Marc Sangnier marc.sangnier@univ-amu.fr

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-Introduction



Information and mass media

Introduction

-Information and mass media

Information and mass media

- Voters need information to efficiently select and monitor policymakers.
- Information acquisition and transmission is a high-fixed-cost, low-marginal-cost activity. Not efficient for each citizen to collect information directly.
- The media collect this information and distribute it to citizens.
- By spreading information about particular events and policies the media can increase government accountability.
- The availability of mass media can have important distributive implications as more informed voters are likely to receive more favorable policies than uninformed ones.

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Information and mass media

The impact of mass media on policy

David Strömberg, 2004. "Radio's Impact on Public Spending," The Quarterly Journal of Economics, Oxford University Press, vol. 119(1), pages 189-221.

- Radio was introduced in the early 1920s and reached 80% of US household by 1940.
- A state-level New Deal program providing unemployment relief was implemented between 1933 and 1935.
- Radio broadcasts informed local voters about benefits they had received.
- Question:

Does local radio access affect spending?

-Introduction

Information and mass media



Federal Emergency Relief Administration organization chart. Source: Strömberg (2004)

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Information and mass media

• Cross-county estimation:

Per capita spending_i = $\alpha + \beta$ Households with radio_i+ $\delta_s(i)$ +...

- Also control for turnout, unemployment, etc.
- About 2500 counties.

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Information and mass media

| + | c_1 : log share hhlds with radios | 0.138^{**} |
|---|---|----------------------------|
| _ | share illiterate | -1.111* |
| + | school enrollment | (-2.1) 0.856* |
| + | c2: log voter turnout | (2.3) 0.165** |
| + | marginal voter density | (2.9) 0.034 |
| + | unempl. 1930 | (0.1) 7.837** |
| + | unempl. 1937 | (3.9) 9.750** (10.6) |
| | state effects R ² Number of observations | yes 0.63 2492 |

Impact of radio penetration on (log of) per capita spending (t-statistics in parentheses). A one standard-deviation increase in the share of households with radios increase spending by 9%. Source: Strömberg (2004)

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Thomas Eisensee and David Strömberg, 2007. "News Droughts, News Floods, and U. S. Disaster Relief," The Quarterly Journal of Economics, Oxford University Press, vol. 122(2), pages 693-728.

- Study the effect of news coverage of natural disasters on U.S. international relief spending.
- Disasters that strike when the news is focused on other things get less media coverage, and therefore less political response (crowding out).

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- Information and mass media

• Empirical strategy:

Exploit the occurrence of exogenous events that are particularly newsworthy and hence likely to compete with natural disasters for news coverage.

- Olympic Games.
- Daily news pressure: median number of minutes devoted to the top three news stories (average of the 40 days following the disaster). Good measure of the presence of other newsworthy stories in the period of the disaster.
- Also control for the severity of the disaster (i.e. number of victims, number of affected people), etc.

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Information and mass media



Source: Eisensee and Strömberg (2007)

-Introduction

Information and mass media

| | Dependent variable: News | | Dependent variable: Relief | | |
|---------------------------|--------------------------|------------------------|-----------------------------|---------------------|--|
| | (2) | (3) | (6) | (7) | |
| News Pressure | -0.0163 (0.0041)*** | -0.0177 (0.0057)*** | -0.0119 $(0.0045)^{***}$ | -0.0094 (0.0058) | |
| Olympics | -0.1079 (0.0470)** | -0.0871 (-0.0628) | -0.1232 (0.0521)** | -0.1071 (0.0763) | |
| log Killed | (010 11 0) | 0.0605 | (010021) | 0.0582 | |
| log Affected | | 0.0123 (0.0024)*** | 0.0376 | (0.0024)*** | |
| Observations R-squared | 5,212 0.1797 | $2,926 \\ 0.3624$ | 5,212 0.1989 | $2,926 \\ 0.4115$ | |

Effect of the pressure for news time on disaster news and relief. Source: Eisensee and Strömberg (2007)

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Information and mass media

- Magnitudes:
 - Disasters happening during the Olympics are 5% less likely to make it in the news and 6% less likely to receive relief.
 - To have the same chance of receiving relief, a disaster occurring during the Olympics must have three times as many casualties as one occurring on a non-Olympic day.
 - For disaster that are marginally newsworthy, news coverage increases the chances of receiving relief by 70%.

