identify (and eliminate) phrases not likely to be useful for diagnosing slant: those used in newspapers' headlines very often ("exchange rate") and very rarely ("yield the remainder of my time").

Step 2:

- ▶ calculate Pearson's χ_{pl}^2 statistic for each phrase (null hypothesis: the propensity to use phrase p of length l is equal for Democrats and Republicans). Choose phrases with the highest χ^2 .

The final set contains **1000 phrases**. Many of them are known to be chosen strategically by for their partisan impact.

Examples

Phrases used more often by Democrats:

- ▶ "private accounts", "workers rights", "minimum wage"
- ▶ "oil companies", "poor people", "tax breaks"
- ▶ "trade deficit", "trade agreement", "war in Iraq"

Phrases used more often by Republicans:

- ▶ "personal accounts", "stem cell", "private property"
- ▶ "natural gas", "death tax", "government spending"
- ▶ "tax relief", "war on terror", "illegal immigration"

Mapping Phrases to ideology

Step 1:

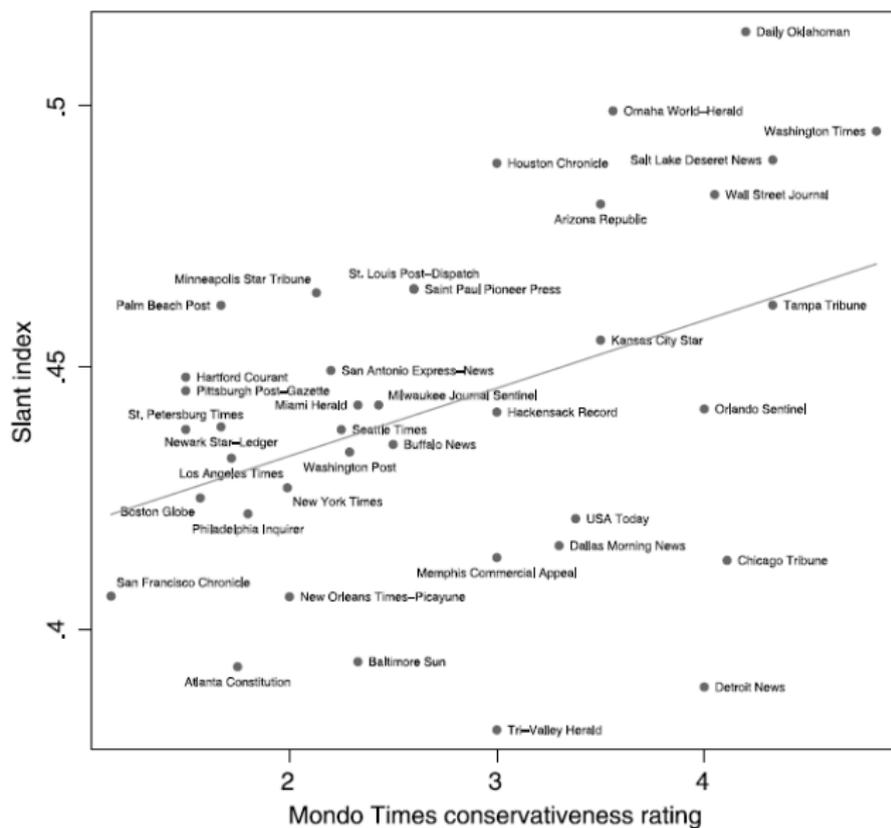
- ▶ estimate the relationship between the use of phrase $p \in \{1, \dots, 1000\}$ and the ideology of a congressman
- ▶ simple regression of \tilde{f}_{pc} (the relative frequency of phrase p in congressman's speech) on y_c (the congressman's ideology variable)

Step 2:

- ▶ use slope and intercept parameters obtained in step 1 and the newspaper's relative frequencies to estimate the ideology (slant) of the newspaper

Evidence of validity of estimates (estimated \hat{y}_c has correlation of 0.61 with y_c), but there is **significant amount of noise** – 63% of the variation in slant among newspapers is likely to be a noise.

