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## Media Markets and Localism: Does Local News *en Español* Boost Hispanic Voter Turnout?

By FELIX OBERHOLZER-GEE AND JOEL WALDFOGEL\*

Since the dawn of broadcasting, and especially in the past decade, Americans have turned their attention from local to more distant sources of news and entertainment. Integrated markets offer more numerous and more varied shows, and they allow consumers to watch content that better matches their preferences. A globalized media world has brought American football to Europe, Japanese *anime* to Latin America, and Mexican soap operas to the United States. At the same time, the availability of these products reduces the consumption of local news, not only because some consumers prefer national and global content to local information, but also because local media products that lose a significant number of consumers are forced to cut quality, and they may even cease to exist if their audience falls below a critical threshold. For these reasons, some scholars claim that the rise of integrated media markets undermines local civic engagement (Robert D. Putnam 2000).

Against this backdrop, many regulatory agencies, including the Federal Communications Commission (FCC) of the United States, seek to protect local media and promote localism, for instance by limiting ownership concentration.<sup>1</sup> However, localism is desirable only if there are, in fact, positive spillovers from the provision of local content that can help justify the loss of private welfare that integrated media markets would provide.

In this paper we propose a simple test for the existence of spillovers from local news programming, asking if the presence of local television news affects civic behavior. The ubiquity of local news programming across all US metro areas makes it impossible to study its effects on the general population. In contrast, the availability of Spanish-language news has increased considerably in recent years, providing us with an experiment to study the effect of local news on one important measure of civic engagement, voter turnout in local elections. In particular, we use a differencing approach, asking whether Hispanic voter turnout is higher, in relation to non-Hispanic turnout, in metro areas with Spanish-language local television news.

Our results indicate that Spanish-language local television news raises Hispanic turnout by more than 4 percentage points. Local news targeted at Hispanics has no effect on the participation of non-Hispanics and, as one would expect, a significantly smaller effect in years with a presidential race. In markets with Spanish-language news, about a quarter of Hispanics turn to these programs. Our estimates thus imply that news in Spanish caused about a fifth of Spanish-language news viewers to start voting. Interestingly, Hispanics with access to news in Spanish do not increase the time they spend watching news. Content analyses of Spanish-language news programs in the United States find that these shows are much more likely to report on issues that are of interest to Latinos (Martin Kaplan, Kenneth Goldstein, and Matthew Hale

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<sup>1</sup> In the words of former FCC Chairman Michael K. Powell, "Fostering localism is one of this Commission's core missions and one of three policy goals, along with diversity and competition, which have driven much of our radio and television broadcast regulation during the last 70 years."

TABLE 1—GROWTH IN METRO AREAS WITH SPANISH-LANGUAGE LOCAL TELEVISION NEWS

	None	One station	Two stations
1994	269	11	5
1996	267	12	5
1998	264	14	6
2000	261	14	9
2002	257	16	10

*Note:* In our sample period, local news in Spanish was introduced in markets located in CA, CO, FL, MD, NV, TX, UT, VA, and WV.

2005), suggesting it is the relevancy of information that increases participation. We conclude that, for the case of Spanish-language news, the spillovers from local media to local civic engagement appear to be fairly important, and they contribute to the policy discussion of localism in broadcasting.

This study links the literature on entry in differentiated product markets with recent models of political economy. During our study period, Hispanics have increasingly gained access to Spanish-language media content because they now form groups that are large enough to make the production of local news economically feasible in many markets. The pattern documented in this paper is not specific to Hispanics. For instance, black-targeted radio stations are available only in markets with many black citizens (Peter Siegelman and Waldfogel 2001), and blacks are more likely to read newspapers in cities with a larger black share of population because these newspapers report more frequently about issues of interest to blacks (Lisa George and Waldfogel 2003). Thus, the present study adds to the evidence that, in the presence of significant fixed costs, markets tend not to serve the preferences of small or spatially dispersed groups of consumers with uncommon preferences (Waldfogel 2003). Our findings also add to the growing literature on the importance of media content for political participation (David Strömberg 2004a, b; Benjamin Olken 2006; Stefano DellaVigna and Ethan Kaplan 2007; Alan Gerber, Dean Karlan, and Daniel Bergan, forthcoming; George and Waldfogel 2008; Oberholzer-Gee and Waldfogel 2005). For example, Matthew Gentzkow (2006) documents that up to half of the decline in US voter participation since the 1950s may be attributable to the spread of television. Our results suggest that this decline is not a TV effect per se but the result of individuals watching shows that contain little political information.

