

questions in those days was: How can we get enough cities with four viable broadcasters so that an additional network can survive?

It was also true that, by the 1960s direct daily newspaper competition had largely disappeared from all but the largest twenty or so U.S. cities. As a result, many communities had a limited number of competitive media outlets.

Another factor was that the technologies of information gathering and management used at that time had little in common between broadcast and print media. This limited the benefits that might be obtained through the closer cooperation that cross ownership might make possible.¹⁴

Changes since then have been dramatic. Technology and the introduction of mandatory carriage on CATV have made UHF fully competitive with VHF, the number of viable broadcast outlets both nationally and in most communities has more than doubled, and there are now at least six significant broadcast networks. Cable and satellite TV have also created vast opportunities for programming and for specialized networks of many kinds, including a number of news networks. The internet has added a very real dimension of media information and entertainment.

Dramatic changes in technologies have reduced the advantages of large central city dailies relative to their smaller nearby competitors fostering a new level of competition among daily newspapers. Those technologies have also made the entry and growth of weekly newspapers possible, something that Professor Waldfogel reports in Table 6, page 52. Those same technologies and changes in postal regulations made direct mail advertising a much more serious competitor for all newspapers. Technology has also made remote publishing economically possible so that one can now get daily home delivery in most urban areas of at least two national dailies.

Another consequence of changing technology is that what used to be a problematic matching of news collection and dissemination methodologies between broadcast and print enterprises is no longer a significant problem. There are many examples of success and the benefits of combined electronic and print journalism are especially evident in reporting the war for Iraq.

What all of this means is that repealing the cross-ownership rule cannot help but be successful. There is ample competition from close substitutes to ensure that monopolization does

¹⁴ This author, with two colleagues, submitted a position paper that reflected the views of these paragraphs in Docket 18110. The paper was titled "Economic Issues in the Joint Ownership of Newspaper and Television Media" by James N. Rosse, Bruce M. Owen, and David L. Grey, May 1970.

not take place in either the marketplace of ideas or in the related economic markets, so there is no downside risk. However, there is a possible upside benefit in that it may well be true that there are gains in product quality and production efficiency to be found by entrepreneurs willing to take the chance.

7. Summary and Conclusion

In the presence of these facts and this history, it seems to me that the research reported by Professor Waldfogel simply misses the point and that, even if it were flawless, it would be irrelevant to the issue at hand. None of the empirical work in the paper informs the FCC's decision in the review of media ownership rules, some of it could actually misinform that decision, and certainly none of the results provides any support for continuation of the newspaper cross-ownership rule.

Statement of Jerry A. Hausman

1. My name is Jerry A. Hausman. I am MacDonal Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139.
2. I received an A.B. degree from Brown University and a B.Phil. and D.Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. Competition among broadcast TV, cable networks, direct to home satellite (DTH) providers, newspapers, and radio is one of the primary topics covered in the course. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards. My curriculum vitae is attached as Exhibit 1.
3. I have done significant amounts of research in the telecommunications industry. I have published numerous papers in academic journals and books about telecommunications. I have also done research and published academic papers regarding advertising on broadcast TV, cable TV, and radio.
4. I have previously submitted Declarations to the Commission regarding the competitive impacts of policies affecting DTH, DBS, cable TV, and broadcast TV service offerings. I have also submitted Declarations regarding competition between cable TV and DTH and broadcast TV. I have previously made presentations to the Department of

Justice regarding competition in TV, cable TV, and radio. I have also served as a consultant to the Tribune Corporation over the past decade. Tribune owns broadcast TV stations, radio stations, and newspapers. I have also consulted for a variety of companies that sell consumer goods and do large amounts of advertising, *e.g.*, Budweiser, Kodak, and Revlon.

5. In March 2002, I submitted a Declaration to the Commission that included two empirical studies of the effects of consolidation in the radio industry that has occurred since the passage of the Telecommunications Act of 1996. In the first study I found that consolidation did not lead to higher prices for radio advertising, while in the second study I found that consolidation has resulted in increases in format diversity. In January 2003, I submitted a Statement to the Commission that extended the previous research in two ways. First, I collected data on actual rates charged by radio stations in additional markets that have experienced significant increases in concentration, and I performed additional econometric analyses of the effect of these increases in concentration on advertising prices. Second, I collected data on cable television advertising prices to study whether cable advertising provides a competitive substitute for radio advertising. The results from the first part of my further study confirmed that, across all size markets, consolidation has not led to higher radio advertising prices, even where the top two firms control more than eighty percent of the revenue. The results of the second part of my further study show a statistically significant relationship between increases in cable television advertising prices and the prices of radio advertising.

6. One of the core principles of economics is that exchanges of assets and property tend to be beneficial, both to the immediate parties in the exchange as well as to

consumers and producers who ultimately benefit from lower prices and better services made possible by market exchanges. From an economic perspective, potential harms from market exchanges occur only under exceptional circumstances. The potential economic harms from market exchanges between and among commercial firms are largely the subject of antitrust laws.

7. Antitrust laws provide a means to account for the exceptional case of potential economic harms from acquisitions or exchanges between commercial firms. Economic antitrust analyses of mergers are based on a case-by-case examination of the potential changes in consumer welfare resulting from a merger between two companies.¹ These analyses are not based ultimately on arithmetic indices.² The economic recommendations to remedy the unusual case of harm resulting from a proposed merger do not rely on arithmetic indices or predetermined prohibitions on broad classes of possible mergers.

8. The FCC's newspaper cross-ownership rule prohibits all ownership exchanges of media licenses -- both transactions that would be economically beneficial to consumers and the exceptional case that might be harmful to consumers. The federal antitrust agencies, the Department of Justice and the Federal Trade Commission, have far better tools to distinguish the economic effects of proposed mergers than the FCC in its application and enforcement of the newspaper/broadcast cross-ownership rule.

9. Many economic studies of media ownership have been conducted in recent years including a few that I have authored, such as those described in the Declaration and

¹ I analyze how to analyze mergers using a consumer welfare standard in J. Hausman and G. Leonard, "Economic Analysis of Differentiated Products Mergers Using Real World Data," George Mason Law Review, 5, 3, 1997.

² For example, the Department of Justice and Federal Trade Commission Horizontal Merger Guidelines (Merger Guidelines, April 2, 1992) state: "However, market share and concentration data provide only the starting point for analyzing the competitive impact of a merger." (§ 2.0) The HHI index is calculated from market share and concentration data.

Statement that I submitted to the FCC in March 2002 and January 2003, respectively, and that are discussed above in Paragraph 5. I am aware of no economic study, and certainly none that I have authored, that would conclude that any form of newspaper/broadcast cross-ownership rule administered by the FCC would be economically superior to relying instead on the antitrust reviews of the federal antitrust agencies. Indeed, to the extent that such a rule raises the costs of economically beneficial exchanges, and would prohibit many useful exchanges, such a newspaper/broadcast cross-ownership rule decreases both economic efficiency and consumer welfare.

10. The observation that advertising markets may include both newspapers and broadcast outlets is not a basis of support for a newspaper/broadcast cross-ownership rule, as I concluded in the studies discussed in Paragraph 5. Mergers among firms that compete in the same market often increase competition and consumer welfare.³ The empirical finding that advertising markets contain TV, radio, newspapers, and cable TV means that antitrust authorities would continue to review mergers between newspapers and broadcast outlets, as they have done in the past.⁴ For example, the Department of Justice in recently reviewing and approving News Corporation's proposed acquisition of Chris-Craft Industries, required News Corporation to divest a broadcast television channel in Salt Lake City, because of a concern that advertising prices would increase without the divestiture.⁵

³ The Merger Guidelines state: "While challenging competitively harmful mergers, the Agency seeks to avoid unnecessary interference with the larger universe of mergers that are either competitively beneficial or neutral." (¶ 0.1)

⁴ I expect that Internet advertising also competes in this market, but available data has not yet permitted me to test this hypothesis.

⁵ See *US v. The News Corporation Ltd. Fox Television Holdings, Inc., and Chris-Craft Industries, Inc.* Proposed Final Judgment and Competitive Impact Statement, 66 FR 29997, June 4, 2001.

11. While the government may have non-economic objectives to intervene in markets such as the newspaper/broadcast cross-ownership rule, such a rule cannot rely on economic studies, including mine, for support.