Mapping Phrases to ideology



Model

Consumer Problem

$$U_{iz} \equiv \sum_{n \in N_{iz}} u_{izn},$$

$$\text{with } u_{izn} \equiv \bar{u}_{zn} - \gamma (y_n - \text{ideal}_z)^2 + \epsilon_{izn}$$

- ▶ i : households; z : zip codes; n : newspapers
- ▶ \bar{u}_{zn} : exogenous taste of consumers in zip code z for newspaper n
- ▶ y_n : slant of newspaper n
- ▶ $\text{ideal}_z \equiv \alpha + \beta r_z$
 - ▶ r_z : exogenous ideology of zip code z
- ▶ ϵ_{izn} : household specific taste shock, logistically distributed

Readership

- ▶ $n \in N_{iz} \subseteq N_z$ iff $u_{izn} \geq 0$
- ▶ S_{zn} : share of households in zip code z reading newspaper n , approx. equal to individual probability. Thus

$$S_{zn} = \frac{\exp \left[\bar{u}_{zn} - \gamma (y_n - \text{ideal}_z)^2 \right]}{1 + \exp \left[\bar{u}_{zn} - \gamma (y_n - \text{ideal}_z)^2 \right]}.$$

Demand Parameters I

$$\bar{u}_{zn} = X_z \phi^0 + W_{zn} \phi^1 + \xi_{mn} + \nu_{zn}$$

- ▶ X_z : zip code demographics
- ▶ W_{zn} : elements of X_z interacted with corresponding averages in the newspaper's market
- ▶ ξ_{mn}, ν_{zn} : preference shocks at market and zip code level

Demand Parameters II

- ▶ Plugging in $ideal_z$ and \bar{u}_{zn} yields

$$\ln \frac{S_{zn}}{1 - S_{zn}} = \delta_{mn} + \lambda_0^d y_n r_z + \lambda_1^d r_z + \lambda_2^d r_z^2 + X_z \phi^0 + W_{zn} \phi^1 + \nu_{zn},$$

with $\delta_{mn} = -\gamma\alpha^2 - \gamma y_n^2 + 2\gamma\alpha y_n + \xi_{mn},$

$$\lambda_0^d = 2\gamma\beta, \quad \lambda_1^d = -2\gamma\alpha\beta, \quad \lambda_2^d = -\gamma\beta^2.$$

- ▶ Predictions for $\gamma, \beta > 0$:
 - ▶ **Hypothesis D1:** $\lambda_0^d > 0$
 - ▶ **Hypothesis D2:** $\lambda_2^d < 0$

Instrument

- ▶ Use Republican share of votes in 2004 in market n , R_n , as instrument for slant \hat{y}_n
 - ⇒ removes attenuation bias due to classical measurement error in \hat{y}_n
- ▶ Tackles reverse causality: demand $S_{zn} \rightarrow$ slant y_n
 - ▶ note that ξ_{mn} absorbed in fixed effect
 - ▶ but not so if it was correlated with $r_z \rightarrow$ IV can deal with this
- ▶ Unresolved: demand $S_{zn} \rightarrow$ ideology r_z
 - ▶ hopefully negligible
 - ▶ religiosity could be a suited instrument but only available at market level

Firm Problem

- ▶ No problem

$$y_n^* = \rho_0 + \rho_1 \text{ideal}_n + \mu_g$$

- ▶ μ_g : ideology of firm g which owns newspaper n

$$\mu_g \sim \mathcal{N}(\bar{\mu}, \sigma_\mu^2)$$

Supply Parameters I

- ▶ Demand identification yields ideal_z
- ▶ but demand sample covers only 290 out of 429 newspapers.
Thus

$$\widehat{\text{ideal}}_n = \eta_0 + \eta_1 R_n + \zeta_n$$

Supply Parameters II

- ▶ Plugging in $\widehat{\text{ideal}}_n$ for ideal_n in expression for y_n^* yields

$$\hat{y}_n = \lambda_0^s + \lambda_1^s R_n + \mu_g + \omega_n,$$

with $\lambda_0^s = \rho_0 + \rho_1 \eta_0$, $\lambda_1^s = \rho_1 \eta_1$, $\omega_n = \rho_1 \zeta_n + (\hat{y}_n - y_n)$.

- ▶ $\omega_n \sim \mathcal{N}(\theta_s, \sigma_\omega^2)$
- ▶ θ_s : state-specific error component, $\mathbb{E}[\theta_s] = 0$
- ▶ Baseline assumption: μ_g , R_n , and ω_n are pairwise uncorrelated, conditional on $\theta_s \Rightarrow$ random effects (RE) model
- ▶ **Hypothesis S1:** $\lambda_1^s > 0$

Results

Evidence on demand for slant

Hypothesis D1: More conservative zip codes have a relative greater taste for more conservatively slanted news.

