



CONCENTRATION IN CALIFORNIA'S LOCAL MEDIA MARKETS

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INTRODUCTION

This study presents a descriptive evaluation of the market structure of California media markets. It first discusses how market analysis is conducted, relying primarily on the Department of Justice *Merger Guidelines*, and why media markets are unique. It then examines local newspaper, TV, and radio across California. It finds that every media market in California is concentrated. Every newspaper and radio market is a tight oligopoly and/or highly concentrated. Every broadcast TV market is concentrated and half of the broadcast TV markets are highly concentrated. Evidence on TV markets as a whole (broadcast and cable/satellite) indicates that most all California TV markets are concentrated, tight oligopolies, although only a few are likely to be highly concentrated.

ANALYZING MEDIA MARKET STRUCTURE

EMPIRICAL MEASURES OF ECONOMIC MARKET STRUCTURE

For the purposes of assessing media markets, as is generally the case in the analysis of the industrial organization, we start with an examination of the number and size of firms in the market. Where a small number of large firms dominates a market, the concern is that they can exercise "market power," by raising prices or lowering quality. This causes inefficiency and a transfer of wealth from consumers to producers.

A clear articulation of this problem, which is directly applicable to the debate over media ownership, can be found in the *Merger Guidelines* issued by the Department of Justice. In order to assess the potential for the exercise of market power resulting from a merger, the Department of Justice analyzes the level of concentration as measured by the Herfindahl-Hirschman Index (HHI) (see Exhibit 1). A second method that is frequently used by economists to quantify market concentration is to calculate the market share of the largest four firms (four firm concentration ratio or CR4).²

Under its Merger Guidelines, the DOJ considers a market with an HHI of 1000 or less to be unconcentrated. Such a market would have the equivalent of ten equal-sized competitors. In such a market, the four firm concentration ratio would be 40 percent. Any

EXHIBIT 1: DESCRIBING MARKET STRUCTURE FOR PUBLIC POLICY ANALYSIS

DEPARTMENT OF JUSTICE MERGER GUIDELINES	TYPE OF MARKET	EQUIVALENTS IN TERMS OF EQUAL SIZED FIRMS	нні	4-FIRM SHARE
	Monopoly	l Dominant firm market, firm with 65% or more of market	(5300+ actual)	100
	Duopoly	2 Two large firms with a fringe	(3000+ actual)	80+
†	†	S	2000	80
HIGHLY CONCENTRATED			1800 OR MORE	ı I
CONCENTRATED	Tight Oligopoly	б	1667	67
UNCONCENTRATED	Loose Oligopoly	10	1000	40
₩	Atomistic Competition	50	200	8

market with a concentration above this level is deemed to be a source of concern. The DOJ considers an HHI of 1800 as the point at which a market is highly concentrated. This level falls between five and six equal-sized competitors. Shepherd describes these thresholds in terms of four firm concentration ratios as follows:³

Tight Oligopoly: The leading four firms combined have 60-100 percent of the market; collusion among them is relatively easy.

Loose Oligopoly: The leading four firms combined have 40 percent or less of the market; collusion among them to fix prices is virtually impossible.

MEDIA MARKETS ARE DIFFERENT

In dealing with media markets, this economic analysis must be leavened with a clear understanding that media "products" are different. Public policy should strive to create media markets that are not unconcentrated. The mass media are not 'just toasters with pictures." Indeed, the governing Supreme Court decisions make it clear that freedom of information and the press transcend mere economics. As Justice Frankfurter put it, concurring in *Associated Press*,

A free press is indispensable to the workings of our democratic society. The business of the press, and therefore the business of the Associated Press, is the promotion of truth regarding public matters by furnishing the basis for an understanding of them. Truth and understanding are not wares like peanuts and potatoes. And so, the incidence of restraints upon the promotion of truth through denial of access to the basis for understanding calls into play considerations very different from comparable restraints in a cooperative enterprise having merely a commercial aspect.⁵

For the framers of the Constitution, diversity was a force to be tapped for the strengthening of democracy. The aspiration for the First Amendment was given its modern formulation by Justice Black in 1945 in the seminal case, *Associated Press.* He concluded that the First Amendment "rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public." Since then, the Supreme Court has reaffirmed this view with respect to newspapers and has unflinchingly applied it to all forms of mass media including broadcast TV and cable TV.