The paper proceeds in four sections. We first introduce our data. In Section II, we show how the availability of Spanish-language local television news depends on the size of the local Hispanic population. We report our results in Section III, and Section IV concludes.

## I. Data

The data for this study are drawn from four sources: the Current Population Survey (CPS) Voting Supplement (1994–2002); direct collection of information on the availability of Spanish-language local television news in US metropolitan areas; data on TV viewing from Scarborough, a media research firm; and demographic information from the 1990 and 2000 US census. Specifically, we have a panel for the even-numbered years between 1994 and 2002 on the number of stations offering local news in Spanish for all US metro areas, and individual-level voter turnout data and socioeconomic characteristics from the CPS. The metropolitan areas in our sample contain 85 percent of the US Hispanic population in 2000.

We gathered our list of stations broadcasting news in Spanish from the *Telemundo* and *Univision* Web sites. We contacted each of the 50 stations to learn if they broadcast local news

TABLE 2—ENTRY OF SPANISH-LANGUAGE LOCAL TELEVISION NEWS (1994–2002)

	News entry (indicator) (1)	News entry (indicator) (2)	News entry (number of stations) (3)
log of Hispanic population	0.0123 (0.0060)**	0.00419 (0.0044)*	0.0383 (0.010)**
log of non-Hispanic population	0.00174 (0.0031)	0.000704 (0.0023)	0.0185 (0.017)
Median Hispanic income (000)		0.000614 (0.00067)	0.00278 (0.0029)
Hispanic share completed college		−0.0894 (0.082)	−0.166 (0.20)
Hispanic share over 40		−0.000504 (0.061)	0.0336 (0.28)
Hispanic share female		0.125 (0.16)	0.367 (0.40)
Constant			−0.00209 (0.22)
Observations	280	280	280
$R^2$			0.14

*Notes:* In columns 1 and 2, the dependent variable is 1 if the market received at least one additional Spanish-language local news show during our study period. We report probability derivatives. In column 3, which gives regression coefficients, the dependent variable is the number of new shows. Standard errors are in parentheses.

\*\*Significant at the 1 percent level.

\*Significant at the 5 percent level.

and when they began doing so. In 1994, there were 16 metro areas with Spanish-language local news, containing 63 percent of the Hispanics in the sample (see Table 1). By 2004, this number had increased to 28, and these 28 areas contained 76 percent of the sample Hispanic population.

To examine why the availability of local news in Spanish increases Hispanic turnout, we turn to data collected by Scarborough. We have a nationally representative cross section of consumers who recorded their television viewing for each half-hour segment during survey weeks in late 1999 and 2000. We use the TV Guide publication to determine which respondents watch local news, both in Spanish and in English. Because Scarborough also collects information on participation in elections, we can directly link the consumption of local news to voting tendencies.

## II. Availability of Spanish-Language Local News

In our approach, we assume that the availability of local news in Spanish reflects the size of the Hispanic population. Table 2 explores the determinants of markets adding local news in Spanish during our study period. The likelihood of receiving at least one more station that provides news is related to the size of the Hispanic population, but unrelated to the non-Hispanic population. Adding socioeconomic characteristics that are predictive of participation in elections, we find no evidence that these characteristics drive the provision of local news in Spanish (column 2). In model 3, we replace the indicator for the provision of news in Spanish with the number of stations that add such programming during our study period. The results are unchanged. Our estimates imply that the Hispanic population needs to reach a size of at least 350,000 for the probability of having Spanish news to exceed 50 percent.

### III. Spanish Local News and Voter Turnout

#### A. Empirical Strategy

We are interested in determining whether the availability of Spanish-language local television news (*HLN*) affects Hispanic voter turnout. Our basic model is

$$(1) \quad V_{imt} = \alpha HLN_{mt} + \alpha^H \delta^H HLN_{mt} + \mathbf{X}_{it} \beta + \delta^H \mathbf{X}_{it} \beta^H + \varphi t + \delta^H \varphi^H t + \mu_m + \varepsilon_{im}.$$