Estimation:

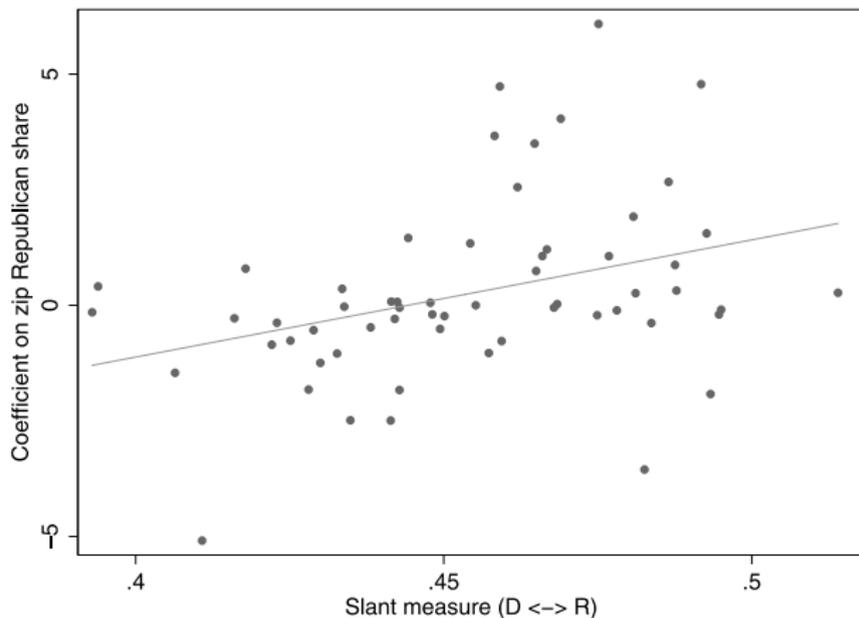
- ▶ **first stage:** regress demand on zip code ideology with fixed effects for market

$$DEMAND_{zn} = \alpha_m + \beta_n \times IDEOLOGY_z + \epsilon_{zn}$$

- ▶ **second stage:** plot coefficients β_n against measured slant \hat{y}_n

Evidence on demand for slant

Result: estimated effect of zip code Republicanism on demand has a clear positive relationship with the newspaper's slant.



Evidence on the demand for slant

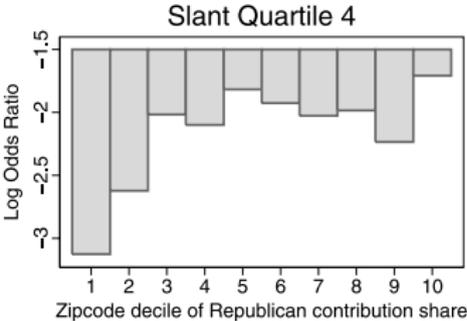
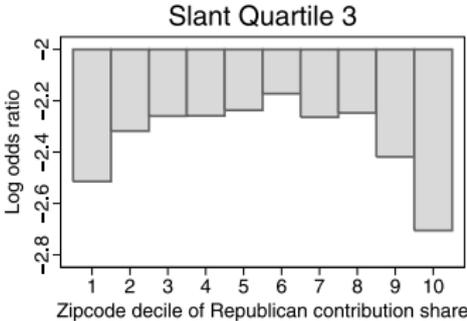
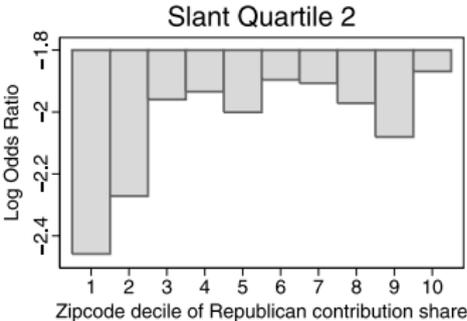
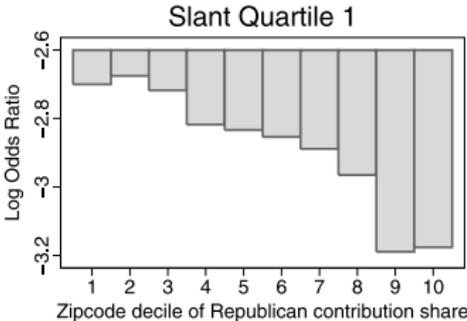
Hypothesis D2: Demand has an inverted-U relationship to zip code ideology.

