Diversity in Local Television News[*]

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May 27, 2011

[*] We thank Jiao Luo for excellent research assistance on this project.

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1. Introduction

This research was sponsored by the United States Federal Communications Commission (FCC) to support a Congressionally-mandated quadrennial review of FCC rules governing media ownership. This report examines the impact of local market structure on viewpoint diversity in the market for local television news. The goals of the study are threefold: to develop metrics for assessing viewpoint diversity in television news; to identify measures of competition and ownership structure relevant to diversity; and to assess the impact of diversity on viewing tendencies.

Two broad conclusions emerge from the research. First, across all results, we find little evidence for a robust influence of market structure on diversity. The available policy instruments for influencing the supply of diversity turn out to be weak: even the variables most often associated with greater diversity relate only to a small subset of our diversity measures. Second, overall, changes in diversity have little impact on local news viewing. The composition and diversity of local news broadcasts matters most for Hispanic viewing in our study, but the relevant diversity measures are not affected by policy variables.

The report is organized as follows. Section 1 summarizes economic research linking competition and diversity. This section also reviews research on the supply of diversity and its connections to media consumption and political engagement. Section 2 documents the diversity metrics developed for this study. Section 3 describes our empirical approach. In section 4, we describe our main results. Section 5 covers the demand for diversity, and section 6 concludes.

2. Literature

A substantial body of economic theory considers the link between competition and variety in differentiated product markets. An important application of this theory has been in markets for media products, namely newspapers, radio, and television. The literature, starting with Hotelling (1929) and research more specific to media markets such as Steiner (1952) and Beebe (1977), shows that firms face conflicting incentives when designing products. On the one hand, more differentiated products soften price competition, giving firms an incentive to offer variety. At the same time, firms seek to design products that please larger groups of viewers with similar preferences, thereby reducing differentiation. The relative strength of these two countervailing forces depends on the dispersion of consumer tastes in the market and on individuals' willingness to consume less-preferred content. Variety tends to be smaller when consumers have similar preferences and when their willingness to view less-preferred shows is low.

Considering business-stealing effects in models of spatial competition affords a straightforward way to think about the link between media ownership and diversity. On the revenue side, a firm that owns two TV stations has few incentives to simultaneously broadcast similar content on both stations because the programs will serve a similar audience and hence cannibalize viewers from one another. By contrast, if the two stations are owned

by different companies, the firms have only weak incentives to consider revenue cannibalization, suggesting that dispersed ownership might lead to greater variety. On the cost side, however, a common owner will have increased incentives to show similar content if this reduces his cost.

The conflicting incentives of firms to produce differentiated products leave it to empirical work to determine whether or not competition, on balance, increases variety. Some evidence on the effect of competition on product targeting is available from research on media industries. In radio, Berry and Waldfogel (2001) and Sweeting (2010) provide evidence that mergers made possible by policy changes in the 1996 Telecommunications Act led to greater station and music variety within markets, emphasizing the importance of revenue cannibalization. In daily newspaper markets, George (2007) finds that ownership consolidation reduced overlap across papers and increased the total number of topics covered in a metro area. In television, Baker and George (2010) show that business-stealing incentives play a substantial role in whether or not stations broadcast local news during evening timeslots. Taken together, these results suggest that business stealing and ownership effects are important in media markets. Regulations designed to foster competition by limiting ownership concentration might thus serve to reduce diversity.

From a welfare perspective it is important to ask whether the changes in diversity documented in the above studies lead to changes in consumption. Here the results are less clear. In radio, Berry and Waldfogel (2001) do not find greater variety in station formats to be associated with higher listening. Sweeting (2010), however, documents that increases in total variety in songs do stimulate consumption. George (2007) finds weak evidence that additional variety increases per capita newspaper readership. Baker and George (2010) show that total television viewership is lower than it would be under more differentiated programming, but most viewership gains would accrue to non-news programming.

An important contribution of the current study is to extend our knowledge of the effects of competition and ownership on viewpoint diversity to television. Television content – and television news programming more specifically – is of particular importance for a few reasons. First, television has long been, and remains, the primary news source for US households. To date at least, technology shifts that have brought news to the internet have had little impact on television news viewing.[1] Second, the very different production technology and regulatory constraints in television result in a modest number of competitors in most markets, amplifying concerns that some viewers might not be served very well by the existing outlets. Minority consumers in particular might be underserved if media firms face weak incentives to differentiate. Third, we know from previous work linking the industrial organization of media markets with political participation that a lack of information deemed relevant by various demographics will reduce their political engagement (George and Waldfogel 2006, 2008; Gentzkow 2006; Oberholzer-Gee and Waldfogel 2009). The concern that the preferences of some groups will not be respresented in media markets and that under-

[1] The annual PEJ State of the Media studies consistently document this effect: see http://stateofthemedia.org/2011/newspapers-essay/data-page-6.

representation will translate into lower political engagement goes to the heart of the FCC ownership regulations.

With this background, we turn to the diversity metrics developed for the analysis.

3. Metrics for Viewpoint Diversity

We develop three categories of metrics for evaluating viewpoint diversity in local television news. All three metrics rely on keyword counts from television news transcripts. The first set covers diversity in issues, the second set captures diversity in political coverage, and the third set of metrics measures diversity in local coverage. We seek with our measures a way of capturing both *variety* –the number of issues that stations in a market cover – and *differentiation* – differences in the amount of time that stations devote to a particular issue. We offer an overview first and then discuss each in turn.

3.1. Overview

We analyze diversity by measuring *what* news anchors and reporters talk about. We do this by counting keywords in local television news transcripts. An alternative approach, unexplored in this report, is to study *how* local newscasts talk about specific topics. Our decision to focus on the choice of topics is not a value judgment – both the choice of topics and the substance of news coverage matter. The former, however, is far easier to measure, giving us greater confidence in our results.

We obtain the news transcripts from the NewsBank database, which covers local stations of the major network affiliates (ABC, CBS, NBC, FOX) in 40 markets over the study period 2006-2010. We analyze a total of 296,633 transcripts. Not all stations made transcripts available every month. To purge our data from short-term fluctuations in news coverage that are unlikely to reflect longer-term competitive pressures and the influence of ownership, we aggregate the keyword counts to the station-market-quarter. The final sample covers 1,523 stations in 37 markets over 12 quarters. We calculate our diversity metrics at the market-quarter, for a sample size of 398 market-quarters. The data manipulation procedures are outlined in Appendix A.

The basic ingredients of our diversity measures are *word shares*. We count the occurrence of each keyword in each station-market-quarter. We then divide these counts by the total number of words in the station-market-quarter.[2] The word shares are of some independent interest and so we summarize them in the report. However our goal is to develop a metric of diversity *across* stations over time. To do this, we calculate the standard deviation in word shares across stations in each market-quarter. We do this both for relevant individual keywords and groups of keywords. In most of our analysis, the market-level standard-deviation calculated from an underlying set of word shares constitutes our primary diversity metric, but the implementation and interpretation varies across the three categories of metrics in ways outlined below.

Our market level metrics have the important feature that they are robust to unobserved differences in the characteristics of demand across markets. For example, environmental

[2] Before counting, documents are processed to remove articles, conjunctions, pronouns and other non-substantive words. See appendix for details.

issues may be more important to viewers in some markets than others. In the data, this difference would appear as variation across markets in the level of coverage. But our diversity metric is computed from the standard deviation across stations within a market, so we will be able to infer whether stations differ in the amount of time devoted to this topic holding constant overall market-specific coverage. We return to this topic in section 4 when we discuss our model and estimation approach.

3.2. Issue Diversity

To characterize diversity in coverage of news topics, we identify a set of 545 keywords associated with 72 issues that we aggregate to 18 general topics. We count each of the keywords in each station-market-quarter, then sum counts within topic. We then calculate word shares by topic, in other words the ratio of all category references to total words for each station in each market-quarter. For example, the single keyword "Education" accounts for 0.026% of all counted words across stations. The set of keywords associated with the topic of education (schools, teachers, etc.) together account for 0.1525% of counted words. For comparison, keywords associated with one of the largest categories in our sample, weather, account for 0.61% of counted words.

To develop the diversity metrics, we calculate the standard deviation in category word shares across stations in each market quarter. A higher standard deviation indicates larger differences in the word shares across stations. For example, the standard deviation across stations for education keywords averages across markets to 0.031. The standard deviation across stations for weather-related words averages 0.187. We expect the absolute size of the standard deviation measure *across issues* to depend on the scope for diversity in vocabulary for each topic, so we do not compare the standard deviations across topics directly.

Our issue categories were developed from two sources. The primary source is the categorization system established by the Policy Agendas Project, an NSF-funded research project managed by political scientists at the University of Texas at Austin, the University of Washington and Pennsylvania State University. The goal of the Policy Agendas Project is to provide a standardized classification system for political and policy information across sources. The classification system has been applied to a diverse set of policy-related documents, including legislation, federal rulemaking, political speeches and news reporting. The Project template includes 19 major topics, each divided into about 10 more detailed categories, plus 7 additional topics developed for classifying newspaper content. We supplement the policy agenda topics with categories that the Wisconsin Advertising Project developed to classify political advertising.