To put the matter simply, the needs of citizens cannot be reduced to the needs of consumers. The objective of the commercial marketplace is to improve efficiency and produce profit. The objective of the forum for democratic discourse is not only to promote diversity and antagonism but also participation. As Justice Brandeis explained in his concurrence in *Whitney v. California*,

Those who won our independence believed that the final end of the State was to make men free to develop their faculties; . . . that the greatest menace to

freedom is an inert people; that public discussion is a political duty; and that this should be a fundamental principle of American government.¹³

Justice Brandeis' admonition against turning citizens into passive couch potatoes needs to be given its full weight in constructing media ownership policy. ¹⁴ In particular, citizens must enter the debate not simply as listeners, but also as speakers. One goal is to ensure that they are well informed – receive good and diverse information – but another goal is to have them engage actively as participants in civic discourse. ¹⁵

A simplistic economic approach to media misunderstands the aspirations of the modern interpretation of the First Amendment in another fundamental way. It fails to recognize that information is not just a commodity in which one source, or information from one type of media, can substitute for another. Institutional diversity – different types of media, with different cultural and journalistic traditions and different business models – plays a special role in promoting civic discourse. Unique perspectives provided by different institutions are highly valued as sources of information. ¹⁶

A narrow view that all media information is fungible fails to recognize the unique role of newspaper reporting as a fourth estate, checking waste, fraud, and abuse of power by governments and corporations. It ignores the difference between national and local news markets and the tendency of nationally oriented media, which maximize profit by presenting programming attractive to national audiences and national advertisers, to homogenize the local point of view out of existence.

NEWSPAPER, TELEVISION AND RADIO ARE SEPARATE, LOCAL MEDIA

Typical economic analysis of markets would start by specifying the market in terms of the products that consumers use to meet their needs. Can they switch (substitute) easily between goods or services to meet their needs if prices increase or quality declines? The ability to switch is determined by the nature of the goods and services (the product market) and their availability in the immediate area of the consumer (the geographic market). For media, the importance of the process of market definition is heightened, for the reasons given above.

The FCC recognized the importance of this analysis by commissioning several studies of substitution between the media – two dealing with consumer usage and two dealing with advertiser usage.¹⁷ On neither count did the FCC find a great deal of substitutability, but the lack of substitutability was especially striking from the consumer usage point of view.

The FCC's econometric analysis provides a remarkable case against substitutability. With multiple tests many involving a very large database, the study found statistically significant substitutability in a small number of cases (less than 3 percent of the tests). In those cases where substitutability was identified, the magnitude was extremely small, explaining two or three percent of the variation in usage. In economic jargon, the cross elasticities of demand are in the range of .05. In an antitrust case, products with cross elasticities of demand this low would not be included within the market.

We should not be surprised to find that the media are not substitutes. A moment's reflection one the product they provide and the manner in which they provide them makes it clear they are very different. They rely on different senses to deliver their product — combining audio and visual, reading and watching in different ways. As a result, they provide different functions. In particular, television and radio provides an announcement function, while newspapers provide a detailed information function. In fact, newspapers are the only medium that is predominantly devoted to news and information. Television and radio, to be sure, are devoted primarily to entertainment. We hear an announcement on the radio, turn to the TV to see what happened, and learn the details in the newspaper. You cannot see the news on the radio or read about it on the TV. The econometric data overwhelmingly supports this view of the media.

The media also provide different types of news and information. The FCC's analysis assumes that cable and Internet are national, not local sources because there is extremely little local content on them. In prime time, broadcast television is predominantly national. While radio is seen as a local distribution medium, the recent severe increase in concentration in that industry has undermined even this source of local content. As the *Wall Street Journal* put it, Clear Channel, by far the largest radio chain, has been "perfecting the are of seeming local." ¹⁸

Newspapers are the only predominantly local information source. Television has a strong local news component, mixed with a great deal of entertainment and national news provided in nightly newscasts and news magazine shows.

Even within these broad categories of national and local markets, geographic market definition deserves considerable care. Each of the media that deliver some local news and information covers a different local market.

Most discussions of TV and newspaper markets use the Designated Marketing Area (DMA) as the geographic market area. This is a very large market area and any analysis based upon it will seriously underestimate the level of actual concentration for a number of reasons.