Estimation:

1. split newspapers in quartiles based on measured slant \hat{y}_n
2. separately for each quartile regress newspaper demand on decile dummies for share of households donating to Republicans and market-newspaper fixed effects, weighted by zip code population

Evidence on the demand for slant

Graphs noisy but consistent with an inverted-U relationship.



Evidence on the demand for slant

These findings can also be tested by estimating the demand function derived from the model described in the previous section.

From model we have:

$$\ln \frac{S_{zn}}{1 - S_{zn}} = \delta_{mn} + \lambda_0^d y_n r_z + \lambda_1^d r_z + \lambda_2^d r_z^2 + X_z \phi^0 + W_{zn} \phi^1 + \nu_{zn}$$

If model is correct, we can expect:

- ▶ **Hypothesis D1:** $\lambda_0^d > 0$
- ▶ **Hypothesis D2:** $\lambda_2^d < 0$

Evidence on the demand for slant

- ▶ results consistent with the stated hypotheses and robust to different specifications
- ▶ **2SLS**: slant is instrumented by share of Republicans in newspaper's market to address measurement error

Description	Model			
	OLS	OLS	OLS	2SLS
(Zip share donating to Republicans) \times Slant	10.66 (3.155)	9.441 (2.756)	14.61 (6.009)	24.66 (7.692)
Zip share donating to Republicans	-4.376 (1.529)	-3.712 (1.274)	—	-10.41 (3.448)
(Zip share donating to Republicans) ²	-0.4927 (0.2574)	-0.5238 (0.2237)	—	-0.7103 (0.2061)
Market-newspaper FE?	X	X	X	X
Zip code demographics?		X	X	X
Zip code \times market characteristics?		X	X	X
Zip code FE?			X	
Number of observations	16,043	16,043	16,043	16,043
Number of newspapers	290	290	290	290

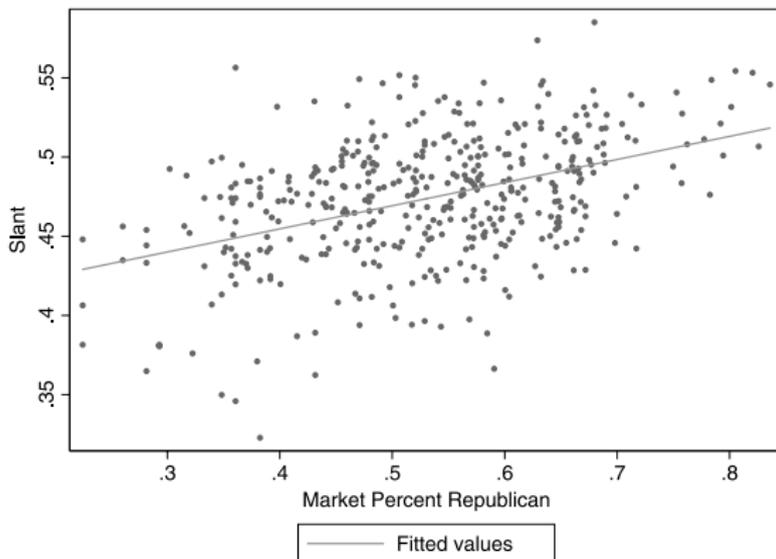
Note: dependent variable is $\ln(S_{zn}) - \ln(1 - S_{zn})$, SE clustered at the newspaper level

Evidence on the supply of slant

Does consumer ideology affect slant?

Model hypothesis S1: Slant is increasing in consumer Republicanism.

Basic result: Slant is highly related to consumer ideology



Evidence on the supply of slant

Does consumer ideology affect slant?

Detailed result: Econometric estimates show the same positive relationship, also after correcting for possible reverse causality, and are robust to different specifications.