12. In addition to providing advertising, media outlets also provide content (such as news and entertainment) to consumers. The study by Professor Joel Waldfogel attempts to determine whether different media are substitutes for one another from the perspective of consumers.⁶ Prof. Waldfogel's results provide no support for a newspaper/broadcast cross-ownership rule.

13. Prof. Waldfogel's assertion that different media are substitutes for one another is largely based on his analysis of individual-level survey data. Prof. Waldfogel constructs measures of relative news use for each medium by calculating how much people use each medium for news relative to their use of the medium for other purposes. Prof. Waldfogel then runs a regression of relative news use for one medium on the measures of relative news use for the other media. Prof. Waldfogel interprets a negative and statistically significant coefficient to mean that news in one medium serves as a substitute for news in another medium.

14. Prof. Waldfogel's claim that his regression results provide evidence of media substitution is incorrect. An alternative interpretation of his results is that consumers prefer to obtain their news from a particular medium. Some people may mainly rely on newspapers while other people rely on TV for their main source of news. This interpretation would result in a negative correlation between news use of one medium and news use of other media. Because of this alternative explanation, Prof. Waldfogel's

⁶ J. Waldfogel, "Consumer Substitution Among Media," Federal Communications Commission, Media Ownership Working Group Paper No. 3, September 2002.

regression results cannot be used to claim that different media serve as substitutes for one another.⁷

15. An additional problem with Prof. Waldfogel's analysis is that it focuses entirely on statistical significance and not economic significance. His individual-level regressions contain almost 180,000 observations. Since statistical precision increases with sample size, it is not surprising that all of the coefficients he reports in Table 14 on p. 76 are statistically significantly different from zero at the 1% level. However, a coefficient that is statistically significant is not necessarily economically significant. For example, the coefficient on the TV relative news use variable in the newspaper regression (Column 4) is -0.0002 and is statistically significant. If one looked only at measures of statistical significance (as Prof. Waldfogel does), one would conclude that TV news substitutes for newspapers. However, an analysis of the economic significance of this coefficient leads to a very different conclusion. This coefficient indicates that an increase of one half-hour of TV news per week reduces the probability of reading a daily newspaper by approximately 0.02 percentage points. Hence while the effect of TV news use on newspaper use is statistically significant it is economically insignificant. Prof. Waldfogel's failure to consider the economic significance of his results provides yet another reason his results cannot be relied upon.

16. As I discuss above in Paragraph 7, arithmetic indices such as the HHI provide only a starting point for analyzing the competitive impacts of mergers. The economic theory of oligopoly justifies the use of the HHI for this purpose, because under certain circumstances the HHI is a function of the price-cost margin and the market elasticity of

⁷ Indeed, Waldfogel's analysis of aggregate data, which does not suffer from this potential problem, finds almost no evidence of substitution among media.

demand.⁸ Thus, changes in the HHI may indicate the changes in economic performance such as the price-cost margin of an oligopoly, following the merger of two firms.

17. In contrast, there is no economic theory that links diversity-related outcomes to underlying market structure. Nor would a “diversity index” yield predictions of changes in diversity in a market, following a merger of two firms. A merged firm may find it to be profitable to increase the diversity of its content offerings. My previous empirical research that I submitted to the Commission found that an increase in format diversity often followed after mergers had occurred in a given market. Hence, any attempt to create a “diversity index” based on market structure measures would be arbitrary and not have a basis in economic theory. An arbitrary “diversity index” would not predict either the economic performance or amount of diversity that would follow after the merger of two firms.

⁸ See, e.g., J. Hausman *et al.*, “A Proposed Method for Analyzing Competition Among Differentiated Products,” *Antitrust Law Journal* 60, 1992. An alternative justification for the use of the HHI was provided by George Stigler, who showed that the HHI could be related to the likelihood of collusion. See G. Stigler, “A Theory of Oligopoly,” *Journal of Political Economy* 72, 1964.

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 Member of MIT Center for Energy and Environmental Policy Research, 1973-
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 Director, MIT Telecommunications Economics Research Program, 1988-
 Board of Directors, Theseus Institute, France Telecom University, 1988-1995
 Member, Conference on Income and Wealth, National Bureau of Economic Research, 1992-
 Member, Committee on the Future of Boston, 1998
 Advisory Editor, Economics Research Network and Social Science Research , 1998-
 Advisory Editor, Journal of Sports Economics, 1999-
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PUBLICATIONS:**I. Econometrics**

- "Minimum Mean Square Estimators and Robust Regression," Oxford Bulletin of Statistics, April 1974.
- "Minimum Distance and Maximum Likelihood Estimation of Structural Models in Econometrics," delivered at the
 European Econometric Congress, Grenoble: August 1974.
- "Full-Information Instrumental Variable Estimation of Simultaneous Equation Models," Annals of Economic and
 Social Measurement, October 1974.
- "Estimation and Inference in Nonlinear Structural Models," Annals of Economic and Social Measurement, with E.
 Berndt, R.E. Hall, and B.H. Hall, October 1974.
- "An Instrumental Variable Approach to Full-Information Estimators in Linear and Certain Nonlinear Econometric
 Models," Econometrica, 43, 1975.
- "Simultaneous Equations with Errors in Variables," Journal of Econometrics 5, 1977.
- "Social Experimentation, Truncated Distributions, and Efficient Estimation," with D. Wise, Econometrica, 45, 1977.
- "A Conditional Probit Model for Qualitative Choice," with D. Wise, Econometrica, 46, 1978.
- "Specification Tests in Econometrics," Econometrica, 46, 1978.
- "Non-Random Missing Data," with A.M. Spence, MIT Working Paper 200, May 1977.

- "Attrition Bias in Experimental and Panel Data: The Gary Income Maintenance Experiment," with D. Wise, Econometrica, 47, 1979.
- "Missing Data and Self Selection in Large Panels," with Z. Griliches and B.H. Hall Annales de l'INSEE, April 1978.
- "Stratification on Endogenous Variables and Estimation," with D. Wise, in The Analysis of Discrete Economic Data, ed. C. Manski and D. McFadden, MIT Press, 1981.
- "Les models probit de choix qualitatifs," ("Alternative Conditional Probit Specifications for qualitative Choice.") (English Version), September 1977; EPRI report on discrete choice models, Cahiers du Seminar d'Econometrie, 1980.
- "The Econometrics of Labor Supply on Convex Budget Sets," Economic Letters, 1979.
- "Panel Data and Unobservable Individual Effects," with W. Taylor, Econometrica 49, November 1981.
- "Comparing Specification Tests and Classical Tests," with W. Taylor, August 1980, Economic Letters, 1981.
- "The Effect of Time on Economic Experiments," invited paper at Fifth World Econometrics Conference, August 1980; in Advances in Econometrics, ed. W. Hildebrand, Cambridge University Press, 1982.
- "Sample Design Considerations for the Vermont TOD Use Survey," with John Trimble, Journal of Public Use Data, 9, 1981.
- "Identification in Simultaneous Equations Systems with Covariance Restrictions: An Instrumental Variable Interpretation," with W. Taylor, Econometrica, 51, 1983.
- "Stochastic Problems in the Simulation of Labor Supply," in Tax Simulation Models, ed. M. Feldstein, University of Chicago Press, 1983.
- "The Design and Analysis of Social and Economic Experiments," invited paper for 43rd International Statistical Institute Meeting, 1981; Review of the ISI.
- "Specification and Estimation of Simultaneous Equation Models," in Handbook of Econometrics, ed. Z. Griliches and M. Intriligator, vol. 1, 1983.
- "Full-Information Estimators," in Kotz-Johnson, Encyclopedia of Statistical Science, vol. 3, 1983
- "Instrumental Variable Estimation," in Kotz-Johnson, Encyclopedia of Statistical Science, vol. 4, 1984
- "Specification Tests for the Multinomial Logit Model," with D. McFadden, Econometrica, 52, 1984.
- "Econometric Models for Count Data with an Application to the Patents R&D Relationship," with Z. Griliches and B. Hall, Econometrica, 52, 1984.
- "The Econometrics of Nonlinear Budget Sets," Fisher-Shultz lecture for the Econometric Society, Dublin: 1982; Econometrica, 53, 1985.
- "The J-Test as a Hausman Specification Test," with H. Pesaran, Economic Letters, 1983.