The diversity metric based on standard deviations across stations is best interpreted as a measure of *differentiation* in the amount of coverage for a particular topic. We develop a second metric to capture *variety*, or the total number of topics covered as well as the proportion of stations covering these topics. To do this, we assign an indicator variable for each topic to identify whether or not the topic was covered at each station in each market-quarter, then take the maximum indicator in a market to identify whether or not a topic was

covered in a market. We sum the station-level indicators to produce a count of topics covered by each station and sum the market-level indicators to produce a count of topics covered in each market. The ratio of the station and market totals produces a share of stations covering each topic. We average this share across all topics to provide a single summary metric of variety in a market at a point in time. With our aggregate categories, virtually all stations cover all topics, so the information from this measure is limited.

3.3. Political Diversity

Our second set of measures tracks political diversity along several dimensions. Following the procedure described above, we first count name references to all members of the US House of Representatives and US Senate in 2006, 2008 & 2010 and calculate word shares for each politician. We aggregate these across office, across party, and by the race/ethnic origin of the politician.[3] With these station-market-quarter word shares, we calculate a standard-deviation across stations.

As with the issue categories, the standard deviation metric represents a baseline measure of differentiation comparable to the issue categories above. The metric captures whether the total time devoted to talking about politicians varies across stations in a market. The party measures indicate diversity in the amount of coverage to politicians in each party, and the minority measures show whether stations differ in the allocation of time to minority officeholders. The metrics show whether some stations in a market emphasize politics while others perhaps emphasize crime, or education. The metrics do not, however, speak to differentiation within political discourse. For example, the metrics cannot distinguish whether three stations in a market devoting equal time to political coverage each cover only a single politician, or split coverage equally across multiple politicians.

To better measure diversity within a topic, we construct a zero-one indicator variable identifying whether or not each politician was mentioned at a station in a market-quarter. Summing these indicators over stations produces a count of the total number of different politicians covered by each news station. Repeating this process at the market level provides a count of the total number of politicians covered in a market. Dividing the count at the station level by the total number of politicians mentioned at the market level generates a share of politicians covered by each station. This measure captures both variety and differentiation in political coverage: when the share of total references for each station is low, the number politicians covered by each station is small, and stations follow different politicians. When the station share of referenced politicians is high, the stations cover the same people.

3.4. Local Diversity

The final set of diversity measures tracks references to places within a market. We wish to capture how much time stations devote to covering the various towns and communities in

[3] We identify minority status from the Congressional Black Caucus, the Congressional Hispanic Caucus and the Congressional Asian Caucus.

a television market. We start with the list of place names recorded by the US Census (about 5,400) and link them by county to each DMA in our sample. We then calculate word shares as above for place references in each market-quarter and calculate standard deviations across stations. This diversity metric indicates whether the amount of time devoted to places varies across stations in a market.

As with politicians, we are interested not only in whether stations in a market devote more or less time to local coverage, but whether stations talk about *different* places even if the time allocated is similar. The same technique described for politicians can be used here: we identify with an indicator whether or not a place is referenced by a station in a market, then sum to create a count of the total number of different place references by each station. We similarly create an indicator for places covered at the market level and sum to produce a total of places covered. When the share of places covered is low, stations report on only a small fraction of all the places referenced in the market, which indicates high differentiation. When the share is high, differentiation is low. An intermediate level suggests that places receive coverage from more than one station, but that some differentiation across stations remains.

To supplement these measures of local diversity, we also study references to state and local government titles, such as mayor, assemblyman, councilman, governor, etc. The levels and standard deviations in title counts provide a separate measure of diversity in local political coverage across stations in a market.

3.5. Summary Statistics - Diversity

We provide summary statistics for our diversity metrics and viewing tendencies in tables 1-3. Table 1 summarizes the word shares and standard deviations for the 18 general news topics, sorted by frequency. The first column reports average word shares for each topic at the station level. The table shows that crime and weather are the dominant categories in local news, consuming 0.98% and 0.62% of words, respectively. Other common topics include government and business. Column 2 summarizes the standard deviations in word shares. The topics with the most coverage are among those with the highest standard deviations across stations within a market, but the relationship is not monotonic.

Table 2 summarizes word shares and diversity metrics for politicians. The top panel shows references by race. As before, column (1) shows word shares averaged over all stations in a market, and column (2) reports the corresponding standard deviations, our diversity metric. There appears to be more differentiation in references to non-minority politicians than minority ones, though the sample size for individual race and ethnic groups is small. It is interesting to note that Senators are referenced more often than members of the House of Representatives. The bottom panel provides counts of politician references. The average station broadcasts reports about 44% of all lawmakers ever mentioned in a market, with a sizeable standard deviation of 5.9%.

Table 3 summarizes word shares and diversity metrics for the coverage of locales. The presentation follows the format of table 2. There is substantial variation in the word shares of places (standard deviation of 0.114). On average, 1,152 places are covered in each market quarter, with a standard deviation of 304. Stations mention 61% of the locales ever covered in their market. This intermediate share suggests both that many places receive coverage from more than one station, but also that stations do not fully overlap in their coverage of locales. We supplement the data on the coverage of places with word shares and market standard deviations for keywords representing local titles (assemblyman, councilman, mayor, etc.).

3.6. Summary Statistics - Ownership

One of the main objectives of this project is to link the supply of diversity in media markets with measures of competition, emphasizing those measures related to FCC ownership rules. While data are available on a wide set of market structure measures in television and across media, we are constrained in our analysis by the limited set of markets and years for which transcript data is available. Moreover, it is important to include market fixed effects in our analysis to control for unobserved heterogeneity in the demand for diversity. This estimation technique requires measures of competition that change over time within a market. With these restrictions in mind, we focus on six ownership measures:

- TV Stations: This variable measures the number of full-power television stations in a market. The number of products offers a baseline measure of competition for viewers. The number of products is a prominent measure of competition in the media economics literature and is included in all specifications.

- TV Parents: This variable measures the number of television station owners in a market.

- Local TV Parents: This variable measures the number of parent firms located in the DMA that own a TV station in the DMA. This measure is especially relevant to local diversity metrics.

- Minority TV Stations: This variable measures the number of television stations in a market owned or controlled by a member of a minority group. While minority ownership does not measure competition in ways that are micro-founded in standard economic theory, there is substantial policy interest in the ways in which minority ownership affects outcomes so we include specifications with this measure.

- Radio TV Parents: This variable measures the number of parent companies that own both radio and TV stations in a market. For a fixed number of television stations and television parents, a larger number of co-owners indicates a more concentrated market.

- Radio Stations: We include the number of radio stations in specifications with Radio TV Parents to control for scale (and changes in scale) in the radio market.

All competition measures are included as counts in the specifications, as entry and exit is most likely to reflect meaningful changes in market structure.[4] We include all full-power stations in a market in our analyses and do not restrict attention to commercial broadcasters only. Baker and George (2010) document that television programs are generally close substitutes from the perspective of viewers, so all stations would be expected to play a role in station competition for viewers. The source for all of competition measures is the FCC.

In addition to these six measures, we might also expect newspaper and television cross-ownership to affect product differentiation. However this variable does not change in our sample over time and cannot be included. Minority ownership also does not vary in the sample between 2007 and 2009. There is variation between 2005 and 2007 but this may in part be due to changes in collection methods, suggesting we interpret the results for minority ownership with caution.[5]

Sample statistics for the ownership measures are reported in table 4. As discussed more fully in section 4, the sample of markets is larger in 2005 and 2007 than in 2009. As can be seen in the means for the television ownership variables, there is not much variation in ownership over time.

3.7. Summary Statistics - Viewership

We evaluate the effects of diversity on viewership using a cross-section of per capita local news viewing among blacks, Hispanics and the total population in 2008. The source is raw viewing data from the Nielsen Company for each quarter hour between 4pm and 12am from January 31 through February 13, 2008. We average viewing over half hour time slots that we link to program names produced by Tribune Media Services (TMS). We aggregate local news viewing over each day in the sample. To calculate our per-capita measure, we divide this daily total by population for each group, then average over the two week sample period.

One difficulty with our data is that Nielsen does not report data for timeslots where total viewing or viewing for any subgroup falls below a threshold. Nielsen sets the threshold but does not provide the exclusion criteria. As a result, we do not have viewing data for the black and Hispanic local news audience at some stations and in some markets in our Newsbank sample. We exclude these stations and markets from all specifications. The resulting sample includes 334 stations in 33 markets.

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[4] An ideal measure would weigh the station and owner counts by total viewership using an inverse Herfindahl index or related measure as in George (2007). Such an approach would differentiate large from small changes in ownership structure. However the aggregate viewership and circulation data needed to calculate a Herfindahl index across media is beyond the scope of this study.