In equation (1),  $V_{imt}$  is a dummy indicating if individual  $i$  who lives in metro area  $m$  voted in the election at time  $t$ .  $HLN_{mt}$  shows whether the area has Spanish-language local television news;  $\delta^H$  indicates the respondent is Hispanic;  $\mathbf{X}_{it}$  contains characteristics of the individual (income, education, age, gender);  $t$  is a time trend, which we implement as year fixed effects;  $\mu_m$  indicates the metro area; and  $\varepsilon_{im}$  is an error term. We expect  $\alpha^H$  to be positive because the availability of local news in Spanish reduces the cost of obtaining political information. For instance, in the 2004 election, only 2.5 percent of English-language stories mentioned Hispanic issues. By contrast, 31 percent of all election stories aired in Spanish discussed Latino issues. In Los Angeles and New York, Spanish-language stations also aired more information about voting issues such as polling locations and registration procedures (Kaplan, Goldstein, and Hale 2005; Hale, Tricia Olsen, and Erika Fowler 2009). Because non-Hispanics generally do not watch Spanish-language local news, we expect  $\alpha$  to be zero.

In linking the availability of Spanish-language local news to political participation, we are particularly concerned about three sources of unobserved heterogeneity. First, the tendency of individuals to vote may be related to unobserved area factors, for example, the ease with which persons can travel to the polls. We address this issue by including metro fixed effects in our models. Second, Hispanics might become more interested in politics over time, and this growing interest could be correlated with the introduction of local Spanish news. We address this problem by including group-specific year fixed effects in model (1). Finally, Spanish-language local news might be selectively offered in markets in which Hispanic interest in politics happens to surge. We test this conjecture by comparing  $\alpha^H$  across local and presidential elections. Turnout increases by more than 10 percentage points when the president is elected. In national contests, local news plays a lesser role because voters' attention shifts to the presidential race and the national media, implying a decline in  $\alpha^H$ . In contrast, if  $\alpha^H$  merely proxied for unobserved variation in Hispanic political acculturation across markets and time, we would expect local news to have a similar impact in all political contests. Thus, we identify the effect of interest from a triple-difference: we ask how changes in the difference between Hispanic and general voting tendencies that are due to the availability of local news in Spanish vary across local and national political contests.

#### B. Results

The changes in voting patterns that drive our results can readily be seen in the raw data. Hispanic participation increased by 10 percentage points and 8.9 percentage points in markets that added Spanish-language local news after the 1994 and the 1998 elections, respectively. This compares to an increase of 3.5 percentage points in markets without local news in Spanish and a decline of 2 percentage points in markets that had local news prior to 1994. To see whether these changes are in fact linked to the introduction of local news in Spanish, we present probit estimates of equation (1) in Table 3. Hispanics are less likely to vote than other citizens (−22.7 percent) but the introduction of local news in Spanish significantly decreases this difference

TABLE 3—VOTER TURNOUT AND THE PRESENCE OF SPANISH-LANGUAGE LOCAL TELEVISION NEWS

	Turnout (1)	Turnout (2)	Turnout (3)	Turnout (4)	Turnout (5)
Hispanic	−0.227 (0.012)**	−0.225 (0.015)**	−0.103 (0.020)**	−0.117 (0.015)**	−0.107 (0.020)**
Spanish local news presence	−0.001 (0.007)	−0.004 (0.007)	−0.006 (0.007)	−0.014 (0.007)	0.005 (0.010)
Hispanic × Spanish local news	0.082 (0.011)**	0.076 (0.015)**	0.051 (0.016)**	0.083 (0.010)**	0.047 (0.017)**
Hispanic × Spanish local news × presidential year	−0.035 (0.018)*	−0.041 (0.018)*	−0.037 (0.019)*	−0.027 (0.011)*	−0.038 (0.019)*
log Hispanic population		0.053 (0.008)**	0.060 (0.009)**		0.034 (0.009)**
Hispanic × log Hispanic population		0.002 (0.004)	0.013 (0.004)**		0.015 (0.004)**
Group-specific personal controls?	No	No	Yes	Yes	Yes
MSA FE	Yes	Yes	Yes	Yes	Yes
Additional controls?	No	No	No	Hispanic population in 1990 × year FE	State FE for states with new stations × year FE
Observations	240,740	230,151	230,151	231,361	230,151

Notes: Probit estimates, with probability derivatives reported. Personal controls include respondent income (16 indicators) as well as group-specific (Hispanic and non-Hispanic) indicators for gender, age, and individuals who did not complete high-school. Standard errors are given in parentheses.

\*\*Significant at the 1 percent level.

\*Significant at the 5 percent level.

(−8.2 percent). Importantly, local Spanish news has no effect on non-Hispanic voting tendencies. As expected, the effect of Spanish local news is smaller in presidential years.