- "Seasonal Adjustment with Measurement Error Present," with M. Watson, Journal of the American Statistical Association, 1985.
- "Efficient Estimation and Identification of Simultaneous Equation Models with Covariance Restrictions," with W. Newey and W. Taylor, Econometrica, 55, 1987.
- "Technical Problems in Social Experimentation: Cost Versus Ease of Analysis," with D. Wise, in Social Experimentation, ed. J. Hausman and D. Wise, 1985.
- "Errors in Variables in Panel Data," with Z. Griliches, Journal of Econometrics, 1986.
- "Specifying and Testing Econometric Models for Rank-Ordered Data," with P. Ruud; Journal of Econometrics, 1987.
- "Semiparametric Identification and Estimation of Polynomial Errors in Variables Models," with W. Newey, J. Powell and H. Ichimura, Journal of Econometrics, 1991.
- "Flexible Parametric Estimation of Duration and Competing Risk Models," with A. Han, Journal of Applied Econometrics, 1990.
- "Consistent Estimation of Nonlinear Errors in Variables Models with Few Measurements," with W. Newey and J. Powell, 1987.
- "Optimal Revision and Seasonal Adjustment of Updated Data: Application to Housing Starts," with M. Watson, Journal of the American Statistical Association Proceedings, 1991.
- "Seasonal Adjustment of Trade Data," with R. Judson and M. Watson, ed. R. Baldwin, Behind the Numbers: U.S. Trade in the World Economy, 1992.
- "Nonlinear Errors in Variables: Estimation of Some Engel Curves," Jacob Marschak Lecture of the Econometric Society, Canberra 1988, Journal of Econometrics, 65, 1995.
- "Nonparametric Estimation of Exact Consumers Surplus and Deadweight Loss," with W. Newey, Econometrica, 1995.
- "Misclassification of a Dependent Variable in Qualitative Response Models," with F. Scott-Morton and J. Abrevaya, Journal of Econometrics, 1998.
- "Semiparametric Estimation in the Presence of Mismeasured Dependent Variables," with J. Abrevaya, Annales D'Economie et de Statistique, 55-56, 1999.
- "Response Error in a Transformation Model: Estimation of Wage Equations," with Jason Abrevaya, mimeo 1998.
- "A New Specification Test for the Validity of Instrumental Variables," with J. Hahn, Econometrica, 2002.
- "Microeconometrics", Journal of Econometrics, 2000.
- "Instrumental Variables Estimation for Dynamic Panel Models with Fixed Effects", with J. Hahn and G. Kuersteiner, mimeo May 2001.
- "Mismeasured Variables in Econometric Analysis: Problems from the Right and Problems from the Left", Journal of Economic Perspectives, 2001.
- "Higher Order MSE of Jackknife 2SLS", with J. Hahn and G. Kuersteiner, revised mimeo 2003.

- "Notes on Bias in Estimators for Simultaneous Equation Models", with J. Hahn, Economic Letters, 2002
- "Triangular Structural Model Specification and Estimation with Application to Causality", Journal of Econometrics, 2003
- "Weak Instruments: Diagnosis and Cures in Empirical Econometrics", with J. Hahn, Dec. 2002, forthcoming in American Economic Review, 2003.

II. Public Finance and Regulation

- "The Evaluation of Results from Truncated Samples," with D. Wise, Annals of Economic and Social Measurement, April 1976.
- "Discontinuous Budget Constraints and Estimation: The Demand for Housing," with D. Wise, J.F. Kennedy School Working Paper, July 1977; Review of Economic Studies, 1980.
- "The Effect of Taxation on Labor Supply: Evaluating the Gary Negative Income Tax Experiment," with G. Burtless, Journal of Political Economy, 1978.
- "AFDC Participation -- Permanent or Transitory?," in Papers from the European Econometrics Meetings, ed. E. Charatsis, North Holland: 1981.
- "The Effect of Wages, Taxes, and Fixed Costs on Women's Labor Force Participation," Journal of Public Economics, October 1980.
- "The Effect of Taxes on Labor Supply," in How Taxes Affect Economic Behavior, ed. H. Aaron and J. Pechman, Brookings: 1981.
- "Income and Payroll Tax Policy and Labor Supply," in The Supply Side Effects of Economic Policy, ed. G. Burtless, St. Louis: 1981.
- "Individual Retirement Decisions Under an Employer-Provided Pension Plan and Social Security," with G. Burtless, Journal of Public Economics, 1982.
- "Individual Retirement and Savings Decisions," with P. Diamond, Journal of Public Economics, 1984.
- "Retirement and Unemployment Behavior of Older Men," in H. Aaron and G. Burtless, Retirement and Economic Behavior, Brookings: 1984.
- "Tax Policy and Unemployment Insurance Effects on Labor Supply," in Removing Obstacles to Economic Growth, ed. M. Wachter, 1984.
- "Family Labor Supply with Taxes," with P. Ruud, American Economic Review, 1984.
- "Social Security, Health Status and Retirement," with D. Wise, in Pensions, Labor, and Individual Choice, ed. D. Wise, 1985.
- "The Effect of Taxes on Labor Supply," in Handbook on Public Economics, ed. A. Auerbach and M. Feldstein, 1985.
- "Choice Under Uncertainty: The Decision to Apply for Disability Insurance," with J. Halpern, Journal of Public Economics, 1986.
- "Household Behavior and the Tax Reform Act of 1986," with J. Poterba, Journal of Economic Perspectives, 1987, also published in French in Annales D'Economie et de Statistique, 1988.

- "Involuntary Early Retirement and Consumption," with L. Paquette, ed. G. Burtless, Economics of Health and Aging, 1987.
- "Income Taxation and Social Insurance in China," in Sino-U.S. Scholars on Hot Issues in China's Economy, 1990.
- "On Contingent Valuation Measurement of Nonuse Values," with P. Diamond, in Contingent Valuation: A Critical Appraisal, ed. J. Hausman, 1993.
- "Does Contingent Valuation Measure Preferences? Experimental Evidence," with P. Diamond, G. Leonard, M. Denning, in Contingent Valuation: A Critical Appraisal, ed. J. Hausman, 1993.
- "Contingent Valuation: Is Some Number Better than No Number?" with P. Diamond, December 1993, Journal of Economic Perspectives, 8, 1994.
- "A Utility-Consistent Combined Discrete Choice and Count Data Model: Assessing Recreational Use Losses Due to Natural Resource Damage," with G. Leonard and D. McFadden, Journal of Public Economics, 56, 1995.
- "Contingent Valuation Measurement of Nonuse Values," with P. Diamond, ed. R.B. Stewart, Natural Resource Damages: A Legal, Economic, and Policy Analysis, 1995.
- "A Cost of Regulation: Delay in the Introduction of New Telecommunications Services," with T. Tardiff, 1995, ed. A. Dumort and J. Dryden, The Economics of the Information Society, 1997.
- "Valuation and the Effect of Regulation on New Services in Telecommunications," Brookings Papers on Economic Activity: Microeconomics, 1997.
- "Taxation By Telecommunications Regulation," Tax Policy and the Economy, 12, 1998.
- "Taxation by Telecommunications Regulation: The Economics of the E-Rate", AEI Press, 1998.
- "Economic Welfare and Telecommunications Welfare: The E-Rate Policy for Universal Service Subsidies," with H. Shelanski, Yale Journal on Regulation, 16, 1999.
- "Efficiency Effects on the U.S. Economy from Wireless Taxation", National Tax Journal, 2000.
- "Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers", with H. Sider and J.G. Sidak, Yale Journal on Regulation, 18, 2001.
- "Regulating the U.S. Railroads: The Effects of Sunk Costs and Asymmetric Risk," with S. Myers, Journal of Regulatory Economics, 2002.
- "Regulated Costs and Prices in Telecommunications," Forthcoming International Handbook of Telecommunications, 2003.
- "Will New Regulation Derail the Railroads?," Competitive Enterprise Institute, October 2001
- "Sources of Bias and Solutions to Bias in the CPI", NBER Discussion paper 9298, Oct. 2002, Journal of Economic Perspectives, 2003.