[5] Collection methods in the 2005 data are described in Turner (2006).

Summary statistics for the viewing data are reported in table 5. As the data indicate, local news shows are less popular among Hispanics.

4. Empirical Analysis

We observe our diversity metrics at the level of a market *(m)* quarter *(t)* from 2006-2010. The competition and population measures are observed less frequently, in November 2005, 2007 & 2009. To focus on changes over the study period 2006-2010, transcript data from 2006-2007 is linked to ownership data in 2005, transcript data from 2008-2009 with ownership data in 2007, and transcript data from 2010 with ownership data from 2009.

The resulting sample consists of 1,523 stations in 37 markets, which produces a working sample of 398 market-quarters. The panel is not balanced. The diversity measures require transcript data from all of the major networks broadcasting in a market. Many stations ceased reporting in 2010, so the sample for that year is limited to 13 markets. Our results do not change substantially if we restrict attention to 2006-2009 but our estimates become less precise.

Our models link diversity to measures of competition and market characteristics.

$$Diversity_{mt} = \beta_0 + \beta_1 Competition_{mt} + \beta_2 \text{TVHH}_{mt} + \beta_3 \text{Minority}_{mt} + \gamma_t + u_m + \varepsilon_{mt}$$

TVHH is the number of television households in a market, measured in millions. Minority is the percent minority residents, calculated as the sum of the black, Hispanic and Asian population. We estimate all specifications using ordinary least squares with market fixed effects. Standard errors are clustered by market.

Including fixed effects is critical because omitted factors are likely to be correlated with our measures of competition and with the observed diversity. The empirical media literature shows that the supply of content is related to the size and the distribution of tastes in a market. For example, a larger black or Hispanic audience is associated with more radio stations (Berry & Waldfogel 2001), more news broadcasts (Oberholzer-Gee and Waldfogel 2009) and more newspaper coverage (George and Waldfogel 2003) targeted to those tastes. Ignoring heterogeneity in demand in regression analysis might lead us to attribute diversity outcomes to competition measures when they are in fact driven by unobserved aspects of demand. We can partially ameliorate this concern with fixed effects estimation, which identifies the effect of *changes* in competition measures on *changes* in diversity within a market. Building our analysis on changes within markets substantially reduces the concern of omitted-variable bias.

It is important to note though that fixed effects estimation cannot control for unobserved changes within a market. For example, we do not observe changes in the market for cable and satellite television over the time period of study. We also do not observe changes in the demand for television advertising, which was substantially affected by the 2008 recession. To the extent that the effects of these changes on diversity are common across markets, year dummies will control for unobserved effects. But effects that differ by market will be captured in the error term and can bias our results.

In the empirical analysis, we examine four specifications of the above model. The first includes the number of TV stations, a core measure of competition. In a second specification, we add the number of TV parents. For a fixed number of stations, fewer owners indicate a more concentrated market. Identifying the effect of ownership concentration in our data will not be easy though. As the bottom panel of table 4 shows, the number of stations and the number of owners are highly correlated (0.95). Multicollinearity will not bias our estimates but inflate standard errors, making it more difficult to detect whether ownership concentration influences diversity.

In a third specification we add more detail about the identity of the owners in a market, controlling for the number of local TV parents and minority-owned stations. A final regression includes information about the broader media environment, adding the number of radio stations and radio-TV cross-ownership.

5. Results

5.1. Results for Issue Diversity

The effects of competition on issue diversity are documented in tables 6a-d. For expositional purposes, we split the issues into four groups. The first includes "soft news," namely sports, death notices, television & media, traffic, and weather. The second group (in table 6b) covers business & economics, labor issues, infrastructure & environment, crime, and agriculture. The third group (in table 6c) includes government, defense, foreign affairs, taxes, as well as ideological topics. Finally, the fourth group (in table 6d) reports our results for education, health, and social welfare issues. For each topic, we report the four specifications described in section 3. To aid in the interpretation of the results, we first describe our findings for the TV & Media category in some detail. We then turn to more general patterns in our results.

Model 12 in table 6a shows that diversity in the coverage of media issues is influenced by four ownership variables: the number of stations, local ownership, the number of radio stations, and radio-TV cross-ownership. Specifically, an additional station increases the standard deviation in media-related word shares by 0.0137. This effect is statistically significant and of economic importance. A one-standard-deviation increase in the number of stations (4.5) almost triples the mean level of diversity. By contrast, a one-standard-deviation increase in locally owned stations (1.7), while statistically significant, lifts the level of diversity only by about 30% of the mean. A greater number of radio stations decreases diversity in the coverage of media issues while radio-TV cross-ownership has the opposite effect. Characteristics of the market matter as well: Not surprisingly, the size of the market and the population share of minorities, an indication for diversity in tastes, are highly significant, both increasing diversity. A one-standard deviation increase in market size (1.2 million households) increases mean diversity by a factor of 7. A one-standard deviation increase in the minority population share (0.17%) more than doubles mean diversity.

Across tables 6a-d, local ownership appears to be the ownership measure that is most often associated with diversity of coverage: for a fixed number of stations and owners, a greater number of local owners is correlated with more diversity in the coverage of death notices, television & media, business, defense, and foreign affairs. The size of the effect is fairly stable across issues. For instance, a one-standard-deviation increase in local ownership lifts the diversity in the coverage of foreign affairs by 28% of the mean. While local ownership influences diversity for several of our categories, it is not associated with the majority of issues. This observation holds true for all ownership measures. There is no variable that consistently affects a majority of our topics.

Ownership concentration and the number of stations in a market impact diversity of a few topics (death notices, crime, and welfare for the former, death notices, media, and business for the latter). In part, the lack of stronger associations may reflect issues of multicollinearity. In several specifications, standard errors jump when we introduce both variables. For issues for which we do find a statistically significant correlation, ownership

concentration tends to increase diversity, echoing the results from previous studies that emphasize the importance of business-stealing incentives. For example, a one-standard deviation increase in the number of TV parents (3.44) is predicted to increase diversity in the coverage of social welfare by almost 75% of the sample mean. The one exception in our results is the coverage of crime for which ownership concentration reduces diversity. We find a similar pattern of results for radio-television cross-ownership. For the majority of topics for which cross-ownership is statistically significant, increases in cross-ownership are associated with greater diversity. Finally, there is scant evidence in our data that suggests that minority ownership influences diversity in issue coverage (health reporting being the exception).

5.2. Results for Political Diversity

The effects of competition on political diversity are set out in tables 7-9. Table 7 reports the relationship between competition and diversity in political coverage by political office and political party. The dependent variable here is the standard deviation in word shares across stations in a market, where the word shares are calculated for members of the US House of Representatives or US Senate from 2006 through 2010,. This measure captures differences in the amount of coverage of politicians in each party across stations in a market.

With one exception (ownership concentration in the model for House Republicans), none of the competition measures in table 7a and 7b are statistically significant within a 10% confidence interval. Table 8 examines variety and diversity within the set of referenced politicians. The four columns on the left report the effects of competition on the number of different politicians covered in a market-quarter. The four columns on the right report the effects of competition on the share of stations covering each referenced politician. The number of stations in a market is inversely related to the total number of politicians covered on local television news. Holding fixed the number of stations, increases in local ownership are associated with a greater number of politicians covered. On the right hand side of the table, the effect of additional stations on the share of stations covering each politician is consistently negative, suggesting that more competition is associated with more differentiation in a market. Larger markets have less overlap in the set of covered politicians.

Table 9a and 9b report results for the coverage of minority politicians. The specifications in 9a show the effect of competition on the *level* of coverage. These specifications are at the station level (with market fixed effects), unlike our other measures which are estimated at the market level. Table 9b shows within-market standard deviations in word shares comparable to results in table 7. We find that the number of minority owners is the only competition variable that is associated with the *level* of coverage of minority politicians. A one-standard-deviation increase in the number of minority owners (0.48) increases the coverage of minority politicians by more than 20% of the mean. By contrast, our ownership variables do not appear to drive *diversity* in the coverage of either type of politician (table 9b).

5.3. Results for Local Diversity

In table 10 and table 11 we report the effect of ownership on local diversity metrics. Our variables do not appear to be associated with the diversity of place references or the number of places covered in local news. Columns 9-12 in table 10 report the relationship between competition measures and the average share of stations covering places that are mentioned in a market. Recall that a larger station share implies more overlap. The negative coefficient for local owners implies that a greater number of local owners in a market is associated with greater differentiation, with each place covered by a smaller number of stations.

Table 11 reports word shares and standard deviations for references to local political titles such as mayor, assemblyman, councilman, etc. The total share of coverage of these titles is not associated with our competition measures, as none of the estimates are statistically significant. The right hand side reports standard deviations in word shares, which also do not reflect any effect of competition on differentiation across stations.