On the TV side, use of the DMA overestimates the availability of broadcast stations for many viewers. To the extent that viewers receive their broadcast signals through multichannel (cable or satellite) distribution, this large market may be appropriate. However, a substantial part of the population receives broadcast signals over the air – about 15 percent. For this group, the DMA is far too large a market definition, since signals do not cover the entire DMA. Second, many smaller broadcast stations do not enjoy distribution throughout the DMA.

The problem on the newspaper side is even more severe. Newspapers are very geographically focused. They are usually identified with a major central city or county where they achieve dominant circulation. When more than one major city or county falls within a DMA the perception of the level of concentration is distorted. Radio markets are smaller than the DMA, constrained by the reach of signals.

In spite of these factors, which are likely to lead to an underestimation of concentration in these major media markets, we find that media markets are dangerously concentrated

CALIFORNIA MEDIA MARKETS ARE CONCENTRATED

NEWSPAPERS

Newspaper markets, even when measured at the DMA level, are highly concentrated, as shown in Exhibit 2. Data for five of the ten DMAs in California show that all are highly concentrated, as measured by the HHI and tight oligopolies, as measured by the CR4.

EXHIBIT 2: CALIFORNIA NEWSPAPER MARKETS

Designated Market Area	HHI	CR4
Los Angeles	2412	75
San Francisco-Oakland	2360	87
San Diego	3162	90
Sacramento-Stockton-Modesto	5638	87
Bakersfield	9284	99

Source: Consumer Federation of America, *Democratic Discourse in the Digital Information Age* (Washington, D.C.: 2003).

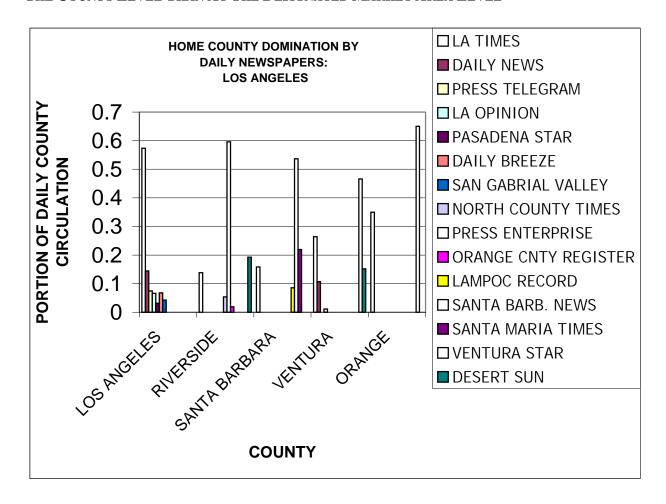
The above DMA-based analysis substantially underestimates the concentration in newspaper markets. We noted that newspapers tend to be very place-specific, providing local news and advertising. They therefore tend to dominate specific areas. To demonstrate this fact, we have examined the newspaper circulation within counties for Los Angeles (see Exhibit 3). Los Angeles is used as an example because it is the third least concentrated (for newspapers) DMA in the country and the five counties identified above account for 95 percent of the households in the DMA. The HHI is 2400 when calculated on a DMA-wide basis but averages 4000 when calculated on a county-by-county basis.

TELEVISION

Broadcast TV markets are also concentrated. Six of the ten DMAs are above the highly concentrated level (as Exhibit 4 shows). All are tight oligopolies, as measured by the four firm concentration ratio. This analysis is based solely on broadcast viewing. Statistics are not publicly available for all viewing, including cable viewing.

However, a recent set of data was made available for prime time viewing of all channels in 21 of the top 60 DMAs. Sacramento was included in that set. Even including cable viewing in prime time, all of the markets remain at least moderately concentrated and

EXHIBIT 3: NEWSPAPER MARKETS ARE MORE CONCENTRATED WHEN VIEWED AT THE COUNTY LEVEL THAN AT THE DESIGNATED MARKET AREA LEVEL



Sources: Eileen Davis Hudson and Mark Fitzgerald, "Capturing Audience Requires a Dragnet," *Editor and Publisher*, October 22, 2001, p. 20.