III. Applied Micro Models

- "Project Independence Report: A Review of U.S. Energy Needs up to 1985," Bell Journal of Economics, Autumn 1975.
- "Individual Discount Rates and the Purchase and Utilization of Energy Using Durables," Bell Journal of Economics, Spring 1979.

- "Voluntary Participation in the Arizona Time of Day Electricity Experiment," with D. Aigner, in EPRI Report, Modeling and Analysis of Electricity Demand by Time of Day, 1979; Bell Journal of Economics, 1980.
- "A Two-level Electricity Demand Model: Evaluation of the Connecticut Time-of-Day Pricing Test," in EPRI Report, Modeling and Analysis of Electricity Demand by Time of Day, 1979; Journal of Econometrics, 1979.
- "Assessing the Potential Demand for Electric Cars," with S. Beggs and S. Cardell, Journal of Econometrics, 1981.
- "Assessment and Validation of Energy Models," in Validation and Assessment of Energy Models, ed. S. Gass, Washington: Department of Commerce, 1981.
- "Exact Consumer Surplus and Deadweight Loss," American Economic Review, 71, 1981.
- "Appliance Purchase and Usage Adaptation to a Permanent Time of Day Electricity Rate Schedule," with J. Trimble, Journal of Econometrics, 1984.
- "Evaluating the Costs and Benefits of Appliance Efficiency Standards," with P. Joskow, American Economic Review, 72, 1982.
- "Information Costs, Competition and Collective Ratemaking in the Motor Carrier Industry," American University Law Review, 1983.
- "An Overview of IFFS," in Intermediate Future Forecasting System, ed. S. Gass et al., Washington: 1983.
- "Choice of Conservation Actions in the AHS," in Energy Simulation Models, ed. R. Crow, 1983.
- "Patents and R&D: Searching for a Lag Structure," with B. Hall and Z. Griliches, in Actes du Colloque Econometrie de la Recherche, Paris: 1983.
- "The Demand for Optional Local Measured Telephone Service," in H. Trebing ed., Adjusting to Regulatory, Pricing and Marketing Realities, East Lansing: 1983.
- "Patents and R&D: Is There a Lag?," with B. Hall and Z. Griliches, 1985; International Economic Review, 1986.
- "Price Discrimination and Patent Policy," with J. MacKie-Mason, Rand Journal of Economics, 1988.
- "Residential End-Use Load Shape Estimation from Whole-House Metered Data," with I. Schick, P. Vsoro, and M. Ruane, IEEE Transactions on Power Systems, 1988.
- "Competition in Telecommunications for Large Users in New York," with H. Ware and T. Tardiff, Telecommunications in a Competitive Environment, 1989.
- "Innovation and International Trade Policy," with J. MacKie-Mason, Oxford Review of Economic Policy, 1988.
- "The Evolution of the Central Office Switch Industry," with W. E. Kohlberg, in ed. S. Bradley and J. Hausman, Future Competition in Telecommunications, 1989.
- "Future Competition in Telecommunications," 1987; ed. S. Bradley and J. Hausman, Future Competition in Telecommunications, 1989.
- "Joint Ventures, Strategic Alliances and Collaboration in Telecommunications," Regulation, 1991.
- "An Ordered Probit Model of Intra-day Securities Trading," with A. Lo and C. MacKinlay, Journal of Financial Economics, 1992.
- "A Proposed Method for Analyzing Competition Among Differentiated Products," with G. Leonard and J.D. Zona, Antitrust Law Journal, 60, 1992.

- "Global Competition and Telecommunications," in Bradley, et al., ed., Globalization, Technology and Competition, 1993.
- "The Bell Operating Companies and AT&T Venture Abroad and British Telecom and Others Come to the US," in Bradley, et al., ed., Globalization, Technology and Competition, 1993.
- "The Effects of the Breakup of AT&T on Telephone Penetration in the US," with T. Tardiff and A. Belinfante, American Economic Review, 1993.
- "Competitive Analysis with Differentiated Products," with G. Leonard and D. Zona, Annales, D'Economie et de Statistique, 34, 1994.
- "Proliferation of Networks in Telecommunications," ed. D. Alexander and W. Sichel, Networks, Infrastructure, and the New Task for Regulation, University of Michigan Press, 1996.
- "Valuation of New Goods Under Perfect and Imperfect Competition," ed. T. Bresnahan and R. Gordon, The Economics of New Goods, University of Chicago Press, 1997.
- "Competition in Long Distance and Equipment Markets: Effects of the MFJ," Journal of Managerial and Decision Economics, 1995.
- "The Cost of Cellular Telephone Regulation," MIT Working Paper, January 1995.
- "State Regulation of Cellular Prices," Wireless Communications Forum, Volume III, April 1995.
- "Efficient Local Exchange Competition," with T. Tardiff, Antitrust Bulletin, 1995.
- "Superstars in the National Basketball Association: Economic Value and Policy," with G. Leonard, Journal of Labor Economics, 15, 4, 1997.
- "Valuation of New Services in Telecommunications," with T. Tardiff, The Economics of the Information Society, ed. A. Dumort and J. Dryden, Office for Official Publications of the European Communities, Luxembourg, 1997.
- "Market Definition Under Price Discrimination," with G. Leonard and C. Velluro, Antitrust Law Journal, Vol. 64, 1996.
- "Characteristics of Demand for Pharmaceutical Products: An Examination of Four Cephalosporins," with S. Fisher Ellison, I. Cockburn and Z. Griliches, Rand Journal of Economics, 28, 3, 1997.
- "Telecommunications: Building the Infrastructure for Value Creation," S. Bradley and R. Nolan, eds. Sense and Respond, 1998.
- "Achieving Competition: Antitrust Policy and Consumer Welfare," with G. Leonard, World Economic Affairs, Vol. 1, No. 2, 1997.
- "The CPI Commission and New Goods," The American Economic Review, May 1997.
- "Economic Analysis of Differentiated Products Mergers Using Real World Data," with G. Leonard, George Mason Law Review, 5, 3, 1997.
- "Cellular Telephone, New Products and the CPI," Journal of Business and Economics Statistics, 1999.
- "Regulation by TSLRIC: Economic Effects on Investment and Innovation," Multimedia Und Recht, 1999; also in J.G. Sidak, C. Engel, and G. Knieps eds., Competition and Regulation in Telecommunications, Boston: Kluwer Academic Publishers, 2000.
- "Efficiencies from the Consumer Viewpoint," with G. Leonard, George Mason Law Review, 7, 3, 1999.

"The Effect of Sunk Costs in Telecommunication Regulation," in J. Alleman and E. Noam, eds, The New Investment Theory of Real Options and its Implications for Telecommunications Economics, 1999.

"A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks," with J. Gregory Sidak, Yale Law Journal, 1999.

"Competition in U.S. Telecommunications Services Four Years After the 1996 Act, with R. Crandall, in S. Peltzman and C. Winston, eds., Deregulation of Network Industries, 2000.

"The Impact of Duality on Productive Efficiency and Innovation," with G. Leonard and J. Tirole, revised April, 2001, Rand Journal of Economics, 2003.

"The Competitive Effects of a New Product Introduction: A Case Study", with G. Leonard, Journal of Industrial Economics, 50, 2002.

"Cable Modems and DSL: Broadband Internet Access for Residential Customers," with J. Gregory Sidak, and Hal J. Singer, American Economic Review, 91, 2001

"Mobile Telephone," in M. Cave et. al. eds, Handbook of Telecommunications Economics, North Holland, 2002.

"Lessons from United States Telecommunications Policy for the New Millenium," with R. Crandall, mimeo May 2001

"Competition and Regulation for Internet-related Services", in Korea Institute for Industrial Economics and Trade, Industrial Competitiveness and Competition Policy in the Era of Telecommunication Convergence. 2001. (also translated into Korean in a book)

"From 2G to 3G: Wireless Competition for Internet-Related Services," presented at Brookings Conference, October 2001, R. Crandall and J. Alleman ed., Broadband, Brookings, 2002.

"Competition and Regulation for Internet-related Services: Results of Asymmetric Regulation", presented at Columbia Univ. conference, October 2001, R. Crandall and J. Alleman ed., Broadband, Brookings, 2002

"Does Bell Company Entry into Long-Distance Telecommunications Benefit Consumers?," with G. Leonard and J.G. Sidak, Antitrust Law Journal, 70, 2002.