6. Demand for Diversity

Taken together, our results provide some limited evidence that competition and ownership structure influence the diversity of local television news programming. To better understand the welfare consequences of policy interventions in the media market, it is critical to know how the policy-induced changes in content impact viewing tendencies. For example, if reduced ownership concentration decreased program diversity and overall viewership, the policy is unlikely to be welfare enhancing.

Tables 12-14 report estimation results for models that link measures of diversity with mean per-capita local news viewing. We report results for black viewers, Hispanics, and the overall audience size. Recall that these results are based on a cross-section, making them more susceptible to omitted-variable bias.

We begin our analysis by documenting how issue diversity influences local news viewing (table 12). We find no evidence that greater diversity stimulates viewing. In fact, greater diversity in the coverage of media issues appears to discourage viewing among blacks. Similarly, there is no evidence that diversity in political programming increases the size of the audience (table 13a).

In table 13b, we analyze the relation between the coverage of minority politicians and local news viewing. Columns 1-3 show that greater diversity in the coverage of minority politicians is associated with lower viewership for each group. The magnitude of the effect is modest, with a one standard deviation increase in diversity (0.006) associated with a 3-4% decline in viewership for each group. However when we add controls for the amount of coverage of minority and non-minority politicians in columns 4-6, the diversity measure for all but Hispanic viewers loses statistical significance.

Results in column (6) suggest that the composition and diversity of local news broadcasts in a market does affect Hispanic viewing. While the standard errors do not all fall within a 10% confidence interval, the magnitude of the coefficient estimates indicates economically relevant effects. A one standard deviation increase (0.01) in the word share for minority politicians is associated with a 46% increase in Hispanic viewing. A one standard deviation increase in the word share for non-minority politicians (0.04) is associated with a 33% decrease in Hispanic viewing. Diversity measures work in the opposite directions, suggesting that the amount of coverage across stations in a market devoted to minority politicians matters more for Hispanic viewing than the distribution of coverage. Finally, we ask whether more diversity in the coverage of locales influences viewing tendencies (table 14). We find a consistently negative effect of the average station share on the size of the audience, implying that greater similarity across stations discourages television news viewing.

7. Conclusions

In this study, we ask whether the structure of television markets has an impact on viewpoint diversity in local news. To answer this question, we develop a broad range of metrics for diversity which we then link to measures of competition and ownership as well as viewing tendencies.

From our research, two broad conclusions emerge. First, across all our results, we are struck by how little evidence we are able to find for a robust influence of specific elements of market structure on diversity. The available policy instruments, we conclude, turn out to be rather blunt. For instance, we find that local ownership is the ownership variable most often associated with greater diversity in issue coverage. However, even local ownership is significantly related to only a small subset of our diversity measures.

Second, by and large, changes in diversity have little impact on viewing tendencies. One view of policy interventions in media markets is that they are necessary to better match the available content to viewer preferences in an industry that is characterized by significant fixed cost and limited competition. In our data, we find little evidence in support of this view. Even if changes in diversity have little influence on the size of audiences, these changes can enhance welfare if the consumption of content has positive externalities. From this perspective, four findings seem particularly noteworthy:

- Local ownership increases diversity in the coverage of business, crime, defense policy, foreign affairs, as well as welfare. Variation in how much time local newscasts spend on covering these issues can be socially desirable if improved knowledge facilitates informed political decision-making among viewers.

- As in previous studies, we document that increases in ownership concentration often encourage diversity. Perhaps most notably from a welfare perspective, greater concentration increases the number of politicians that are covered in local news. If more extensive coverage leads to better-informed citizens, existing restrictions on ownership concentration are likely to be welfare-reducing.

- Minority-owned stations spend more time covering minority politicians. While this effect is certainly consistent with existing policy, it is worth keeping in mind that the effects of minority ownership are quite limited overall. For instance, we find little evidence that minority owners contribute to the diversity in the coverage of elected federal lawmakers, as well as broad range of issues and local concerns.

- The composition and diversity of local news broadcasts has the largest impact on Hispanic viewing. However the measures of political diversity associated with Hispanic viewership do not appear to be influenced by the policy variables relevant to FCC ownership rules.

In considering the results in this report, it is important to keep two limitations in mind. First, in our analyses we are forced to rely on limited variation in many policy variables, a constraint that leads to less precise estimates, making it difficult to identify the effects of interest. This limitation is particularly relevant because we fail to uncover significant correlations in many of our specifications. Second, in this research we ask *what issues* local newscasts decide to cover. An equally important question is *how* the media report on the news of the day. We leave it to future research to make progress on this second front.

References

Baker, Matthew J. and Lisa M. George. "Estimating Welfare in Two-Sided Market Games: The Case of Local Television News." Hunter College Working Paper, May 2010.

Berry, S., J. Waldfogel. 2001. Do Mergers Increase Product Variety? Evidence from Radio Broadcasting. *Quarterly Journal of Economics*, 116, 1009-1025.

Beebe, Jack H. "Institutional Structure and Program Choices in Television Markets." *Quarterly Journal of Economics* 91, no. 1 (1977): 15-37.

Fox, Christopher. "A Stop List for General Text." ACM-SIGIR Forum, 1990, 24, pp. 19–35.

Gentzkow, Matthew and Jesse M. Shapiro. "What Drives Media Slant? Evidence from U.S. Daily Newspapers." *Econometrica*, 2010, 78(1), pp. 35-71.

Gentzkow, Matthew. "Television and Voter Turnout." *Quarterly Journal of Economics* 121, no. 3 (2006): 931-72.

George, Lisa. "What's Fit to Print: The Effect of Ownership Concentration on Product Variety in Daily Newspaper Markets." *Information Economics and Policy* 19, no. 3-4 (2007): 285-303.

George, Lisa M. and Joel Waldfogel (2006). "The *New York Times* and the Market for Local Newspapers." *American Economic Review,* Vol. 96, No. 1, pp. 435-477.

George, Lisa M., and Joel Waldfogel. "Who Affects Whom in Daily Newspaper Markets?" *Journal of Political Economy* 111, no. 4 (2003): 765-84.

George, Lisa M. and Joel Waldfogel (2008). "National Media and Local Political Participation: The Case of the New York Times" in Roumeen Islam, ed., *Information and Public Choice: From Media Markets to Policymaking*. Washington, DC: World Bank Publications, pp. 33-48.

Hotelling, H. (1929), "Stability in competition", *Economic Journal* 39, 41-57.

Oberholzer-Gee, Felix, and Joel Waldfogel. "Media Markets and Localism: Does Local News *En Español* Boost Hispanic Voter Turnout?" *American Economic Review* 99, no. 5 (2009): 2120-28.

Project for Excellence in Journalism (PEJ). 2011. Newspapers: by the Numbers. http://stateofthemedia.org/2011/newspapers-essay/data-page-6.

Sweeting, A.T. "The Effects of Mergers on Product Positioning: Evidence from the Music Radio Industry." *RAND Journal of Economics*, 41 (2) , 372-97.

Turner, S. D. 2006. *Out of the Picture: Minority & Female TV Station Ownership in the United States*. Available http://www.freepress.net/files/out_of_the_picture.pdf, accessed May 2011.

Waldfogel, Joel. "Who Benefits Whom in Local Television Markets?" *Brookings-Wharton Papers on Urban Affairs* (2004): 257-84.

Appendix A

This Appendix summarizes the methodology for creating the word share data.

WordStat

We analyzed the text of 296,633 local TV transcripts from 40 designated market areas (DMA) from the 4th quarter of 2006 to the 4th quarter of 2010 using Wordstat 6.0, an often-used tool for computer-assisted analysis of textual data.

As a first step, the transcripts are appended by station-market-quarter and read into Wordstat using the Document Conversion Wizard, a program embedded with the Wordstat package. All Newsbank indexing items (station, market, media type, publication date, location, record number, copyright, and section) are removed to ensure focus on the main text. The transcripts are pre-processed to remove common but uninformative words to speed analysis using standard software tools (Fox 1990; Gentzkow and Shapiro 2010). The "stoplist" of 421 words are mainly determinants, prepositions, conjunctions, pronouns, and certain very frequent verbs forms. Example include "the," "that", "among", "behind", "both", "while", "my", "is," "can", "you", "therefore", "the", etc.

We run text analysis on the pre-processed main text, using the three dictionaries described in the body of this report: (1) a dictionary of political candidates; (2) a dictionary of political issues; (3) a dictionary of places. We tabulate (by the "Crosstab" function in Wordstat) the frequency of each dictionary word or phrase as the percentage of total words, on a station-market-quarter level. The frequency tables are at this point imported into STATA, which is the platform used for transposing and aggregating data and calculating the diversity metrics.

Dictionaries

The policy issue dictionary is developed as summarized in the body of the report.

The political candidate dictionary contains 5,028 unique key phrases developed from 2,504 politicians that ran for offices in the House or the Senate on the election year of 2006, 2008 or 2010. The dictionary is constructed by combining the first names (or whenever available, the abbreviated name that the politician is commonly known for) and last names of the politician. We also conduct a joint search by adding "Representative" with the name for House members from (1) and "Senator" with the name for senators from (1). For example, house member Gregory W. Kahn from Louisiana is identified in the dictionary with two key phrases, "Gregory Kahn" as well as "Representative Gregory Kahn".