Media capture and media bias

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-Media capture and media bias

Media capture and media bias

Media capture and media bias

- Media coverage impacts policies because more informed voters are more aware of politicians' choices.
- So, information helps to discipline politicians (see lecture 2).
- But, politicians can have an incentive to influence the media so that information does not reach the public: political **media capture**.
- More generally, those who control the media can have an incentive to influence content and viewers' opinions so as to favor their own agenda: media bias.

Media capture and media bias

A model of media capture

A model of media capture

Timothy Besley and Andrea Prat, 2006. "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability," American Economic Review, American Economic Association, vol. 96(3), pages 720-736, June.

• An adverse selection political agency model that includes media (and media capture).

Media capture and media bias

A model of media capture

Setup of the model

- Politicians can be either good or bad: $i \in \{G, B\}$.
- The share of good politicians in the pool of potential leaders is $\pi.$
- If the incumbent leader is good, voters get a benefit of 1. If the incumbent leader is bad, they get 0.
- At the end of a period, voters choose whether to reelect the incumbent or to elect a challenger (from the pool of potential leaders).
- A reelected incumbent gets *r* as next period payoff (first period payoff is normalized to 0).

Media capture and media bias

A model of media capture

- Voters do not observe their payoffs directly. Instead, they might receive from the media some signal *s* about the incumbent's type.
 - N active media who might observe the incumbent's type.
 - No signal (s = ∅) is received by the media if i = G (simplifying assumption).
 - If i = B, the media receive the correct signal (s = B) with probability q and no signal $(s = \emptyset)$ with probability 1 q.
 - Each media can decide whether or not to share the signal with voters.

Media capture and media bias

A model of media capture

- Each individual outlet that produces news gets a revenue a/m, where a the maximum potential audience-related revenue on the news market, and $m \leq N$ the number of outlets reporting news (i.e. transmitting signal).
- Before the election takes place, the incumbent can bribe the media to buy their silence. She can offer each outlet j a transfer t_j (to be paid during the next period) to suppress its signal.
- If t_j is offered, outlet j receives t_j/τ , where $\tau > 0$ represents transaction costs.

Media capture and media bias

└─A model of media capture

Timing

- The incumbent's type is realized: $i \in \{G, B\}$.
- Media outlets receive their signal: $s \in \{\emptyset, B\}$.
- The incumbent observes the media signal and makes offers $t = (t_1, \ldots, t_N)$.
- Each outlet *j* decides whether to accept *t_j* (and to keep silent) or to reject it (and to share the signal with voters).
- If at least one outlet shares the signal, all voters are informed.
- Voters choose to reelect the incumbent or to elect the challenger (if no signal is available, the incumbent is reelected).

Media capture and media bias

A model of media capture

Optimal decisions

- Assume the incumbent is of the **good** type.
 - The probability to be reelected is 1.
 - No decision to be taken.
- Assume the incumbent is of the **bad** type and her type is **not** revealed to the media $(s = \emptyset)$.
 - The probability to be reelected is 1.
 - No decision to be taken.
- Assume the incumbent is of the bad type and her type is revealed to the media (s = B).
 - The probability to be reelected is:

$$\mathbb{P}(\mathsf{Reelected}|s=B) = \begin{cases} 0, \text{ if } m \ge 1, \\ 1, \text{ if } m = 0. \end{cases}$$

• So, the incumbent must decide whether to buy silence from all outlets or from none.

Media capture and media bias

A model of media capture

• The bribe necessary to buy silence from one outlet is:

$$orall j, \ t_j = t^* = a au$$

- The incumbent needs to pay an amount that compensate the audience revenues received if each single outlet was the only one to report news.
- Total cost of bribing media outlets is:

$$T^* = Nt^* = Na\tau$$

• The incumbent will decide to bribe all media outlets if and only if the expected benefits from bribing (reelection) exceed costs (total bribe), that is:

$$r > Na\tau$$
.

-Media capture and media bias

└─A model of media capture

• If $N < \frac{r}{a\tau},$ the full media industry is captured.

• If

$$N > \frac{r}{a\tau},$$

the media is completely free.