EXHIBIT 4: CALIFORNIA BROADCAST TV MARKET

Designated Market Area	HHI	CR4
Los Angeles	1636	57
San Francisco-Oakland	2126	80
San Diego	1552	71
Sacramento-Stockton-Modesto	1718	75
Fresno	1935	81
Monterey-Salinas	2764	99
Bakersfield	2185	82
Chico-Redding	2160	90
Palm Springs	2521	97
Eureka	2774	99

Source: BIA Financial, *Television Market Report: 2001* (Chantilly, VA: 2001).

highly concentrated level (as Exhibit 4 shows). All are tight oligopolies, as measured by the four firm concentration ratio. This analysis is based solely on broadcast viewing. Statistics are not publicly available for all viewing, including cable viewing.

However, a recent set of data was made available for prime time viewing of all channels in 21 of the top 60 DMAs. Sacramento was included in that set. Even including cable viewing in prime time, all of the markets remain at least moderately concentrated and all still qualify as tight oligopolies (see Exhibit 5). This was true of Sacramento. Moreover, for news and information, the viewing market is likely to be more concentrated than the prime time market, because a considerable number of broadcast stations do not provide local news.

RADIO

Exhibit 6 shows that all California radio is a tight oligopoly, and several are duopolies. In cities like Modesto, Redding, and Santa Barbara, two owners account for over three quarters of the radio revenues. In about a half dozen others the top two account for about 70 percent of radio revenues.

EXHIBIT 5: MEASURES OF CONCENTRATION IN TELEVISION MARKETS

(Based on Viewer Share)

DMA	Rank	Four-Firm Concent. Ratio	HHI Index	% of Broadcasters Who Provide Local News
Minneapolis	13	75	1762	64
Tampa	14	69	1432	54
Sacramento	19	70	1617	70
Pittsburgh	21	77	1798	50
St. Louis	22	76	1670	44
Baltimore	24	78	1875	50
Raleigh	29	73	1732	50
Nashville	30	81	1826	40
Kansas C.	31	71	1641	67
Cincinnati	32	76	1723	50
Milwaukee	33	73	1776	40
Columbus	34	75	1639	57
San Antonio	37	61	1188	58
Birmingham	39	66	1421	50
Norfolk	42	75	1695	56
Greensboro	44	69	1606	44
Oklahoma C.	45	72	1611	45
Buffalo	47	70	1530	45
Las Vegas	51	68	1495	60
Richmond	58	76	1847	57
Dayton	60	75	1664	40

Sources: Video Shares = Sinclair, Exhibit 15.

Network Ownership = Owen, Bruce and Michael Baumann, "Concentration Among National Purchasers of Video Entertainment Programming," Comments of Fox, Economic Study F: Network Affiliations of Local Stations, *Television Market Report, 2001.* Owen, Bruce and Michael Baumann and Allison Ivory, "News and Public Affairs Programming Offered by the Four Top-Ranked Versus Lower Ranked Television Stations," Comments of Fox, Economic Study A.

EXHIBIT 6: CALIFORNIA RADIO MARKET

Radio Markets

Arbitron Market Area CR4 – 1996 CR4- 2002		
Los Angeles	49	76
Oxnard-Ventura	83	97
Santa Barbara	77	96
Santa Maria	72	91
San Francisco-Oakland	d 55	78
San Jose	69	82
San Diego	48	83
Riverside	85	84
Sacramento	72	87
Stockton	98	100
Modesto	85	88
Fresno	69	88
Monterey-Salinas	60	82
Bakersfield	71	82
Chico	81	99
Redding	93	100
Palm Springs	50	68
Merced	71	87
San Luis Obispo	72	82
Santa Rosa	88	93

Source: Williams, George and Scott Roberts, *Radio Industry Review 2002: Trends in Ownership, Format and Finance*, (Federal Communications Commission, Media Staff Research Paper, September 2002), Appendix F.

Radio has become a hot button issue because of the rapid increase in concentration in the industry. Congress raised the cap on radio station ownership and the industry increased concentration very quickly. Four firm concentration ratios increased by an average of over twenty percentage points on a weighted average basis in the six years after the Telecommunications Act of 1996. Prior to the merger wave, the weighted average four firm concentration ratio was 60 percent; today it is over 80 percent.

ENDNOTES

¹ U.S. Department of Justice, Merger Guidelines, revised, 1997, section 0.1.