While increases in the size of the Spanish-speaking community encourage the provision of local news, its size may also have a direct effect on participation rates. For example, a sufficiently large local Hispanic population may facilitate the existence of other institutions, such as clubs or political organizations that can boost voter turnout. If these organizations are more effective in local than in national elections, their presence could explain our results. In models 2 and 3 of Table 3, we control for the effect of Hispanic population, allowing it to vary across groups. In model 3, we also include personal controls. Accounting for these socioeconomic characteristics reduces the difference between Hispanic and non-Hispanic voting tendencies, but our basic results remain unchanged: the introduction of local Spanish-language TV increases Hispanic participation by 5.1 percentage points in local elections. There is no significant increase in presidential years.<sup>2</sup>

Models 4 and 5 in Table 3 report the results for two robustness checks.<sup>3</sup> In 4, we allow the effect of Hispanic population to vary by year, accounting for the possibility that it might be more important in nonpresidential years. Specification 5 accounts for the possibility that voting trends may have evolved differently in states that added Spanish-language local news. The reported results are consistent with our earlier findings.

<sup>2</sup> In an additional test, we looked at Hispanics who speak only Spanish. Individuals in this group are even less likely to vote than Hispanics in general but, consistent with our other results, this difference disappears in markets with Spanish-language local news.

<sup>3</sup> We thank the referees for suggesting these specifications.

TABLE 4—PATTERNS OF LOCAL NEWS CONSUMPTION

Respondents	Markets	News	Percent watching local news	Number of segments watched	Percent segments watched
Non-Hispanics	Without news in Spanish		65.9 (47.4)	4.1 (5.0)	27.3 (31.3)
		With news in Spanish	News in English	63.6 (48.1)	3.8 (4.7)
		News in Spanish	0.4 (6.0)	0.0 (0.2)	0.3 (4.7)
		Any news	63.9 (48.0)	3.9 (4.9)	18.6 (22.9)
	Hispanics	Without news in Spanish		61.8 (48.6)	3.7 (4.8)
With news in Spanish			News in English	41.2 (49.2)	2.1 (3.6)
		News in Spanish	25.6 (43.6)	0.9 (2.0)	25.5 (36.1)
		Any news	63.5 (48.1)	3.1 (3.8)	14.7 (17.8)
$\Delta$ for Hispanics across markets with and without local news in Spanish			+1.7	−0.6	−9.4
$H_0$ : $\Delta$ for Hispanics = 0 (Prob >  z )			0.05	0.00	0.00

Notes: The variable “percent watching local news” is the fraction of persons who report they watch a local news program during a one-week period. “Number of segments” is the mean number of half-hour local news segments that respondents watch. “Percent segments” is the ratio of the mean number of half-hours of local news that respondents watch to the number of half-hours that are available in a market. Standard deviations are in parentheses. The last row reports Mann-Whitey U tests comparing the behavior of Hispanic respondents across markets with and without local news in Spanish.

Source: Scarborough data, based on 178,784 respondents.

### C. Mechanism

A key premise of our approach is that Hispanics are better able to access political information that is relevant to them if they live in a market with local news in Spanish. For this story to be plausible, we should observe that Hispanics tune in to news in Spanish where such programs are available, and this increased consumption should in turn lead to increases in local turnout. In this section, we document these changes, using data from Scarborough. We have data for a single survey period, during which 178,784 individuals reported when they watched TV.

In Table 4, we compare the consumption of local news for Hispanics and Non-Hispanics in markets with and without local Spanish-language news. Only 0.4 percent of non-Hispanic respondents watch news in Spanish. In contrast, many Hispanics prefer to receive local news in Spanish. While 61.8 percent of those who live in media markets without news in Spanish watch local news in English, this fraction drops to 41.2 percent in markets with Spanish news. About a quarter of Hispanics reports that they watch their local news in Spanish. Overall, there is a modest but statistically significant increase in the share of Hispanics who watch any type of local news in markets with news in Spanish (+1.7 percent). Interestingly, Hispanic news consumption actually falls in markets with local news when measured as the number of half-hour segments that respondents watch (−0.6) or the fraction of news that is offered in a market (−9.4 percent). One likely reason is that the supply of news in Spanish is much more limited than the supply of