"Do Long-Distance Carriers Price Discriminate Against the Poor and the Less-Educated?," with J.G. Sidak,, mimeo December 2002

"Estimation of Patent Licensing Value Using a Flexible Demand Specification", with G. Leonard, mimeo Dec. 2002.

JOINT REPORTS, TESTIMONY, AND BOOKS:

"Project Independence: An Economic Analysis," Technology Review, May 1974.

"The FEA's Project Independence Report: Testimony before Joint Economic Committee," U.S. Congress, March 18, 1975.

"The FEA's Project Independence Report: An Analytical Assessment and Evaluation," NSF Report, June 1975.

"Energy Demand in the ERDA Plan," with D. Wood, Energy Laboratory Report, August 1975.

"A Note on Computational Simplifications and Extensions of the Conditional Probit Model," EPRI report on choice models, September 1977.

"Labor Supply Response of Males to a Negative Income Tax," Testimony for U.S. Senate Finance Subcommittee on

- Public Assistance, November 22, 1978.
- "Appliance Choice with Time of Day Pricing," Energy Laboratory Report, January 1980.
- "Discrete Choice Models with Uncertain Attributes," Oak Ridge National Laboratories Report, January 1980.
- "Individual Savings Behavior," with P. Diamond, Report to the National Commission on Social Security, May 1980.
- "Wealth Accumulation and Retirement," with P. Diamond, Report to the Department of Labor, May 1982.
- "A Review of IFFS," Report to the Energy Information Agency, February 1982.
- "A Model of Heating System and Appliance Choice," with J. Berkovec and J. Rust, Report to the Department of Energy, December 1983.
- "Labor Force Behavior of Older Men After Involuntary Job Loss," with L. Paquette, Report to Department of Health and Human Services, December 1985.
- "Pollution and Work Days Lost," with D. Wise and B. Ostrow, NBER Working Paper, January 1984; Revised 1985.
- "Demand for Interstate Long Distance Telephone Service," with A. Jafee and T. Tardiff, November 1985.
- "Competition in the Information Market 1990", August 1990.
- "The Welfare Cost to the US Economy of Regulatory Restriction in Telecommunications," January 1995.
- "Benefits and Costs of Vertical Integration of Basic and Enhanced Telecommunications Services," April 1995.
- "Statement on the Natural Resource Damage Provisions of CERCLA," Testimony before the U.S. Senate Committee on Environment and Public Works, May 11, 1995; Testimony before the U.S. House of Representatives, Transportation & Infrastructure Committee, Water Resources & Environment Subcommittee, July 11, 1995.
- "Competition in Cellular Markets," Testimony before the U.S. House of Representatives, Committee on Commerce, October 12, 1995.
- "Merger Policy in Declining Demand Industries," Testimony before the U.S. Federal Trade Commission, November 14, 1995.
- "Expected Results from Early Auctions of Television Spectrum," Testimony before the U.S. Senate Budget Committee and the U.S. House of Representatives, Committee on Commerce, March 13, 1996.
- The Choice and Utilization of Energy Using Durables, ed. J. Hausman, Palo Alto: EPRI, 1981.
- Social Experimentation, ed. J. Hausman and D. Wise, Chicago: 1985.
- Future Competition in Telecommunications, ed. S. Bradley and J. Hausman, Harvard: 1989.
- Contingent Valuation: A Critical Appraisal, ed. J. Hausman, North Holland, 1993.
- Globalization, Technology and Competition, ed. S. Bradley, J. Hausman, R. Nolan, Harvard: 1993.
- Economic Impact of Deregulating U.S. Communications Industries, The WEFA Group, Burlington, MA, February 1995.

ATTACHMENT 1**SELECTED PRESS ACCOUNTS OF CURTAILMENTS IN LOCAL TELEVISION NEWSCASTS
NOVEMBER 1998 THROUGH JANUARY 2003**

Market	Station	Decision	Source
Anchorage, AK	KTVA (CBS)	Announced in April 2000 that it would eliminate noon newscasts.	11
Binghamton, NY	WIVT (ABC)	Cancelled locally produced morning news show in June 2002, and replaced it with regionally produced morning news show.	34
Boston, MA	WSBK (UPN)	Cancelled early evening newscasts in 1998, leaving only a 10 p.m. newscast, which is rebroadcast from WBZ-TV (CBS).	2
Boston, MA	WMUR-TV (ABC)	Cancelled 9 a.m. and 4 p.m. newscasts in May 2001.	19
Charlotte, NC	WBTW (CBS)	Cancelled 6:30 p.m. newscast in September 2001.	22
Chattanooga, TN	WDSI (Fox)	Cancelled morning and noon newscasts and added 4 p.m. newscast in January 2001.	15
Chattanooga, TN	WTVC-TV (ABC)	Cancelled weekend morning newscasts in February 2001.	16
Chicago, IL	WBBM-TV (CBS)	Cancelled one hour 6 p.m. newscast in early 1999. Replaced it with a half hour 4:30 p.m. newscast, which thereafter was cancelled in July 2000. Cancelled Saturday morning newscasts in December 1998.	3, 8
Cleveland, OH	WUAB (IND)	Cancelled 11:30 a.m. newscast in January 1999.	4
Cleveland, OH	WEWS (ABC)	Cancelled 5 a.m. newscast in June 1999.	6
Detroit, MI	WKBD (UPN)	Cancelled local 10 p.m. newscast in November 2002 and replaced with one produced by other station in market.	35
Detroit, MI	WWJ-TV (CBS)	Cancelled 11 p.m. half hour local newscast in November 2002.	35
Duluth, MN	KDLH (CBS)	Cancelled noon newscast in November 1998.	1
Evansville, IN	WEVV (CBS)	Cancelled local newscasts in late 2001	29
Green Bay, WI	WLUK-TV (Fox)	Cancelled 10 p.m. newscast in March 2001.	17
Greensboro, NC	WXLV-TV	Cancelled morning and weekend newscasts in late 2000.	13

Market	Station	Decision	Source
Greensboro/ Winston/Salem, NC	WXLV-TV (ABC)	Cancelled local newscasts in January 2002	27
Hattiesburg, MS	WHLT-TV (CBS)	Cancelled all newscasts and eliminated news department in May 2001.	18
Jacksonville, FL	WJXX (ABC)	Cancelled all locally produced newscasts in January 2000; now re-broadcasts newscasts from WTLV-TV (NBC).	10
Kingsport, TN	WKPT (ABC)	Announced in February 2002 that it would cancel locally produced weekday newscasts and brief updates and replace them with re-broadcast newscasts from WJHL-TV (CBS), Johnson City, TN.	28
Los Angeles, CA	KCBS (CBS)	Cancelled 4 p.m. newscast in 2001.	21
Los Angeles, CA	KCOP (UPN)	Announced in July 1999 that it would cancel 7:30 p.m. newscast.	7
Marquette, MI	WBUP WBKP (ABC)	Cancelled local newscast in March 2002	31
Miami, FL	WAMI-TV (IND)	Cancelled only newscast and eliminated news department in December 2000.	14
Miami, FL	WTVJ (NBC)	In February 2002, cancelled midmorning newscast and added 4:00 p.m. newscast, which was subsequently cancelled.	26
Minneapolis, MN	KSTC-TV (IND)	Cancelled both weekday morning and 6:30 p.m. newscasts in October 2001.	23
Minneapolis, MN	KSTP (ABC)	Cancelled morning weekend newscasts in October 2001.	23
New York, NY	WCBS-TV	Cancelled 4:00 p.m. newscast in January 2002	25
Odessa/ Midland, TX	KOSA-TV (CBS)	Cancelled morning newscasts in November 1998.	1
Orlando, FL	WESH (NBC)	Eliminated 4:30 p.m. newscast in April 2000.	9
Raleigh/ Durham, NC	WKFT (IND)	Cancelled hourly local news briefs in December 2002.	32
Sacramento, CA	KMAX-TV (UPN)	Cancelled evening newscast in 1998.	2
San Antonio, TX	KVDA-TV (Telemundo)	Cancelled morning and 5 p.m. newscasts in July 2001.	20
Seattle, WA	KSTW(TV) (UPN)	Cancelled all newscasts and eliminated news department in December 1998.	2
St. Louis, MO	KDNL-TV (ABC)	Cancelled all newscasts and eliminated news department in September 2001.	24
Tallahassee, FL	WTWC (NBC)	Cancelled all newscasts and eliminated news department in November 2000.	24