The place dictionary contains 6684 unique keywords (or phrases) that identify the census "places" associated with each county in each DMA of our sample. Specifically, the frequency of each county sums up the frequency of the name of that county as well as the names of all the census "places" associated with the county being mentioned in the transcript. For example, the Hudson County in New Jersey is identified in the dictionary as "Hudson NJ" as

well as “Guttenberg”, “East Newark”, “Harrison”, “Hoboken”, “Bayonne”, “Jersey City”, “Kearny”, “Secaucus”, “Union City” and “West New York”. We do not include in the dictionary some “places” tracked in the census are parts of counties but are not independent political jurisdictions with their own names.

Table 1: Issue Diversity Sample Statistics

	Mean Word Share (%) (N=1523) (1)	Market Standard Deviation (N=398) (2)
Crime	0.976	0.205
Weather	0.615	0.187
Government	0.391	0.091
Business & Economics	0.226	0.045
Foreign Affairs & Trade	0.161	0.040
Education	0.152	0.031
Defense	0.138	0.035
TV & Media	0.112	0.031
Social Welfare	0.108	0.021
Health	0.097	0.029
Traffic	0.096	0.044
Infrastructure & Environment	0.087	0.022
Sports	0.069	0.018
Ideological Issues	0.062	0.017
Labor & Employment	0.054	0.016
Taxes	0.041	0.016
Agriculture	0.008	0.004
Death Notices	0.0003	0.0003

Note: Column (1) reports the share of words in all transcripts at the station level. Column (2) reports the standard deviation in shares across stations in a market in each quarter.

Table 2: Political Diversity Sample Statistics

	Mean Word Share (%) N=1523	Market Standard Deviation N=398
Ethnicity & Race		
All Minority	0.0019	0.0020
Non-Hispanic White	0.0320	0.0102
Party & Office		
Democrats House	0.0062	0.0037
Republicans House	0.0039	0.0022
Democrats Senate	0.0111	0.0042
Republicans Senate	0.0100	0.0036
Politician Counts	Mean	St. Dev.
Total Covered Politicians	56	26
Average Share of Stations Covering	44%	5.9%

Note: Column (1) reports the share of words in all transcripts at the station level. Column (2) reports the standard deviation in shares across stations in a market in each quarter. Lower panel reports mean and standard deviation of the total number of unique politicians covered in a market-quarter and the share of stations covering each.

Table 3: Local Diversity Sample Statistics

	Mean Word Share (%) N=1523	Market Standard Deviation N=398
Place Coverage	0.592	0.114
Local Government Titles	0.086	0.025
Place Counts	Mean	St. Dev.
Total Place References	1152	304
Average Share of Stations Covering	61%	5%

Note: Column (1) reports the share of words in all transcripts at the station level. Column (2) reports the standard deviation in shares across stations in a market in each quarter. Lower panel reports mean and standard deviation of the total number of unique places covered in a market-quarter and the share of stations covering each.

Table 4: Ownership Sample Statistics

	Year	Markets	Mean	Std. Dev.	Min	Max
TV Stations	2005	37	11.22	4.70	5	22
TV Parents	2005	37	9.41	3.63	4	18
Local TV Parents	2005	37	2.65	1.74	0	8
Radio Stations	2005	37	93.76	53.75	20	235
Radio-TV Parents	2005	37	1.76	1.57	0	7
Minority TV Stations	2005	37	0.05	0.23	0	1
TV Stations	2007	35	11.17	4.60	5	22
TV Parents	2007	35	9.43	3.53	4	17
Local TV Parents	2007	35	2.57	1.90	0	9
Radio Stations	2007	35	94.00	54.16	20	237
Radio-TV Parents	2007	35	1.60	1.79	0	8
Minority TV Stations	2007	35	0.31	0.58	0	2
TV Stations	2009	13	12.38	3.28	7	18
TV Parents	2009	13	10.15	2.70	6	14
Local TV Parents	2009	13	2.23	1.42	0	4
Radio Stations	2009	13	112.69	58.51	51	224
Radio-TV Parents	2009	13	1.08	0.95	0	3
Minority TV Stations	2009	13	0.31	0.63	0	2

Correlations

	TV Stations	TV Parents	Local TV Parents	Radio Stations	Radio-TV Parents	Minority TV Stations
TV Stations	1.00					
TV Parents	0.95	1				
Local TV Parents	0.74	0.6798	1			
Radio Stations	0.71	0.6047	0.4873	1		
Radio-TV Parents	0.62	0.6002	0.6133	0.3935	1	
Minority TV Stations	0.46	0.4376	0.4452	0.1962	0.3563	1

Table 5: Viewership Sample Statistics

	Stations	Markets	Mean	Std. Dev.	Min	Max
Average Daily Local News Viewing Per Capita						
All Viewers	334	33	0.0419	0.085	0	0.67
Black Viewers	334	33	0.0382	0.169	0	0.74
Hispanic Viewers	334	33	0.0268	0.060	0	0.51

Notes: Average daily local news viewing per capita is calculated as the sum of all local news viewing each day divided by the market population for each group, averaged over each day in the sample and across markets.

Table 6a: Issue Diversity Results (Soft News Topics)

	Sports				*Death Notices*				*TV & Media*				*Traffic*				*Weather*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
TV Stations	-0.0016	-0.0023	-0.0020	-0.0024	0.0001	0.0002	0.0002	0.0002	0.0114	0.0088	0.0104	0.0137	-0.0087	-0.0058	-0.0062	-0.0103	-0.0159	-0.0316	-0.0262	-0.0236
	-0.81	-1.30	-1.06	-1.06	2.36	3.74	4.27	3.98	1.88	1.35	1.58	2.17	-1.26	-0.74	-0.75	-1.15	-0.81	-1.13	-0.94	-0.75
TV Parents		0.00090	-0.00040	-0.00058		-0.00013	-0.00016	-0.00016		0.00339	-0.00075	-0.00181		-0.00397	-0.00321	-0.00212		0.02120	0.00767	0.00308
		0.67	-0.21	-0.32		-2.49	-2.96	-3.10		0.64	-0.13	-0.33		-0.94	-0.57	-0.37		0.86	0.27	0.11
Local TV Parents			0.0028	0.0034			0.0001	0.0001			0.0068	0.0053			-0.0005	0.0017			0.0200	0.0238
			1.27	1.67			2.06	2.63			2.19	1.81			-0.09	0.34			1.17	1.31
Minority TV Stations			-0.0014	-0.0005			0.0000	0.0000			0.0039	0.0010			-0.0037	0.0003			0.0218	0.0257
			-0.89	-0.26			0.40	0.48			0.95	0.27			-0.80	0.05			1.25	1.26
Radio Stations				0.0001				0.0000				-0.0016				0.0020				-0.0021
				0.38				0.49				-2.89				1.54				-0.47
Radio TV Parents				-0.0032				0.0000				0.0070				-0.0102				-0.0216
				-1.82				-0.21				1.73				-1.62				-0.98
Households (M)	0.0021	0.0077	0.0200	0.0027	0.0018	0.0010	0.0010	0.0009	0.0244	0.0455	0.0498	0.1535	-0.0488	-0.0735	-0.0616	-0.1926	-0.3322	-0.2003	-0.2251	-0.1859
	0.07	0.23	0.56	0.07	1.30	0.69	0.76	0.58	0.27	0.55	0.59	2.36	-0.42	-0.63	-0.49	-1.52	-0.54	-0.31	-0.37	-0.28
Minority Pop %	0.0698	0.0678	0.0499	0.0615	-0.0011	-0.0008	-0.0008	-0.0007	0.2845	0.2770	0.2760	0.2084	-0.0490	-0.0402	-0.0605	0.0252	-0.1058	-0.1526	-0.0929	-0.1150
	1.91	1.83	1.35	1.58	-1.28	-0.79	-0.93	-0.76	5.44	4.87	4.04	3.72	-0.51	-0.42	-0.59	0.26	-0.24	-0.37	-0.24	-0.29
Constant	0.0137	0.0080	0.0027	0.0119	-0.0017	-0.0009	-0.0009	-0.0010	-0.2077	-0.2291	-0.2292	-0.1839	0.2085	0.2336	0.2275	0.1815	0.7117	0.5777	0.5962	0.8089
	0.40	0.20	0.07	0.36	-1.38	-0.68	-0.71	-0.79	-2.04	-2.32	-2.58	-3.08	2.10	2.35	2.20	1.27	1.36	1.05	1.18	1.71
Fixed Effects	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt
Markets	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to keywords in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 6b: Issue Diversity Results (Business, Economy & Crime)