TABLE 5—LOCAL NEWS IN SPANISH AND HISPANIC POLITICAL PARTICIPATION

	Local elections (1)	Local elections (2)	Local elections (3)	National elections (4)
Market with local news in Spanish (indicator)	−0.023 (0.081)	−0.024 (0.081)	−0.021 (0.083)	−0.003 (0.081)
Hours watched local news in Spanish		0.061 (0.028)*	0.072 (0.029)*	−0.011 (0.019)
Hours watched local news in English			0.020 (0.004)**	
Demographic controls?	Yes	Yes	Yes	Yes
Observations	25,534	25,534	25,534	25,534

Notes: The coefficients are ordered probits, estimated on a sample of Hispanics who are registered to vote. We employ the sample weights provided by Scarborough. We report robust standard errors, clustered on 66 local media markets, in parentheses. The dependent variable is the response to the question, “How often do you vote in local (national) elections?” There are three outcomes: 1 = never, 2 = sometimes, 3 = always. All models include controls for income (15 indicators) and gender.

\*\*Significant at the 1 percent level.

\*Significant at the 5 percent level.

news in English (weekly means are 3.3 hours and 16.1 hours, respectively). Although Hispanics have far fewer shows to choose from, and these shows may or may not be aired at times that are convenient for respondents, Table 4 shows that Hispanics watch about 25 percent of the shows that are aired in their market. This fraction is not substantially different from the one for Hispanics and non-Hispanics living in markets without Spanish news. In sum, the data suggest that any effect of news in Spanish on voting tendencies is likely to be driven by the quality, not by the quantity of local news that prospective voters consume. Where Spanish news is available, Hispanics desert shows in English, and they end up watching fewer news segments, presumably because of the limited supply of news in Spanish.

Scarborough asks respondents if they participate in elections: “How often do you vote in local (national) elections?” Responses are “never,” “sometimes,” and “always.” Our dataset includes 25,534 Hispanics who are registered to vote. For these respondents, we can directly relate the consumption of news to participation in local and national elections. Unlike our main estimates, these results are cross-sectional in nature, and they need to be interpreted with care. Table 5 reports ordered probit estimates. We have data on respondents’ income (15 indicators) and gender, which we add as controls to all models. We cluster standard errors on local media markets (66 markets).

In model 1 of Table 5, we test if markets with news in Spanish have increased voting tendencies. As before, we are concerned that the supply of these shows is not random and that *Telemundo* and *Univision* offer local news in markets where consumers have significant political interests, leading us to misattribute increases in participation to TV consumption. As the insignificant estimate indicates, this appears not to be the case.

In model 2, we add the weekly number of hours that respondents spend watching local news in Spanish. News consumption bears a positive relationship to participation in local elections. The coefficient implies that for every additional news segment, the likelihood of not voting falls by 1.4 percent, the likelihood of voting sometimes declines by 1 percent, and the probability of always voting increases by 2.4 percent. We can compare these estimates directly to the effectiveness of news in English (model 3). The estimated coefficient on Spanish news is more than three times as large as the coefficient on news in English. News consumption in both languages is correlated



with increases in participation but, among Hispanics, this effect is much stronger for Spanish news. Finally, we can check whether local news consumption bears a relationship to participation in national elections (specification 4). This appears not to be the case.

#### IV. Conclusions

Our results indicate that Spanish-language news programs substantially boost Hispanic turnout in nonpresidential election years, the periods when the presence of local news actually changes the kind of political information available to Spanish-speakers through television. Our estimates allow a rudimentary calculation of the change in Hispanic turnout. About a quarter of Hispanics switch from English to Spanish-language local television news (Table 4), raising overall Hispanic turnout by 5 percentage points (Table 3). Hence, 20 percent of those who switch start participating. In nonpresidential elections, baseline turnout among Hispanics in our sample is 31 percent. Our estimates thus imply that Spanish-language news caused 27 percent of nonvoters to participate. This effect is very similar to DellaVigna and Kaplan's (2007) estimates for the impact of Fox News and Alan Gerber and Donald Green's (2000a, b) study of door-to-door canvassing. Using Hispanics as a window into the possible effects of television on political behavior, it appears that the effects of television news on voter turnout can be quite large and positive.

With more integrated media markets and a larger variety of programming choices, many consumers opt for nonlocal programming. While such choices enhance the private benefits of media consumption, there is a concern that reduced localism undermines civic engagement. Exploiting variation in the cost of accessing information about local politics, we find support for this concern. Hispanics without access to local television news are significantly less likely to participate in elections than Hispanics with access to news in Spanish. At least for the case of Spanish-language news, the spillovers from local news to local civic engagement appear to be real, and the evidence for them is relevant to the discussion of regulatory policies that promote localism.