Market	Station	Decision	Source
Tampa, FL	WTOG (UPN)	Cancelled 10 p.m. newscast and eliminated news department in 1998.	5
Topeka, KS	KTKA-TV (ABC)	Cancelled all four local newscasts in April 2002.	33
Twin Falls, ID	KMVT (CBS)	Announced in February 2002 that it would cancel 5:00 p.m. newscast	30
Utica, NY	WUTR(TV) (ABC)	Cancelled locally produced morning news show in June 2002, and replaced it with regionally produced morning news show.	34
Washington, DC	WUSA (CBS)	Cancelled 90 minutes of evening newscasts, added 9 a.m. newscast, in September 2000.	12
Watertown, NY	WWTI(TV) (IND)	Cancelled locally produced morning news show in June 2002, and replaced it with regionally produced morning news show.	34

KEY TO SOURCES

Source	News Article
1	"Benedek Slashes Costs, Staffs," <i>Electronic Media</i> , Nov. 16, 1998 at 1; interview with station news staff, February 13, 2003.
2	Monica Collins, "Clickers of Sweeps and Cable Rates," <i>The Boston Herald</i> , Nov. 15, 1998 at 5.
3	Dan Trigoboff, "A Day of Rest. WGN Cancels Saturday Morning Newscast," <i>Broadcasting & Cable</i> , Dec. 21, 1998 at 28.
4	Roger Brown, "Poor Ratings Sink Channel 43 Midday Newscast," <i>The Plain Dealer</i> , Dec. 22, 1998 at 4E.
5	Eric Deggans, "WTTA Might Add Late-Night News," <i>St. Petersburg Times</i> , Mar. 18, 1999 at 2B.
6	Tom Feran, "Wenz Hires Sommers To Do Midday Show," <i>The Plain Dealer</i> , June 9, 1999 at 2E.
7	Cynthia Littleton, "KCOP Dropping Newscast," <i>Daily Variety</i> , July 12, 1999 at 5.
8	Phil Rosenthal, "More Bad News for Ch. 2," <i>Chicago Sun-Times</i> , Aug. 16, 2000, at 57.
9	"Chatter," <i>The Stuart News/Port St. Lucie News</i> , Apr. 16, 2000 at P6.
10	Eileen Davis Hudson, "Market Profile," <i>Mediaweek</i> , May 15, 2000; interview with station news staff, February 13, 2003.
11	"Inside Alaska Business," <i>Anchorage Daily News</i> , Apr. 20, 2000 at 1E.
12	"Local Media," <i>Mediaweek</i> , Oct. 2, 2000.
13	Jeremy Murphy, "Local Media—Los Angeles Radio Stations: ESPN Radio Picks Up Biggest Affiliate," <i>Mediaweek</i> , Nov. 27, 2000.
14	Dan Trigoboff, "Station Break," <i>Broadcasting & Cable</i> , Dec. 11, 2000 at 33.
15	Barry Courter, "Fox 61 Moves To Be First With News," <i>Chattanooga Times/Chattanooga Free Press</i> , Jan. 21, 2001 at B1.
16	Barry Courter, "Public Gives Locher A Boost," <i>Chattanooga Times/Chattanooga Free Press</i> , Feb. 9, 2001 at H5.
17	Tim Cuprisin, "Green Bay Fox Station Cancels 10 p.m. News," <i>Milwaukee Journal Sentinel</i> , Mar. 8, 2001 at 8B.
18	Kathryn S. Wenner, "News Blackout," <i>American Journalism Review</i> , May 2001, at 12.
19	Denis Paiste, "'Chronicle' Coming to WMUR," <i>The Union Leader (Manchester NH)</i> , May 30, 2001 at A2.
20	"News roundup," <i>San Antonio Express-News</i> , July 4, 2001 at 2B.
21	Dan Trigoboff, "Station Break," <i>Broadcasting & Cable</i> , Aug. 6, 2001 at 26.
22	Mark Washburn, "WBTB Replaces News Director to Boost Ratings," <i>The Charlotte Observer</i> , Aug. 14, 2001 at 1D.
23	Jeremy Murphy, "Local Media TV Stations," <i>Mediaweek</i> , Nov. 5, 2001; interview with station news staff, February 13, 2003.
24	Dan Trigoboff, "KDNL's St. Louis Blues; KDNL Television in St. Louis, Missouri, Axes News Department," <i>Broadcasting & Cable</i> , Oct. 8, 2001 at 22.
25	Chris Pursell, "Stations Scrambling to Slot New Strips," <i>Electronic Media</i> , Dec. 31, 2001 at 3.

KEY TO SOURCES

26	Tom Jicha, "WTVJ Shifts Newscasts to Late Afternoon," <i>Sun-Sentinel (Fort Lauderdale, FL)</i> , Feb. 6, 2002 at 3E; interview with station news staff, Feb. 11, 2003.
27	Dan Trigoboff, "Station Break," <i>Broadcasting & Cable</i> , Jan 7, 2002 at 40.
28	Dan Trigoboff, "Station Break," <i>Broadcasting & Cable</i> , Jan. 21, 2002 at 36; interview with station news staff, February 13, 2003.
29	Michael Schneider, "Local Newscasts Fall Victim to Cost Cuts," <i>Variety</i> , Jan. 28-Feb. 8, 2002 at 21.
30	Lorraine Cavener, "Twin Falls, Idaho, TV Station Drops Early-Evening Newscast," <i>Times-News</i> , Feb. 2, 2002.
31	Associated Press, "Upper Peninsula Television Station Cancels Local News," <i>Associated Press</i> , March 29, 2002.
32	Business North Carolina, "WKFT, Eastern, Eliminates Local News Segment," <i>Business North Carolina</i> , March 1, 2002.
33	Kansas City Star, "Station Drops Local News," <i>Kansas City Star</i> , April 24, 2002; Dan Trigoboff, "The News Not Out of Topeka," <i>Broadcasting & Cable</i> , April 22, 2002.
34	William LaRue, "Clear Channel Consolidating Some Staff," <i>The Post-Standard</i> , July 6, 2002.
35	John Smyntek, "Channel 50's Exodus Aids Channel 7's News," <i>Detroit Free Press</i> , December 4, 2002; Dan Trigoboff, "CBS Drops News in Detroit," <i>Broadcasting & Cable</i> , November 25, 2002.

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
2002 Biennial Regulatory Review – Review of the Commission’s Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996)	MB Docket No. 02-277
)	
Cross-Ownership of Broadcast Stations and Newspapers)	MM Docket No. 01-235
)	
Rules and Policies Concerning Multiple Ownership of Radio Broadcast Stations in Local Markets)	MM Docket No. 01-317
)	
Definition of Radio Markets)	MM Docket No. 00-244

COMMENTS OF MEDIA GENERAL, INC.

(Volume 1: Comments and Appendices 1-8)

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Commission cannot defend it, and a reviewing court could not sustain it under established principles of First Amendment jurisprudence.

IV. The FCC's Own Recently Released Media Ownership Studies Also Compel Repeal of the Rule.

On October 1, 2002, the FCC released twelve studies examining various aspects of the current media marketplace.¹⁰¹ Of these twelve empirical studies, six include information tangentially of relevance to the FCC's review of the newspaper/broadcast cross-ownership rule. While the studies may provide useful information to the FCC and the public, not one of them specifically provides a basis to evaluate whether the newspaper/broadcast cross-ownership rule is necessary in the public interest as a result of competition. Overall, these six studies demonstrate that the FCC lacks any empirical basis on which it can rely to continue implementation of the newspaper/broadcast cross-ownership rule as being necessary in the public interest as a result of competition. Individually, as shown below, the six studies show that the media marketplace has changed radically since 1975 when the rule was adopted and that repeal of the rule will not have a damaging effect on the public interest. In the end, these studies support repeal of the rule.

1. *Nielsen Consumer Survey.*

Study No. 8 released by the FCC reports the results of telephone interviews with 3,136 respondents whom Nielsen Media Research queried by telephone in late August and early September 2002 regarding their use of media.¹⁰² The pool of consumers from which the respondents were drawn had recently completed television diaries in the February and May 2002

¹⁰⁰ *League of Women Voters*, 468 U.S. at 380.