	Business & Economics				*Labor & Employment*				*Infrastructure & Environment*				*Crime*				*Agriculture*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
TV Stations	0.0082	0.0089	0.0105	0.0132	-0.0001	0.0002	0.0004	-0.0001	-0.0003	-0.0022	-0.0026	-0.0027	0.0204	0.0027	-0.0019	-0.0117	-0.0005	-0.0002	-0.0002	-0.0002
	1.65	1.94	2.14	2.81	-0.05	0.06	0.13	-0.03	-0.11	-0.53	-0.59	-0.71	1.21	0.13	-0.10	-0.61	-1.02	-0.35	-0.29	-0.41
TV Parents		-0.00101	-0.00555	-0.00685		-0.00044	-0.00094	-0.00076		0.00260	0.00332	0.00333		0.02383	0.03970	0.04299		-0.00035	-0.00035	-0.00049
		-0.22	-0.95	-1.20		-0.21	-0.37	-0.31		0.78	0.85	0.87		1.14	1.69	1.73		-0.65	-0.61	-0.86
Local TV Parents			0.0082	0.0075			0.0007	0.0009			-0.0009	-0.0008			-0.0322	-0.0278			-0.0001	0.0001
			1.87	1.89			0.41	0.49			-0.45	-0.38			-1.51	-1.37			-0.28	0.21
Minority TV Stations			0.0013	-0.0005			0.0010	0.0014			-0.0017	-0.0015			0.0091	0.0174			0.0005	0.0008
			0.27	-0.09			0.51	0.77			-0.74	-0.62			0.49	0.79			1.01	1.31
Radio Stations				-0.0014				0.0002				0.0001				0.0049				0.0000
				-1.47				0.42				0.12				1.62				-0.26
Radio TV Parents				0.0027				-0.0009				-0.0006				-0.0194				-0.0011
				0.53				-0.34				-0.22				-0.75				-2.04
Households (M)	-0.1984	-0.2047	-0.1874	-0.1060	-0.0140	-0.0167	-0.0185	-0.0340	-0.0767	-0.0605	-0.0568	-0.0615	-0.9917	-0.8434	-0.9611	-1.2662	-0.0160	-0.0182	-0.0203	-0.0225
	-2.28	-2.08	-1.70	-0.79	-0.26	-0.28	-0.29	-0.40	-1.14	-0.92	-0.84	-0.87	-2.01	-1.58	-1.87	-2.33	-1.24	-1.28	-1.40	-1.56
Minority Pop %	-0.1009	-0.0987	-0.1199	-0.1727	0.0465	0.0475	0.0510	0.0611	0.0048	-0.0009	-0.0079	-0.0048	-0.1606	-0.2132	-0.0466	0.1524	0.0224	0.0232	0.0265	0.0281
	-1.28	-1.17	-1.37	-1.89	1.14	1.16	1.07	1.10	0.10	-0.02	-0.17	-0.11	-0.52	-0.64	-0.14	0.49	2.39	2.45	2.66	3.26
Constant	0.1558	0.1622	0.1562	0.2137	0.0117	0.0145	0.0156	0.0079	0.0927	0.0762	0.0741	0.0741	0.9586	0.8080	0.8564	0.7140	0.0178	0.0200	0.0210	0.0277
	1.99	1.71	1.58	1.63	0.20	0.22	0.23	0.17	1.39	1.18	1.15	1.08	1.88	1.45	1.64	1.42	1.59	1.63	1.69	1.78
Fixed Effects	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt
Markets	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to keywords in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 6c: Issue Diversity Results (Government & Politics)

	Government				*Defense*				*Foreign Affairs & Trade*				*Taxes*				*Ideological Issues*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
TV Stations	0.0398	0.0490	0.0568	0.0573	-0.0030	-0.0018	-0.0009	-0.0012	-0.0022	-0.0017	-0.0009	-0.0009	-0.0023	-0.0028	-0.0025	-0.0015	0.0003	-0.0008	-0.0006	-0.0007
	1.08	1.33	1.43	1.41	-1.25	-0.49	-0.22	-0.28	-0.64	-0.26	-0.13	-0.13	-0.76	-1.21	-1.10	-0.51	0.10	-0.24	-0.18	-0.21
TV Parents		-0.01235	-0.03781	-0.04014		-0.00160	-0.00441	-0.00551		-0.00057	-0.00333	-0.00403		0.00070	-0.00019	-0.00064		0.00151	0.00119	0.00118
		-1.32	-1.62	-1.60		-0.41	-1.05	-1.44		-0.08	-0.46	-0.55		0.20	-0.04	-0.16		0.57	0.34	0.38
Local TV Parents			0.0502	0.0529			0.0054	0.0071			0.0056	0.0065			0.0014	0.0011			0.0000	0.0001
			1.32	1.35			1.84	2.50			1.84	2.10			0.68	0.49			0.01	0.05
Minority TV Stations			-0.0088	-0.0057			-0.0004	0.0018			-0.0014	-0.0003			0.0012	0.0005			0.0022	0.0024
			-0.57	-0.40			-0.12	0.54			-0.32	-0.07			0.33	0.17			1.32	1.21
Radio Stations				-0.0007				-0.0001				-0.0002				-0.0005				0.0000
				-0.31				-0.19				-0.26				-1.03				0.06
Radio TV Parents				-0.0144				-0.0093				-0.0049				0.0011				-0.0005
				-0.81				-2.35				-0.84				0.38				-0.22
Households (M)	-0.6587	-0.7356	-0.5716	-0.5788	-0.0182	-0.0282	-0.0125	-0.0355	0.0108	0.0072	0.0269	0.0202	-0.1680	-0.1637	-0.1642	-0.1348	-0.1177	-0.1083	-0.1162	-0.1198
	-1.16	-1.30	-1.43	-1.39	-0.21	-0.33	-0.15	-0.39	0.11	0.08	0.32	0.24	-2.92	-2.59	-2.52	-1.93	-1.64	-1.55	-1.54	-1.66
Minority Pop %	0.0107	0.0379	-0.1896	-0.1828	0.0254	0.0289	0.0077	0.0238	0.0817	0.0830	0.0552	0.0602	0.0223	0.0208	0.0229	0.0038	-0.0387	-0.0420	-0.0289	-0.0265
	0.05	0.16	-0.50	-0.49	0.25	0.29	0.08	0.25	0.67	0.68	0.45	0.49	0.48	0.42	0.45	0.06	-0.49	-0.53	-0.36	-0.30
Constant	0.2434	0.3215	0.2556	0.3646	0.0861	0.0963	0.0902	0.1428	0.0403	0.0439	0.0358	0.0685	0.1895	0.1851	0.1858	0.2058	0.1348	0.1253	0.1292	0.1298
	0.98	1.23	1.06	1.88	1.12	1.24	1.17	1.92	0.46	0.60	0.50	0.83	3.61	2.84	2.96	3.86	2.17	2.04	2.04	1.76
Fixed Effects	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt
Markets	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to keywords in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 6d: Issue Diversity Results (Health, Education & Welfare)

	Education				*Health*				*Social Welfare*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
TV Stations	0.0041	0.0014	0.0011	-0.0003	0.0033	0.0007	0.0014	0.0012	0.0000	0.0039	0.0041	0.0026
	0.76	0.21	0.17	-0.05	0.87	0.21	0.41	0.34	-0.01	1.21	1.28	1.07
TV Parents		0.00375	0.00441	0.00504		0.00348	0.00140	0.00057		-0.00531	-0.00560	-0.00452
		0.71	0.76	0.88		1.34	0.54	0.27		-2.64	-2.73	-2.11
Minority TV Stations			-0.0011	-0.0007			0.0041	0.0053			0.0003	0.0002
			-0.30	-0.19			1.87	2.68			0.11	0.08
Local TV Parents			-0.0006	0.0003			-0.0005	0.0011			0.0012	0.0015
			-0.16	0.08			-0.17	0.37			0.45	0.56
Radio Stations				0.0007				-0.0001				0.0009
				0.92				-0.14				2.37
Radio TV Parents				-0.0015				-0.0068				0.0011
				-0.37				-1.87				0.47
Households (M)	-0.1736	-0.1503	-0.1512	-0.1922	-0.0189	0.0027	0.0154	-0.0002	-0.0616	-0.0946	-0.0982	-0.1390
	-2.08	-1.66	-1.60	-1.66	-0.26	0.03	0.18	0.00	-1.01	-1.52	-1.56	-2.30
Minority Pop %	-0.0248	-0.0331	-0.0326	-0.0060	-0.0877	-0.0953	-0.1127	-0.1017	-0.0724	-0.0606	-0.0545	-0.0285
	-0.31	-0.40	-0.42	-0.07	-1.04	-1.12	-1.23	-1.09	-1.35	-1.25	-1.06	-0.59
Constant	0.1526	0.1289	0.1290	0.1011	0.0341	0.0121	0.0070	0.0465	0.1017	0.1353	0.1371	0.0882
	1.69	1.28	1.29	1.21	0.39	0.12	0.08	0.52	1.45	1.98	1.98	1.46
Fixed Effects	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt	Yr, Mkt
Markets	37	37	37	37	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to keywords in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 7a: Political Diversity by Party (Senate)