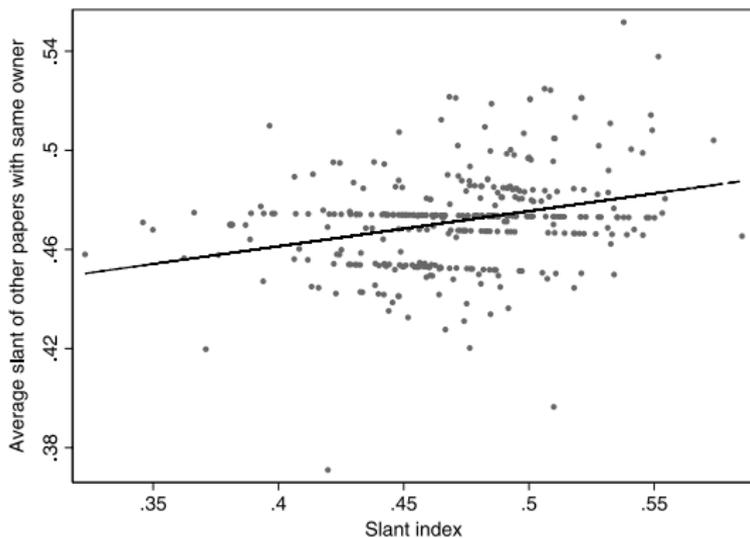
	OLS	2SLS	OLS	RE
Share Republican in newspaper's market	0.1460 (0.0148)	0.1605 (0.0612)	0.1603 (0.0191)	0.1717 (0.0157)
Ownership group fixed effects?			X	
State fixed effects?				X
Standard deviation (SD) of ownership effect				0.0062 (0.0037)
Likelihood ratio test that SD of owner effect is zero (p value)				0.1601
Number of observations	429	421	429	429
R^2	0.1859	—	0.4445	—

^aThe dependent variable is slant index (\hat{y}_i). Standard errors are given in parentheses. An excluded instrument in the 2SLS model is share attending church monthly or more in the newspaper's market during 1972–1998, which is available for 421 of our 429 observations. The first-stage has coefficient 0.2309 and standard error 0.0450. The RE model was estimated via maximum likelihood. See Section 7.2 for details.

Evidence on the supply of slant

Does ownership affect slant?

Model hypothesis S2: Slant is increasing in owner Republicanism

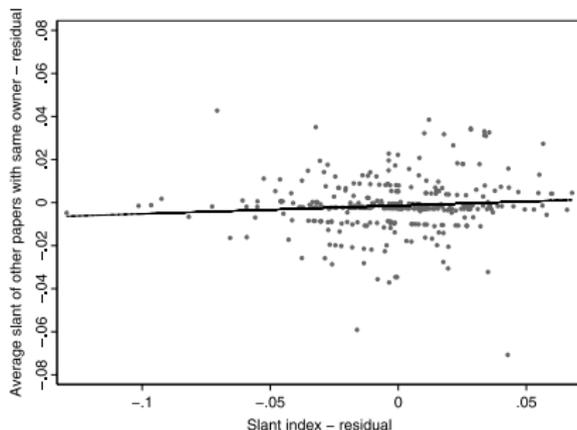


Note: correlation = 0.29, $p < 0.001$

Evidence on the supply of slant

Does ownership affect slant?

After controlling for the propensity of owners to own newspapers in politically and geographically similar markets, they find **no evidence that two jointly owned newspapers have a more similar slant than two randomly chosen newspapers.**



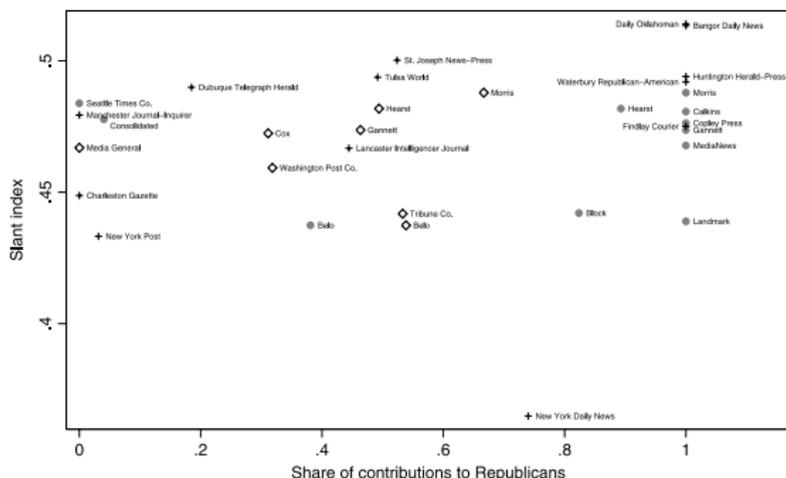
Slant: Residuals from a regression of slant on percent Republican in market and dummies for the state in which the newspaper is located. (correlation = 0.09, $p = 0.11$)

Evidence on the supply of slant

Does ownership affect slant?