¹⁰¹ FCC News, "FCC Releases Twelve Studies on Current Media Marketplace: Research Represents Critical First Steps in FCC's Fact Finding Mission," *supra* note 8.

¹⁰² Nielsen Media Research, "Consumer Survey on Media Usage," FCC Media Ownership Working Group, 2002-8, September 2002 ("Study No. 8").

“sweeps” measurement periods.¹⁰³ As a result, the group’s composition may have been slightly biased in favor of video watchers versus print readers. In addition, the average and median ages of the respondents were in their mid-forties,¹⁰⁴ so the pool of respondents likely was skewed against Internet usage.¹⁰⁵ Nonetheless, the results of the Nielsen consumer survey are telling in three principal ways: they demonstrate significant and growing reliance on the Internet for news and public affairs information; they show that cable and satellite subscription services have made measurable inroads in the use of over-the-air broadcast television; and they document substantial use of weekly newspapers, showing growing erosion of the market occupied by daily newspapers.

Internet Growth. Although the Nielsen study shows Americans still utilize a variety of more traditional media outlets to obtain local and national news, it also demonstrates that consumers are making substantial use of the Internet in seeking information about current events and public affairs. When asked to name the list of sources they had used for *local* news and current affairs within the preceding seven days, 18.8 percent, or almost one-fifth, of the group responded that they had used the Internet without hearing any list of suggested sources.¹⁰⁶ When those who did not volunteer use of the Internet were presented with a follow-up question asking specifically if they had used it as a source of *local* news and public affairs in the preceding week,

¹⁰³ Study No. 8, “Description of Methodology,” at 8.

¹⁰⁴ *Id.* at Table 095.

¹⁰⁵ U.S. Department of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration, *A Nation Online: How Americans Are Expanding Their Use of the Internet* at 14 (February 2002), available at <http://www.esa.doc.gov/508/esa/USEconomy.htm>. While this study shows that since December 1997, the age range of individuals more likely to be computer users has been rising, children and teenagers are still the most likely to be computer users.

¹⁰⁶ Study No. 8, Table 001.

another 18.5 percent, or again almost one-fifth of those questioned, answered affirmatively.¹⁰⁷

When the same questions were asked about *national* news, 21.3 percent, or even more respondents, volunteered that they had used the Internet.¹⁰⁸ Of those that had not volunteered their usage of the Internet to obtain *national* news, some 12.7 percent admitted such use when specifically queried.¹⁰⁹

When a slightly smaller group of respondents, those who admitted to obtaining any *local* news and current affairs in the last week, were then asked if they had used the Internet to gain access to local news and current affairs, 34.2 percent responded affirmatively.¹¹⁰ When a similar group was asked the same question but about *national* news and public affairs, a consistent 32.2 percent responded affirmatively.¹¹¹

In the overall pool of respondents, a large number admitted access to the Internet. Some 79.2 percent, or almost four-fifths, responded that they have access at home, work or both.¹¹² The study's results also presaged the likely emergence of the Internet as an even more dominant source of news. When respondents were asked to list which media they might utilize more or less in the future, the Internet, among all listed media, was the source that gained the highest percentage of "more often" responses -- 24.7 percent.¹¹³

Cable Television/Satellite-Delivered Video. The Nielsen study results also showed significant growth in the role of subscription video services, like cable and satellite, in the daily

¹⁰⁷ *Id.* at Table 002.

¹⁰⁸ *Id.* at Table 009.

¹⁰⁹ *Id.* at Table 010.

¹¹⁰ *Id.* at Table 097.

¹¹¹ *Id.* at Table 098.

¹¹² *Id.* at Table 077.

¹¹³ *Id.* at Tables 070 through 076.

lives of Americans. Of respondents who answered that television is one of their sources of *local* news and public affairs, 67 percent said that they watch such news on broadcast television channels, and 58 percent, or almost as many, said that they watch cable or satellite news channels.¹¹⁴ When the same question was asked about sources of *national* news and current affairs, an even larger number, or 65.5 percent, listed cable or satellite news channels compared to 62.8 percent for broadcast news channels.¹¹⁵

A slightly smaller group of respondents, those who had said they get local or national news from various sources, were asked to name the source that they used most often. While almost one-third, or 33.1 percent, cited broadcast television channels, a surprisingly large number, or 23.3 percent, listed cable or satellite news channels, a figure that exactly matched the percentage of respondents who cited daily newspapers as the single source they use more often.¹¹⁶

Respondents who named a particular medium as the one that they used most often as their source for local or national news were also asked how likely, on a scale of one to five, they would be to use another suggested source if their preferred source were no longer available. A rating of “5” represented “much more likely” and “1” meant “no more likely.” When the numbers for those who rated a specified substitute as either a “5” or a “4” were tallied, cable or satellite news channels beat out daily newspapers among all respondents except those who had

¹¹⁴ *Id.* at Table 008. As the notations in many of the tables state, percentages of responses may sum to more than 100 percent due to multiple responses.

¹¹⁵ *Id.* at Table 016. Again, multiple responses are responsible for causing the percentages to total more than 100 percent.

¹¹⁶ *Id.* at Table 020.

listed either weekly newspapers or magazines as their first preferred source.¹¹⁷ When all respondents were queried about what source they would be more likely to use for national or local news and current affairs in the future, cable and satellite channels came in second behind the Internet.¹¹⁸

Finally, among the respondents, many more households paid to receive subscription video services than subscription print services. Specifically, when all respondents were asked to list the subscription services, if any, that they received, 62 percent said cable, 20.5 percent said satellite, 49.8 percent said daily newspaper, and 24.0 percent said weekly newspaper.¹¹⁹ When the cable and satellite percentages are summed, they show that 83.4 percent of the respondents subscribed to a paid video source.¹²⁰

Weekly Newspapers. The results for the survey also show that weekly newspapers have a strong response rate vis-à-vis dailies in terms of readership. When the respondents who had not mentioned reading a weekly newspaper in the last seven days were specifically asked if they had done so, almost one-third, or 27.5 percent, responded affirmatively.¹²¹ When those respondents who had said they obtained their news from a newspaper were asked to specify whether it was a daily, weekly, or both, 10.2 percent said weekly only and 27.3 percent, or again almost one-third, said they subscribe to both.¹²²

¹¹⁷ For those who listed broadcast as their number one source, *compare* Study No. 8, Table 021 *with* Table 024; for those preferring the Internet, *compare* Table 034 *with* Table 036; for those preferring radio, *compare* Table 058 *with* Table 061.

¹¹⁸ *Id.* at Table 070 through Table 076.

¹¹⁹ *Id.* at Table 079.

¹²⁰ *Id.*

¹²¹ *Id.* at Table 081.

¹²² *Id.* at Table 007.

2. *Outlet/Owner Survey.*

Another study that the FCC staff prepared compares the availability and ownership of media in ten different markets at three different points in time -- 1960, 1980, and 2000.¹²³

Included among the media that were counted were television and radio broadcast stations, cable systems, direct broadcast satellite systems, and daily newspapers.¹²⁴

Echoing the factual evidence already presented in the *2001 Proceeding*, this study showed a dramatic increase in the availability of media outlets and the number of owners during the period from 1960 to 2000. The first table in the study, intended as an aggregate count of all media and owners in the ten markets, showed “percent[age] increases in [the number of] outlets ranged from 79% in Lancaster PA [sic] to a whopping 533% in Myrtle Beach SC [sic] with an average increase of almost 200% across all ten markets.”¹²⁵ With respect to counts of actual owners, the percentage increases were slightly less dramatic because of consolidation following passage of the Telecommunications Act of 1996 but still “ranged from 67% in Altoona PA to a huge 283% in Myrtle Beach SC resulting in a 140% average increase in the number of owners for all ten markets from 1960 to 2000.”¹²⁶ Even with consolidation, however, all but two markets experienced consistent growth in the number of owners. The New York market, with consolidation, did experience a net loss of two owners between 1980 and 2000, but the statistics

¹²³ Scott Roberts, *et al.*, “A Comparison of Media Outlets and Owners for Ten Selected Markets (1960, 1980, 2000),” September 2002, FCC Media Bureau Staff Research Paper, 2002-1 (“Study No. 1”). The study states that the views it expresses do not necessarily reflect those of the agency.