² The HHI takes the market share of each firm, squares it, sums the result, and multiplies by 10,000. William G. Shepherd, The Economics of Industrial Organization (Englewood Cliffs, NJ: Prentice Hall, 1985), p. 389, gives the following formulas for the Herfindahl-Hirschman Index (HHI) and the Concentration Ratio (CR):

$$H = \underbrace{\frac{n}{\sum_{i=1}^{N} S_i^2}}_{i=1} S_i$$

$$CR = \sqrt{\frac{m}{S_i}}$$

$$I = 1 \quad i$$

$$m i = 1$$

where

n = the number of firms

m= the market share of the largest firms (4 for the four firm concentration ratio) S_i = the share of the ith firm.

³ Shepherd, p. 4.

⁴ C. Edwin Baker, Media, Markets, and Democracy (Cambridge: Cambridge University Press, 2002) p. 3

⁵ Associated Press, 326, U.S. at 17.

⁶ Cass Sunstein, Republic Dot.Com (Princeton: Princeton University Press, 2001), p. 40. It is here that the Constitution's framers made a substantial break with conventional republican thought, focusing on the potential uses of diversity for democratic debate. For them, heterogeneity, far from being an obstacle, would be a creative force, improving deliberation and producing better outcomes... Alexander Hamilton invoked this point to defend discussion among diverse people within a bicameral legislature, urging in what could be taken as a direct response to Brutus, that "the jarring of parties... will promote deliberation.

⁷ Associated Press v. United States, 326 U.S. 1, 20 (1945).

⁸ FCC v. National Citizens Committee for Broadcasting, 436 U.S. 775 (1978).

⁹ Red Lion Broadcasting v. FCC, 395 US 367 (1969).

¹⁰ Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622, 638-39 (1994) ("Turner I"); Time Warner Entertainment Co., L.P. v. FCC, 240 F.3d 1126 (D.C. Cir. 2001) (Time Warner III).

As Sunstein, Republic, p. 106, puts it, "we should evaluate new communications technologies, including the Internet, by asking how they affect us as citizens, not mostly, and certainly not only, by asking how they affect us as consumers."
¹² Sunstein, p. 45, elaborates on the fundamental difference as follows:

Consumer sovereignty means that individual consumers are permitted to choose as they wish, subject to the constraints provided by the prices system, and also by their current holdings and requirements...

The idea of political sovereignty stands on different foundations. It does not take individual tastes as fixed or given. It prices democratic self-government, understood as a requirement of "government by discussion," accompanied by reason giving in the public domain. ¹³ 274 U.S. 357 (1927).

¹⁴ It is interesting to note that Sunstein, (Republic, pp. 46-47) cites this passage in a discussion that notes that

"with respect to a system of freedom of speech, the conflict between consumer sovereignty and political sovereignty can be found in an unexpected place: the great constitutional dissents of Supreme Court Justices Oliver Wendell Holmes and Louis Brandeis... Note Brandeis's suggestion that the greatest threat to freedom is an "inert people," and his insistence, altogether foreign to Holmes; the public discussion is not only a right but a "political

duty"... On Brandeis's self-consciously republican conception of free speech, unrestricted consumer choice is not an appropriate foundation for policy in a context where the very formation of preferences, and the organizing processes of the democratic order, are at stake.

¹⁵ Sunstein, Republic, p. 110, argues that "[T]he right of free speech is itself best seen as part of the project

of helping to produce an engaged, self-governing citizenry."

¹⁶ Judge Learned Hand argued in Associated Press, 52 F. Supp. p. 372 that a newspaper "serves one of the most vital of all general interests: the dissemination of news from many different sources, and with as many different facets and colors as possible" because "it is only by cross-lights from varying directions that full illumination can be secured."

¹⁷ C. Anthony Bush, *On the Substitutability of Local Newspaper, Radio, and Television Advertising in Local Business Sales* (Federal Communications Commission, Media Bureau Staff Research Paper, September 2002).

Keith Brown and George Williams, Consolidation and Advertising Prices in Local Radio Markets (Federal Communications Commission, Media Bureau Staff Research Paper, September 2002); Nielsen, Consumer Survey on Media Usage (Federal Communications Commission, Media Ownership Working Group, September 2002); Waldfogel, Joel, Consumer Substitution Among Media (Federal Communications Commission, Media Bureau Staff Research Paper, September 2002).

¹⁸ "A Giant Radio Chain Perfecting the Art of Seeming Local," *Wall Street Journal*, February 24, 2002.

¹⁸ Anna Wilde Mathews, "A Giant Radio Chain is Perfecting the Art of Seeming Local," *Wall Street Journal*, February 25, 2002, p. A-1.