Additionally, **no evidence that slant is related to owner ideology**, as proxied by political donation:

- ▶ nonparametric evidence



Note: Correlation coefficients are -0.04 ($p = 0.90$) for newspaper group executives, 0.29 ($p = 0.34$) for independent newspaper executives, and 0.01 ($p = 0.97$) for newspaper group corporate contributions.

Evidence on the supply of slant

Does ownership affect slant?

Additionally, **no evidence that slant is related to owner ideology**, as proxied by political donation:

- ▶ nonparametric evidence
- ▶ evidence from RE model
 - ▶ Table III: cannot reject H_0 that the variance of the owner effect is zero
- ▶ regressions that control for the percent voting Republican in each paper's market

Evidence on the supply of slant

Does ownership affect slant?

Figure: Relationship between slant and political contribution

Contribution Type	Newspaper Group Executives	Independent Newspaper Executives	Newspaper Group Corporate Contributions
Share of contributions to Republicans	-0.0002 (0.0212)	-0.0936 (0.0289)	-0.0379 (0.0181)
Share Republican in newspaper's market	0.1883 (0.0513)	3.068 (0.9453)	0.1413 (0.0390)
State fixed effects			
Number of newspapers	183	13	148
Number of owners	18	13	8
R^2	0.6242	0.9892	0.6287

^aDependent variable: slant index (\hat{y}_n). Standard errors are given in parentheses. Standard errors in the first and third specifications are clustered by owner to allow for correlation in error across newspapers with the same owner.

Implications of the model

For the average newspaper:

- ▶ observed slant is close to the profit-maximising slant
 - ▶ model: $IDEAL_n = \eta_0 + \eta_1 REP_VOTE_SHARE_n + \xi_n$
- ▶ would move slightly left in a profit maximising counterfactual world
- ▶ would experience **18 % loss in circulation** if it were to deviate by 1 sd from the profit-maximising level of slant

Slant variance decomposition:

- ▶ **consumer ideology** explains 22 % of the within-state variation in slant
- ▶ **owner ideology** explains only 4 % of the within-state variation in slant

Implications of the model

Figure: Economics interpretation of model parameters

Quantity	Estimate
Actual slant of average newspaper	0.4734 (0.0020)
Profit-maximizing slant of average newspaper	0.4600 (0.0047)
Percent loss in variable profit to average newspaper from moving 1 SD away from profit-maximizing slant	0.1809 (0.1025)
Share of within-state variance in slant from consumer ideology	0.2226 (0.0406)
Share of within-state variance in slant from owner ideology	0.0380 (0.0458)

^aStandard errors, given in parentheses, are from the delta method. The sample in the first three rows includes 290 newspapers in the demand sample. The sample in the last two rows includes 429 newspapers in the supply sample. The calculation in the fourth row is $(\hat{\lambda}_1^s)^2$ times the within-state variance in R_n , divided by the within-state variance of \hat{y}_n . The calculation in the last row is $\hat{\sigma}_\mu^2$ divided by the within-state variance of \hat{y}_n .

Other determinants of slant

So far the evidence point towards the interpretation that **newspaper cater to their readers** (demand factors are important).

Two possible alternative explanations:

- ▶ Incumbent politicians influence news content and their ideology is correlated with consumer ideology
- ▶ Reporters and editors are drawn from local population, have ideologies correlated with those of local consumers and are willing to sacrifice wage income to represent their own views in the newspaper.

Ideology of incumbent politicians

Problem: If incumbent politicians influence news content, then any correlation between incumbent politicians' ideology and consumer ideology could bias out results.

Results of check: slant is not significantly related to the ideology of incumbent politicians

Figure: Relationship between slant and party of incumbent politicians

Incumbent governor is Republican as of December 2005	-0.0090 (0.0070)	
Share of Republican representatives to House in 109th Congress		-0.0044 (0.0054)
Share Republican in newspaper's market (presidential vote)	0.1497 (0.0185)	0.1538 (0.0177)
Number of newspapers	427	429
R^2	0.1990	0.1871

^aDependent variable: slant index (\hat{y}_n). Standard errors are given in parentheses. Standard errors in the first specification are clustered by state to allow for correlation in error across newspapers in the same state and Washington, DC newspapers are omitted.