	Standard Deviation in Word Shares Senate Democrats				*Standard Deviation in Word Shares Senate Republicans*			
	(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)
TV Stations	-0.00011	-0.00128	-0.00125	-0.00116	0.00042	0.00031	0.00028	0.00022
	-0.20	-0.93	-0.90	-0.86	0.71	0.39	0.33	0.24
TV Parents		0.00158	0.00161	0.00174		0.00014	0.00025	0.00024
		1.09	1.07	1.14		0.21	0.33	0.31
Local TV Parents			-0.00029	-0.00054			-0.00022	-0.00015
			-0.47	-0.77			-0.42	-0.30
Minority TV Stations			0.00091	0.00058			0.00005	0.00015
			0.51	0.35			0.06	0.17
Radio Stations				-0.00001				0.00002
				-0.11				0.31
Radio TV Parents				0.00129				-0.00034
				1.04				-0.40
Households (M)	-0.034	-0.025	-0.029	-0.024	-0.033	-0.032	-0.033	-0.035
	-1.89	-1.63	-1.63	-1.24	-2.82	-2.42	-2.35	-2.27
Minority Pop %	0.007	0.003	0.010	0.007	-0.002	-0.002	-0.001	0.001
	0.52	0.25	0.54	0.36	-0.17	-0.20	-0.08	0.04
Constant	0.034	0.024	0.026	0.020	0.028	0.027	0.027	0.028
	2.00	1.78	1.81	1.41	2.68	2.28	2.26	2.08
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to politicians in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 7b: Political Diversity by Party (House of Representatives)

	Standard Deviation in Word Shares House Democrats				*Standard Deviation in Word Shares House Republicans*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TV Stations	-0.00033	-0.00015	-0.00012	-0.00005	-0.00021	0.00032	0.00032	0.00040
	-0.73	-0.29	-0.21	-0.09	-0.62	0.83	0.87	1.08
TV Parents		-0.00025	-0.00040	-0.00051		-0.00071	-0.00072	-0.00071
		-0.45	-0.47	-0.55		-2.03	-2.14	-2.20
Local TV Parents			0.00039	0.00048			-0.00002	-0.00009
			0.41	0.51			-0.10	-0.44
Minority TV Stations			-0.00037	-0.00027			0.00009	-0.00002
			-0.80	-0.53			0.40	-0.07
Radio Stations				-0.00005				-0.00003
				-0.49				-0.54
Radio TV Parents				-0.00054				0.00033
				-0.98				0.84
Households (M)	-0.010	-0.011	-0.009	-0.008	-0.004	-0.009	-0.009	-0.006
	-1.12	-1.10	-0.88	-0.71	-0.58	-1.00	-1.07	-0.68
Minority Pop %	-0.001	-0.001	-0.004	-0.005	0.001	0.002	0.003	0.001
	-0.09	-0.04	-0.44	-0.58	0.14	0.41	0.50	0.19
Constant	0.016	0.018	0.017	0.022	0.008	0.013	0.013	0.013
	1.93	1.83	1.70	1.85	1.05	1.41	1.46	1.47
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398

Notes: Dependent variable is the standard deviation across stations in a market in the share of words devoted to politicians in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 8: Political Variety & Differentiation

	Number of Politicians Covered				*Average Share of Stations Covering*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TV Stations	-4.39	-12.79	-13.38	-12.54	-0.017	-0.016	-0.017	-0.017
	-1.10	-2.35	-2.54	-2.96	-2.52	-1.82	-1.69	-1.56
TV Parents		11.31	13.42	13.11		-0.001	0.002	0.000
		2.38	2.73	2.80		-0.13	0.15	0.00
Local TV Parents			-4.46	-4.80			-0.009	-0.006
			-1.41	-1.54			-1.48	-0.92
Minority TV Stations			1.90	1.23			0.012	0.016
			0.30	0.18			1.35	1.59
Radio Stations				-0.42				0.000
				-0.60				-0.01
Radio TV Parents				1.49				-0.016
				0.30				-1.55
Households (M)	73.81	144.21	125.65	151.66	-0.403	-0.411	-0.476	-0.525
	0.79	1.57	1.21	1.14	-2.22	-2.07	-2.40	-1.99
Minority Pop %	152.08	127.10	153.95	137.01	0.021	0.024	0.123	0.158
	2.08	1.62	1.80	1.50	0.17	0.18	0.89	1.08
Constant	-5.19	-76.71	-68.88	-55.43	1.009	1.018	1.047	1.131
	-0.05	-0.82	-0.70	-0.63	5.14	4.74	4.78	5.23
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398

Note: Dependent variable in columns 1-4 is the number of different politicians cited in a market-quarter. Dependent variable is columns 5-8 is the average share of stations covering each politician in a market-quarter. See text for details. All specifications include market and year fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 9a: Political Diversity & Minority Politicians (Word Shares)

	Minority Politician Word Shares				*Non-Minority Politician Word Shares*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TV Stations	-0.00039	-0.00029	-0.00019	-0.00011	-0.00333	0.00004	-0.00080	-0.00086
	-0.81	-0.45	-0.29	-0.15	-1.62	0.02	-0.29	-0.32
TV Parents		-0.00014	-0.00029	-0.00031		-0.00457	-0.00272	-0.00247
		-0.32	-0.53	-0.53		-1.18	-0.76	-0.71
Local TV Parents			0.00003	-0.00002			-0.00233	-0.00265
			0.06	-0.03			-0.89	-1.03
Minority TV Stations			0.00091	0.00083			-0.00432	-0.00466
			2.52	1.69			-1.29	-1.48
Radio Stations				-0.00004				0.00009
				-0.55				0.28
Radio TV Parents				0.00022				0.00171
				0.27				0.41
Households (M)	-0.016	-0.017	-0.020	-0.017	-0.159	-0.187	-0.178	-0.177
	-1.58	-1.58	-2.11	-1.64	-2.22	-2.28	-2.08	-1.80
Minority Pop %	-0.013	-0.013	-0.007	-0.009	0.048	0.058	0.041	0.040
	-1.15	-1.13	-0.75	-0.89	0.68	0.80	0.53	0.52
Constant	0.025	0.026	0.028	0.028	0.192	0.221	0.216	0.203
	3.03	3.00	3.51	3.12	2.79	2.84	2.71	2.55
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	1523	1523	1523	1523	1523	1523	1523	1523

Note: Dependent variable is the share of words devoted to minority and non-minority politicians each station. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 9b: Political Diversity & Minority Politicians (Standard Deviations)

	Standard Deviation in Word Shares Minority Politicians				*Standard Deviation in Word Shares Non-Minority Politicians*			
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
TV Stations	-0.00010	0.00005	0.00022	0.00038	-0.00008	-0.00161	-0.00182	-0.00180
	-0.25	0.11	0.38	0.61	-0.06	-0.92	-1.12	-1.03
TV Parents		-0.00020	-0.00069	-0.00078		0.00207	0.00287	0.00295
		-0.58	-0.94	-0.95		0.99	1.63	1.64
Local TV Parents			0.00090	0.00087			-0.00180	-0.00192
			0.94	0.91			-1.65	-1.74
Minority TV Stations			0.00011	0.00002			0.00110	0.00095
			0.28	0.04			0.46	0.40
Radio Stations				-0.00009				0.00001
				-0.94				0.05
Radio TV Parents				0.00011				0.00062
				0.20				0.39
Households (M)	-0.009	-0.010	-0.008	-0.003	-0.064	-0.051	-0.060	-0.058
	-1.40	-1.33	-1.18	-0.41	-3.33	-2.35	-2.35	-2.00
Minority Pop %	0.010	0.010	0.008	0.004	0.011	0.007	0.019	0.018
	0.81	0.83	0.91	0.65	0.47	0.25	0.63	0.55
Constant	0.008	0.009	0.009	0.012	0.064	0.051	0.055	0.051
	1.50	1.54	1.56	1.24	3.47	2.19	2.41	2.20
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398

Note: Dependent variable is the standard deviation across stations in a market in the share of words devoted to politicians in the specified group. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 10: Local Diversity: Variety & Differentiation