Media capture and media bias

A model of media capture

Consequences on political turnover

- Let us define turnover as the probability that the incumbent is replaced by the challenger.
- If the media industry is fully captured:
 - An initial bad incumbent will never be replaced (signals are suppressed).
 - Turnover is 0.
- If the media industry is free:
 - Turnover will occur if and only if we start with a bad incumbent and the (free) media receive some signal. suppressed).
 - Turnover is $(1 \pi)q$.
- Political turnover is higher if the media industry is free.

Media capture and media bias

A model of media capture

Consequences on voters' welfare

- Let us reason over two periods.
- If the media industry is fully captured:
 - Voters expected utility in both periods is π (start and continue with a good incumbent).
 - Ex-ante welfare is 2π .
- If the media industry is free:
 - Voters expected utility in period 1 is π (start initially with a good incumbent).
 - Voters expected utility in period 2 is π (continue with the good incumbent) plus $(1 \pi)q\pi$ (bad incumbent is replaced with a good politician).
 - Ex-ante welfare is $2\pi + (1 \pi)q\pi$.
- Voters' welfare is higher if the media industry is free.

Media capture and media bias

A model of media capture

Implications

- Pluralism (N) reduces the scope for capture, as it makes it more expensive for the government to silence the media.
- Higher rents from being in power (r) increase the scope for capture.
- A more commercialized media (a) favor media independence.
- Higher transaction costs (τ) favor media independence:

-Media capture and media bias

A model of media capture

Comments

- How to bribe the media?
 - Direct cash transfers,
 - Fire/promote employees (if state-owned),
 - · Public decision benefiting the media company,
 - · Public decision benefiting firms linked to media,
 - Selective access to scoops.
- Transaction costs depend on institutional/cultural features of the country and on the form of ownership of the media.

-Media capture and media bias

└─ Media bias

Media bias

- In the previous model, media either report news or don't.
- Media can also slant the news in order to favor a particular point of view. This is called **partisan bias**:
 - Unbalanced reporting of political events (language, citations, etc.);
 - More time devoted to like-minded politicians/experts;
 - More emphasis on issues on which a party is perceived as stronger.

-Media capture and media bias

Media bias

Example of media bias

• On December 2, 2003, American troops fought a battle in the Iraqi city of Samarra.

• Fox News

In one of the deadliest reported firefights in Iraq since the fall of Saddam Hussein's regime, US forces killed at least 54 Iraqis and captured eight others while fending off simultaneous convoy ambushes Sunday in the northern city of Samarra.

New York Times

American commanders vowed Monday that the killing of as many as 54 insurgents in this central Iraqi town would serve as a lesson to those fighting the United States, but Iraqis disputed the death toll and said anger against America would only rise.

Al-Jazeera.net

The US military has vowed to continue aggressive tactics after saying it killed 54 Iraqis following an ambush, but commanders admitted they had no proof to back up their claims. The only corpses at Samarra's hospital were those of civilians, including two elderly Iranian visitors and a child.

Source: Gentzkow and Shapiro (2006)

-Media capture and media bias

-Media bias

Determinants of media bias

- Supply-driven media bias.
 - Media slant content to try to manipulate viewers' beliefs in such a way as to favor the political preferences of owners, advertisers, or journalists.
- Demand-driven media bias.
 - Viewers hold beliefs which they like to see confirmed.
 - Viewers are sophisticated and choose media outlets with content conforming to their own ideology.
 - Profit-maximizing media slant stories towards viewers beliefs.
 - Since viewers are exposed to like-minded content, the scope for influence is reduced.

-Media capture and media bias

└─ Media bias

Empirical evidence of supply-driven bias

Valentino Larcinese, Riccardo Puglisi and James M. Snyder Jr., 2011. "Partisan bias in economic news: Evidence on the agenda-setting behavior of U.S. newspapers," Journal of Public Economics, Elsevier, vol. 95(9-10), pages 1178-1189, October.

- Study the agenda-setting political behavior of US newspapers.
- How do politically-oriented media change their behavior depending on the economic and political situations?