Ideology of local reporters and editors

Important question: how would slant be chosen if (local) reporters' and editors' ideologies diverged from those of consumers?

Authors believe it is unlikely that reporter/editor ideology would exert a significant influence in such a case.

Arguments:

- ▶ high cost of deviation from consumer preferences (18% for 1 sd)
- ▶ relatively high geographical mobility of reporters
 - ▶ evidence based on Census micro data
- ▶ relatively low total cost of salaries of editors and reporters - 10%
- ▶ comparison of Washington bureau reporting and local reporting ($SLANT_i = f(CONSUMER_IDEOLOGY_i) + \epsilon_i$)
 - ▶ regression coefficients indistinguishable

Conclusion

- ▶ Deviating from readers' preferred level of slant is associated with high costs
 - ▶ Consumer taste (demand side) is the main determinant of newspaper slant, no support for influence of owner ideology (supply side)
 - ▶ No aggregate slant on the national level due to owner ideology
- ⇒ Role of diversity in newspaper ownership might be overrated

Discussion

- ▶ Endogeneity problems might persist:
 - ▶ Demand side analysis: Newspaper circulation could (and should) have an effect on consumer ideology. No instrument.
 - ▶ Supply side analysis: Is religiosity exogenous?
- ⇒ One could imagine sizable long-run effects running in the opposite direction

- ▶ Validity of results depends on market structure:
 - ▶ Assumptions about ideal_n only reasonable for local monopolies
 - ▶ Authors' claim: Observed levels of slant are almost perfectly efficient as newspapers cater to the "average" taste in their markets
 - ▶ but in a duopoly they should probably split the market

- ⇒ Politically charged topic: No rash conclusions!

Validity of results?

What is the reason for such a deviation of results from observed perceptions?

Are newspapers so special, is the approach flawed or are people just severely biased in their assessment of bias?

Figure: Gallup poll on media bias

Perceptions of Media Bias, by Party and Ideology

	% Too liberal	% Just about right	% Too conservative
Democrats	20	52	24
Independents	42	33	21
Republicans	71	18	9
Liberals	15	49	33
Moderates	35	44	18
Conservatives	70	16	12

Sept. 4-7, 2014

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Other papers

Press Coverage and Political Accountability (Snyder and Strömberg 2010)

Research question

What is the causal effect that local press coverage of members of congress has on voters' monitoring and on the effort that politicians exert to serve the interests of their constituencies?

- ▶ An active press is essential to put checks on government
- ▶ Problematic mostly for weak democracies but can also be studied in U.S. local politics
- ▶ Exploit random variation in press coverage due to *congruence* between newspaper markets and U.S. congressional districts

$$\text{Congruence}_{cd} = \sum_{m=1}^M \text{MarketShare}_{mc} \text{Readershare}_{md} \in [0, 1]$$

Setup

- ▶ Data
 - ▶ 162 newspapers in the period 1991 – 2002 which on average cover 385 congressional districts
 - ▶ Direct information on press coverage by newspapers from online databases
 - ▶ Survey data on people's knowledge about their local representatives and on election turnouts
 - ▶ Information on representatives' behavior in congress
- ▶ Methodology
 - ▶ OLS
 - ▶ also served with fixed effects – it's a panel

Results

- ▶ *Congruence* is a strong predictor for coverage
- ▶ People are better informed if they live in a district with higher *congruence*,
 - ▶ robust to controlling for key sociodemographic and economic characteristics
 - ▶ they are also more likely to vote as compared to turnout for presidential elections
- ▶ Congress members from constituencies with high *congruence* work harder for their voters:
 - ▶ More witness-appearances before congressional hearings
 - ▶ More likely to sit in "distributive" committees as opposed to "policy" committees (insignificant when including FEs)
 - ▶ More moderate and more likely to vote against party line
 - ▶ Higher public spending in more *congruent* districts

Media and Political Persuasion: Evidence from Russia

Ruben Enikolopov, Maria Petrova and Ekaterina Zhuravskaya

Research question

Can mass media have a substantial effect on political outcome?