	Standard Deviation in Place Word Shares				*Number of Places Covered*				*Average Share of Stations Covering*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
TV Stations	0.025	0.008	0.007	0.012	-33.9	-74.1	-81.0	-51.2	-0.012	-0.015	-0.017	-0.013
	2.13	0.55	0.44	0.80	-0.59	-0.93	-1.09	-0.97	-1.12	-0.98	-1.17	-1.00
TV Parents		0.023	0.027	0.024		54.1	77.4	64.6		0.004	0.012	0.009
		1.29	1.22	1.21		1.05	1.47	1.27		0.39	1.20	0.97
Local TV Parents			-0.010	-0.009			-47.0	-56.7			-0.015	-0.015
			-0.68	-0.71			-1.10	-1.33			-2.32	-2.36
Minority TV Stations			0.005	0.005			12.3	-8.5			-0.001	-0.003
			0.47	0.42			0.18	-0.12			-0.10	-0.32
Radio Stations				-0.003				-15.4				-0.002
				-1.04				-1.66				-1.43
Radio TV Parents				-0.005				39.2				0.002
				-0.35				0.80				0.37
Households (M)	-0.45	-0.31	-0.35	-0.23	232.8	569.6	401.6	1300.4	0.11	0.13	0.09	0.21
	-1.39	-1.18	-1.32	-0.81	0.20	0.50	0.31	0.89	0.58	0.66	0.44	0.99
Minority Pop %	-0.02	-0.08	-0.01	-0.09	1371.3	1251.9	1488.8	905.2	0.03	0.02	0.07	-0.01
	-0.09	-0.28	-0.03	-0.28	1.25	1.15	1.27	0.81	0.14	0.11	0.30	-0.04
Constant	0.25	0.10	0.12	0.29	990.2	648.0	716.8	1279.9	0.65	0.63	0.64	0.74
	1.01	0.56	0.71	0.82	0.75	0.53	0.54	1.22	3.21	3.17	2.93	3.78
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37	37	37	37	37
N	398	398	398	398	398	398	398	398	398	398	398	398

Note: Dependent variable in columns 1-4 is the standard deviation in place reference shares across stations in each market-quarter. Dependent variable in columns 5-8 is the number of different places cited in a market-quarter. Dependent variable is columns 9-12 is the average share of stations covering each place in a market-quarter. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 11: Variety & Differentiation in Local Political Coverage

	Local Title Word Shares				*Standard Deviation in Local Title Word Shares*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TV Stations	-0.0043	0.0069	0.0087	0.0058	0.0003	0.0021	0.0021	0.0009
	-0.82	0.54	0.68	0.47	0.14	0.80	0.79	0.29
TV Parents		-0.0151	-0.0197	-0.0176		-0.0024	-0.0022	-0.0017
		-1.00	-1.18	-1.20		-1.10	-0.98	-0.83
Local TV Parents			0.0070	0.0068			-0.0010	-0.0005
			1.12	1.40			-0.67	-0.31
Minority TV Stations			0.0072	0.0078			0.0017	0.0027
			1.00	1.26			0.89	1.22
Radio Stations				0.0017				0.0007
				1.65				1.70
Radio TV Parents				0.0023				-0.0022
				0.19				-0.56
Households (M)	0.1981	0.1042	0.0971	0.0183	-0.0899	-0.1051	-0.1139	-0.1536
	1.01	0.68	0.61	0.12	-1.63	-1.77	-1.88	-2.05
Minority Pop %	-0.1097	-0.0764	-0.0582	-0.0079	-0.0445	-0.0391	-0.0254	0.0005
	-0.39	-0.27	-0.21	-0.03	-1.22	-1.05	-0.67	0.01
Constant	-0.0214	0.0740	0.0797	-0.0161	0.1181	0.1336	0.1376	0.1165
	-0.11	0.48	0.50	-0.08	2.02	2.14	2.21	2.03
Fixed Effects	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market	Year, Market
Markets	37	37	37	37	37	37	37	37
N	1523	1523	1523	1523	398	398	398	398

Note: Dependent variable in columns 1-4 is the share of words devoted to local political titles at each station. Dependent variable in columns 5-8 is the standard deviation in word shares across stations in each market-quarter. See text for details. All specifications include market and time fixed effects, with standard errors clustered by market. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 12: Issue Diversity & Television Viewing

	Average Daily Local News Viewing Per Capita		
	Total	Black Viewers	Hispanic Viewers
	(1)	(2)	(3)
Business & Economics	0.1562	0.1590	0.0415
	1.22	1.25	0.37
Crime	0.0472	-0.0059	-0.0145
	1.35	-0.12	-0.27
Social Welfare	-0.2966	0.0554	0.0599
	-0.97	0.17	0.23
Health	0.2092	0.1499	0.0598
	0.98	0.71	0.38
TV & Media	-0.0835	-0.2473	0.0949
	-0.63	-2.43	0.60
Households (M)	0.0008	-0.0012	-0.0014
	0.36	-0.51	-0.65
Minority Pop %	-0.0447	-0.0136	-0.0176
	-1.42	-0.44	-0.50
Constant	0.0355	0.0368	0.0260
	2.28	2.00	1.18
Markets	33	33	33
N	334	334	334

Notes: Average daily local news viewing per capita is calculated as the sum of all local news viewing each day divided by the market population for each group, averaged over each day in the sample and across markets. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 13a: Political Diversity & Television Viewing

	Average Daily Local News Viewing Per Capita					
	All Viewers (1)	Black Viewers (2)	Hispanic Viewers (3)	All Viewers (4)	Black Viewers (5)	Hispanic Viewers (6)
House Democrats SD	0.2466	0.7811	0.0883			
	0.53	1.06	0.26			
House Republicans SD	-1.1120	-1.5920	-0.7085			
	-0.50	-0.75	-0.44			
Senate Democrats SD	-0.0487	-0.3002	-0.0540			
	-0.12	-0.64	-0.16			
Senate Republicans SD	0.9731	0.1824	0.8511			
	1.08	0.35	1.66			
Politicians Covered				0.00004	0.00001	0.00006
				0.21	0.07	0.42
Average Station Share				-0.0291	-0.0195	0.0120
				-0.31	-0.25	0.17
Households (M)	-0.0026	-0.0019	-0.0020	-0.0024	-0.0024	-0.0019
	-1.68	-0.93	-1.52	-1.27	-1.22	-1.05
Minority Pop %	-0.0495	-0.0205	-0.0129	-0.0446	-0.0178	-0.0100
	-1.67	-0.69	-0.45	-1.43	-0.56	-0.34
Constant	0.0540	0.0507	0.0268	0.0687	0.0541	0.0234
	4.17	3.27	1.92	1.53	1.29	0.70
Markets	33	33	33	33	33	33
N	334	334	334	334	334	334

Notes: Average daily local news viewing per capita is calculated as the sum of all local news viewing each day divided by the market population for each group, averaged over each day in the sample and across markets. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 13b: Minority Politicians & Television Viewing

	Average Daily Local News Viewing Per Capita					
	All Viewers	Black Viewers	Hispanic Viewers	All Viewers	Black Viewers	Hispanic Viewers
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Minority Politician SD	-0.198	-0.274	-0.142	-1.323	-2.625	-2.371
	-2.07	-3.12	-1.79	-0.86	-1.43	-1.88
Non-Minority Politician SD	0.436	0.269	0.323	0.961	0.484	0.943
	1.30	0.69	1.32	1.68	0.78	2.68
Minority Politician Word Shares				0.607	1.350	1.242
				0.65	1.23	1.63
Non-Minority Politician Word Shares				-0.196	-0.071	-0.227
				-0.97	-0.30	-1.69
Households (M)	-0.0036	-0.0032	-0.0028	-0.0048	-0.0033	-0.0040
	-2.28	-1.74	-2.12	-2.36	-1.40	-2.70
Minority Pop %	-0.0444	-0.0159	-0.0095	-0.0458	-0.0276	-0.0164
	-1.42	-0.51	-0.31	-1.32	-0.77	-0.51
Constant	0.052	0.042	0.027	0.061	0.046	0.037
	5.02	3.70	2.01	4.07	2.74	2.38
Markets	33	33	33	33	33	33
N	334	334	334	334	334	334

Notes: Average daily local news viewing per capita is calculated as the sum of all local news viewing each day divided by the market population for each group, averaged over each day in the sample and across markets. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.

Table 14: Local Diversity & Television Viewing

Average Daily Local News Viewing Per Capita

	All Viewers (1)	Black Viewers (2)	Hispanic Viewers (3)	All Viewers (4)	Black Viewers (5)	Hispanic Viewers (6)
Place Coverage SD	0.130	0.017	0.086			
	1.62	0.21	1.16			
Places Covered				6.24E-06	5.69E-06	-8.77E-06
				0.48	0.45	-0.67
Average Station Share				-0.110	-0.105	-0.070
				-1.66	-2.08	-1.63
Households (M)	-0.003	-0.003	-0.002	-0.004	-0.004	-0.003
	-1.31	-1.49	-1.22	-2.28	-2.23	-2.48
Minority Pop %	-0.041	-0.017	-0.008	-0.038	-0.011	-0.010
	-1.38	-0.56	-0.24	-1.21	-0.36	-0.32
Constant	0.044	0.045	0.022	0.113	0.098	0.084
	4.14	3.44	1.25	3.4	3.11	3.39
Markets	33	33	33	33	33	33
N	334	334	334	334	334	334

Notes: Average daily local news viewing per capita is calculated as the sum of all local news viewing each day divided by the market population for each group, averaged over each day in the sample and across markets. T-statistics reported below coefficient estimates: Shaded results significant within a 10% confidence interval.