Media capture and media bias

-Media bias

- Construct a measure of partisanship for each newspaper *n*: propensity across elections to endorse the Democratic candidate rather than the Republican one.
- Construct a monthly measure of stories about specific issues.
- Estimated equation:

Stories about..._{n,t} = ... $+\beta$ Dem. President_t ×Economic variable_t ×Dem. partisanship_n + ... - Media capture and media bias

Media bias

| ι | Unemployment | Inflation | Budget deficit | Trade deficit |
|------------------------------------|----------------------|-----------|----------------------|---------------------|
| | (3) | (6) | (9) | (12) |
| Democratic President dummy× econor | mic -0.105 | -0.088 | -0.056 ^{**} | -0.017 |
| variable× reader partisanship | [0.300] | [0.158] | [0.028] | [0.046] |
| Democratic Pres. dummy× economic | -0.115 ^{**} | 0.009 | -0.006 | -0.014 [*] |
| variable× endorsement partisanship | [0.053] | [0.036] | [0.008] | [0.008] |
| Observations | 12,004 | 12,004 | 4009 | 4009 |
| Number of newspapers | 101 | 101 | 101 | 101 |
| R-squared | 0.64 | 0.72 | 0.62 | 0.72 |

Newspapers with pro-Democratic endorsement pattern systematically give more coverage to high unemployment when the incumbent president is a Republican than when the president is Democratic, compared to newspapers with pro-Republican endorsement pattern.

Source: Larcinese, Puglisi, and Snyder (2011)

-Media capture and media bias

Media bias

Further empirical evidence of supply-driven bias

Rafael Di Tella and Ignacio Franceschelli, 2011. "Government Advertising and Media Coverage of Corruption Scandals," American Economic Journal: Applied Economics, American Economic Association, vol. 3(4), pages 119-51, October.

- Combine data on the coverage of government corruption on Argentina's main newspapers, with data on government advertising on those newspapers.
- An increase in monthly government advertising is associated with a significant reduction in coverage of the governments corruption.

Jonathan Reuter and Eric Zitzewitz, 2006. "Do Ads Influence Editors? Advertising and Bias in the Financial Media," The Quarterly Journal of Economics, Oxford University Press, vol. 121(1), pages 197-227.

- Analyze mutual fund recommendations on personal finance magazines.
- A magazine is more likely to recommend funds from families that have advertised within their pages in the past.

-Media capture and media bias

Does slanted media affect voting?

Does slanted media affect voting?

Stefano Della Vigna and Ethan Kaplan, 2007. "The Fox News Effect: Media Bias and Voting," The Quarterly Journal of Economics, Oxford University Press, vol. 122(3), pages 1187-1234.

- Investigate the impact of the entry of Fox News (right-wing news network) in cable markets on the change in Republican vote share between 1996 and 2000 Presidential elections.
- Exploit the difference in timing in the introduction of Fox News in different cable markets.

- Media capture and media bias

Does slanted media affect voting?



Source: Della Vigna and Kaplan (2007)

- Media capture and media bias

Does slanted media affect voting?

| Republican between 20 | Republican two-party vote share change between 2000 and 1996 pres. elections | | | | |
|---------------------------------------|---|-----------------|--|--|--|
| | (6) | (7) | | | |
| Availability of Fox News via | 0.0037 | 0.0048 | | | |
| cable in 2000 | $(0.0021)^{*}$ | $(0.0019)^{**}$ | | | |
| Pres. Rep. vote share change | 0.0229 | 0.0514 | | | |
| 1988–1992 | (0.0216) | $(0.0219)^{**}$ | | | |
| Constant | -0.0377 | 0.0081 | | | |
| | (0.0258) | (0.0313) | | | |
| Control variables | | | | | |
| Census controls: 1990 and 2000 | Х | Х | | | |
| Cable system controls | Х | Х | | | |
| U. S. House district fixed effects | Х | — | | | |
| County fixed effects | _ | Х | | | |
| R^2 | 0.7528 | 0.8244 | | | |
| N | 3,722 | 3,722 | | | |

Source: Della Vigna and Kaplan (2007)

Conclusion



- Conclusion

Conclusion

• Media play a key role in a world of imperfect information where citizens need to choose officials to take responsibilities.

• Incredibly high number of evidence on media bias and the impact of slanted media on voting behavior.

End of lecture.

Lectures of this course are inspired from those taught by D. Acemoglu, Y. Algan, R. Durante, and B. Olken.