- ▶ the influence of the only independent national channel NTV on voting behavior in parliamentary election 1999 in Russia
- ▶ the availability of NTV approximated by the strength of transmitting signal in different regions
- ▶ main assumption: the availability of NTV was idiosyncratic conditional on observables
- ▶ analyze media effect on aggregate / individual level

Aggregate-Level Results

Estimated model:

$$\text{vote}_{s,1999}^j = \beta_0 + \beta_1 \text{NTV}_{s,1999} + \beta_2' X_{s,1999} + \beta_3' E_{s,1999} + \delta_r + \epsilon_s^j$$

The main results:

- ▶ the aggregate vote for the government party decreased by 8.9%
- ▶ the aggregate vote for the opposition parties increased by 6.3%
- ▶ the turnover decreased by 3.8%

Further analysis: calculating persuasion rates, conducting placebo experiment and assessing the persistence of NTV effects.

Individual-Level Results

Estimated model (bivariate probit regression model):

$$Pr(\text{vote}_{i,1999}^j = 1) = \Phi(\beta_0 + \beta_1 \text{WatchedNTV}_{i,1999} + \beta_2' C_{i,1999} + \epsilon_i^j)$$

The main results:

- ▶ significant positive effect for the two opposition parties
- ▶ the NTV has strong persuasion power at the individual level as well
- ▶ however, no effect on reported turnout (may be due to unwillingness to report political apathy in the survey)

The results suggest that **the media have substantial effect** in countries characterized by weak democratic institutions such as Russia.

Cross-Border Media and Nationalism: Evidence from Serbian Radio in Croatia (Della Vigna et al.)

Research question

How does exposure to media intended to strengthen nationalistic identification of a particular ethnic group affect nationalistic feelings of a rival group?

Various possible effects:

- ▶ it may **trigger ethnic animosity**, increasing the polarization of political views (Glaeser and Sunstein 2009), and thus making future conflict more likely
- ▶ it may instead **reduce informational asymmetries** between groups and alleviate ethnic tensions (Allport 1954)
- ▶ the cross-group impact of media may be **negligible**, if people mostly consume media that support their own views (Sunstein 2001; Durante and Knight 2012)

Context

- ▶ aftermath of Serbo-Croatian conflict in the 1991–1995 Yugoslavian wars
- ▶ analysed region of Croatia under Serbian occupation until 1995
- ▶ in the following decade public media in Serbia continued to promote Serbian nationalism
- ▶ the signal of Serbian public radio intended for internal consumption inside Serbia reaches several, but not all, villages in this region of Croatia

Research design and data

Research design:

- ▶ **regression:** use idiosyncratic nature of radio reception to identify the causal effect of Serbian (nationalist) radio on Croatia voting patterns
 - ▶ **instrument relevance:** 78% of Croats occasionally listen to Serbian radio when it is available
 - ▶ **instrument exogeneity:** strong case in favor (details in paper)
- ▶ **lab experiment:** test if Serbian radio triggers anti-Serbian sentiment among tested Croats

Data:

- ▶ street survey of residents of Croatian villages located close to the Serbian border
- ▶ hand-collected data on actual availability of Serbian radios (2009 and 2010), and calculation based on topography
- ▶ election results (2003, 2007, 2010)

Results

Regression results

- ▶ Availability of Serbian radio
 - ▶ increases the votes for extremist nationalist parties during the Parliamentary election of 2007
 - ▶ reduces the vote share for the moderate nationalistic
 - ▶ in some specifications increases the vote share for the social-democratic party
 - ▶ is associated with a significantly higher likelihood of having ethnically offensive graffiti in the village center
- ▶ Persuasion rate of 3 - 4 percent

Experiment results

Confirms that Serbian public radio has content offensive to Croats, as they express higher anti-Serbian sentiment after being exposed to this radio as opposed to other radio stations.

Topic Summary

- ▶ Identification idea:
 - ▶ focus on regional variation in media availability
 - ▶ newspapers often serve a local market
 - ▶ signal quality of broadcast varies e.g. for topographic reasons
- ▶ Key insights:
 - ▶ establishing a causal link between media ownership and bias is difficult
 - ▶ media play a decisive role in providing voters with information and influence their behavior
 - ▶ coverage has an impact on political outcomes
- ▶ Context matters!
 - ▶ In Russia increased media coverage decreased voter turnout, in US congressional elections it was increased
 - ▶ wider reach of media can promote democracy but can also amplify resentments
 - ▶ found no ownership effects in US newspaper market whereas (state) ownership in Russia mattered a lot