#### REFERENCES

- Caldeira, Gregory A., Aage R. Clausen, and Samuel C. Patterson. 1990. "Partisan Mobilization and Electoral Participation." *Electoral Studies*, 9(3): 191–204.
- Cox, Gary W., and Michael C. Munger. 1989. "Closeness, Expenditures, and Turnout in the 1982 U.S. House Elections." *American Political Science Review*, 83(1): 217–31.
- DellaVigna, Stefano, and Ethan Kaplan. 2007. "The Fox News Effect: Media Bias and Voting." *Quarterly Journal of Economics*, 122(3): 1187–1234.
- Feddersen, Timothy J., and Wolfgang Pesendorfer. 1996. "The Swing Voter's Curse." *American Economic Review*, 86(3): 408–24.
- Feddersen, Timothy J., and Wolfgang Pesendorfer. 1999. "Abstention in Elections with Asymmetric Information and Diverse Preferences." *American Political Science Review*, 93(2): 381–98.
- Gentzkow, Matthew. 2006. "Television and Voter Turnout." *Quarterly Journal of Economics*, 121(3): 931–72.
- George, Lisa, and Joel Waldfogel. 2003. "Who Affects Whom in Daily Newspaper Markets?" *Journal of Political Economy*, 111(4): 765–84.
- George, Lisa, and Joel Waldfogel. 2008. "National Media and Local Political Participation: The Case of the *New York Times*." In *Information and Public Choice: From Media Markets to Policy Making*, ed. Roumeen Islam, 33–48. Washington, DC: World Bank.
- Gerber, Alan S., and Donald P. Green. 2000a. "The Effect of a Nonpartisan Get-out-the-Vote Drive: An Experimental Study of Leafletting." *Journal of Politics*, 62(3): 846–57.
- Gerber, Alan S., and Donald P. Green. 2000b. "The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment." *American Political Science Review*, 94(3): 653–63.
- Gerber, Alan S., Dean Karlan, and Daniel Bergan. 2009. "Does the Media Matter? A Field Experiment Measuring the Effect of Newspapers on Voting Behavior and Political Opinions." *American Economic Journal: Applied Economics*, 1(2): 35–52.

- Hale, Matthew, Tricia D. Olsen, and Erika Franklin Fowler.** 2009. "A Matter of Language or Culture: Coverage of the 2004 U.S. Elections on Spanish- and English-Language Television." *Mass Communication*, 12(1): 26–51.
- Kaplan, Martin, Ken Goldstein, and Matthew Hale.** 2005. "Spanish-Language TV Coverage of the 2004 Campaigns." <http://www.localnewsarchive.org/pdf/LCLNASpanishReport.pdf>.
- Matsusaka, John G.** 1995. "Explaining Voter Turnout Patterns: An Information Theory." *Public Choice*, 84(1–2): 91–117.
- Matsusaka, John G., and Filip Palda.** 1999. "Voter Turnout: How Much Can We Explain?" *Public Choice*, 98(3–4): 431–46.
- Oberholzer-Gee, Felix, and Joel Waldfogel.** 2005. "Strength in Numbers: Group Size and Political Mobilization." *Journal of Law and Economics*, 48(1): 73–91.
- Olken, Benjamin A.** 2006. "Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages." National Bureau of Economic Research Working Paper 12561.
- Putnam, Robert D.** 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
- Shachar, Ron, and Barry Nalebuff.** 1999. "Follow the Leader: Theory and Evidence on Political Participation." *American Economic Review*, 89(3): 525–47.
- Siegelman, Peter, and Joel Waldfogel.** 2001. "Race and Radio: Preference Externalities, Minority Ownership, and the Provision of Programming to Minorities." In *Advertising and Differentiated Products*, ed. Michael R. Baye and Jon P. Nelson, 73–107. Amsterdam: Elsevier Science.
- Strömberg, David.** 2004a. "Mass Media Competition, Political Competition, and Public Policy." *Review of Economic Studies*, 71(1): 265–84.
- Strömberg, David.** 2004b. "Radio's Impact on Public Spending." *Quarterly Journal of Economics*, 119(1): 189–221.
- Waldfogel, Joel.** 2003. "Preference Externalities: An Empirical Study of Who Benefits Whom in Differentiated-Product Markets." *RAND Journal of Economics*, 34(3): 557–68.
- Wielhouwer, Peter W., and Bard Lockerbie.** 1994. "Party Contacting and Political Participation, 1952–1990." *American Journal of Political Science*, 38(1): 211–29.