¹²⁴ *Id.* at “II. Methodology.” The study is not paginated, so citations are to various sections and tables.

¹²⁵ *Id.* at “III. Results – Table 1.”

¹²⁶ *Id.*

for 2000 still showed that the market had over 100 owners, 114 to be exact.¹²⁷ (Over the same period, the number of media outlets in New York grew from 154 to 184.) Similarly, while the number of outlets in Kansas City grew from 44 to 53 between 1980 and 2000, the number of outlets remained constant at 33. The eight other smaller markets in the study experienced increases in the number of their owners, which from 1980 to 2000 grew an average of about twenty-five percent.¹²⁸

In Table 2 of the study, the FCC staff provided more detail, showing the growth in outlets and owners by media type for each market in each of the three benchmark years. Such detail makes clear that the growth in broadcast, rather than the other outlets and owners accounted for virtually all of the dramatic increase in the overall aggregate media counts that had been presented in the first table.¹²⁹ What is most telling is that except for two markets, New York and Birmingham, the number of newspapers and their owners remained steady or declined.¹³⁰

Next, Table 3 breaks out totals for radio and television stations according to whether they are commercial or non-commercial facilities. With the exception of a decline by one in the number of television owners in Lancaster, Pennsylvania, the only numbers in the charts that decreased are those for the number of commercial radio station owners in 2000 compared to 1980, and even with the decreases, between 10 and 41 owners remained in all but one market.¹³¹

Finally, Table 4 of the study tracks the growth in cable system availability in the ten markets. As the FCC staff writes, “[t]his table exhibits the tremendous growth of cable in each

¹²⁷ *Id.* at Table 1.

¹²⁸ *Id.* at “III. Results – Table 1.”

¹²⁹ *Id.* at “III. Results – Table 2” and Table 2.

¹³⁰ *Id.*

¹³¹ *Id.* at Table 3.

of the ten markets, not only in the number of communities served, but also in channel capacity and subscriber count. Cable, virtually non-existent in 1960, has grown to be the dominant video delivery vehicle in the U.S.”¹³² Although the FCC staff also states that the table depicts a “declining number of cable system owners, reflecting consolidation,” the table itself reveals that only in New York, where the number of owners has gone from 26 in 1980 to 9 in 2000, and in Lancaster, Pennsylvania, where the number has declined from six to three over the same period, has there been any decrease.¹³³

This outlet/owner study shows that the overall trend in the number of outlets and owners in ten representative markets has been one of significant growth among all media except newspapers. Nothing in the study supports retention of the newspaper/broadcast cross-ownership rule, and nothing indicates repeal is unjustified.

3. *Pritchard Studies.*

Another Commission-published study that was authored by Professor David Pritchard of the University of Wisconsin-Milwaukee deals directly with the effect of newspaper/broadcast cross-ownership on diversity of viewpoint.¹³⁴ This review, which builds on an earlier study by Professor Pritchard published in December 2001,¹³⁵ examines the extent to which commonly-owned newspapers and television stations in a community speak with a single voice about important political matters. In his earlier study, Professor Pritchard had examined co-owned

¹³² *Id.* at “III. Results – Table 4.”

¹³³ *Compare id.* at “III. Results – Table 4” with Table 4.

¹³⁴ David Pritchard, “Viewpoint Diversity in Cross-Owned Newspapers and Television Stations: a Study of News Coverage of the 2000 Presidential Campaign,” FCC Media Ownership Working Group, 2002-2, September 2002 (“Study No. 2”). The study is not paginated. Citations assume that the first page following the “Executive Summary” is page 1.

media properties in three cities. In the latest report, he studies an additional seven co-owned properties in six cities and draws conclusions about all ten combinations.

Both studies examined the political “slant” of news content in co-owned media properties during the last 15 days of the Bush-Gore election. Professor Pritchard and his associates developed a numerical coding and grading system for quantifying this “slant.” They then examined newspaper editorials, cartoons, staff opinion pieces, syndicated columns, guest opinion essays, reader’s letters, and free-standing photographs as well as television news reports. From these, they computed an objective “slant co-efficient” that allowed them to conclude whether a media outlet was pro-Bush or pro-Gore.¹³⁶

As described below, each of Professor Pritchard’s studies establish that common ownership does not have an effect, no less an adverse effect, on diverse presentation of news and opinions. In his first study, which focused on media properties in Milwaukee, Chicago, and Dallas, Professor Pritchard found no evidence of owners’ influence on, or control of, news coverage by co-owned newspapers and broadcast stations. Rather, the empirical results led him to conclude that the cross-owned properties offered a “wealth” of diverse and antagonistic information.¹³⁷ He summarized his results and conclusions as follows:

In other words, the evidence does not support the fears of those who claim that common ownership of newspaper and broadcast stations in a community inevitably leads to a narrowing, whether intentional or unintentional, of the range of news and opinions in the community

¹³⁵ D. Pritchard, *A Tale of Three Cities: Diverse and Antagonistic Information in Situations of Newspaper/Broadcast Cross-Ownership*, 54 FED. COM. L.J. 31 (Dec. 2001) (“Pritchard 2001 Study”).

¹³⁶ *Id.* at 38-41; Study No. 2 at 5-7.

¹³⁷ Pritchard 2001 Study at 49.

This Article examined whether three existing newspaper/broadcast combinations in major markets provided information about the 2000 presidential campaign from “diverse and antagonistic sources.” The results show clearly that they did provide a wide range of diverse information. In other words, the Commission’s historical assumption that media ownership inevitably shapes the news to tout its own interests may no longer be true (if it ever was).¹³⁸

In short, Professor Pritchard concludes that “the prohibition on newspaper/broadcast cross-ownership has outlived its usefulness.”¹³⁹

In the latest report released by the FCC, Professor Pritchard studied additional co-owned properties in New York, Chicago, Fargo, Hartford, Los Angeles, Phoenix and Tampa.¹⁴⁰ Of these new combinations, Professor Pritchard concludes that at those in Phoenix, Fargo, and Tampa and the News Corporation’s co-owned properties in New York, the newspaper’s and the television station’s coverage exhibited slants that were “noticeably different” from each other.¹⁴¹ In the latest study, he also adds the combination he already studied in Milwaukee to this group with “noticeably different” slant.¹⁴² Of the other new combinations as well as the ones he already studied in Dallas and Chicago, he concludes that the “overall” slant of the newspaper’s coverage of the 2000 campaign was not significantly different from the overall slant of the local television station’s coverage.¹⁴³

¹³⁸ *Id.* at 49-51 (footnotes omitted).

¹³⁹ *Id.* at 51.

¹⁴⁰ In New York, he studied two newspaper-television combinations. In other markets, he studied just one combination. The combination which he studied in Tampa was Media General’s WFLA-TV and *The Tampa Tribune*.

¹⁴¹ Study No. 2 at 8.

¹⁴² *Id.*

¹⁴³ *Id.* Professor Pritchard determined what constituted a meaningful difference between commonly-owned properties “via two-tailed, independent – sample T-tests [T]he tests suggested that there was an 83% chance that a difference of the type we found with the Fargo

Professor Pritchard also points out several facts demonstrating a lack of connection between the coverage provided by co-owned properties that are otherwise not obvious from his calculation of “slant” coefficients. First, the Tribune Company did not require its newspapers to coordinate their endorsements for president; of the four Tribune Company newspapers in the study, two (Chicago, Hartford) endorsed Bush, one (Long Island’s *Newsday*) endorsed Gore, and one (*Los Angeles Times*) made no endorsement.¹⁴⁴ In addition, of the seven television stations in cross-owned combinations in which the newspaper endorsed Bush, two (WTIC in Hartford and KPNX in Phoenix) provided coverage of the presidential campaign that had a clear pro-Gore slant.¹⁴⁵

While Professor Pritchard is more tempered in his conclusions in this latest study and also moves the combinations he previously studied in Dallas and Chicago out of the group exhibiting “noticeably different” slant, he nonetheless concludes,

for the ten markets studied, our analysis of the coverage of [the] last two weeks of the 2000 presidential campaign suggests that common ownership of a newspaper and a television station in a community does not result in a predictable pattern of news coverage and commentary on important political events between the commonly-owned outlets. This is not to say that the news organizations under study presented a vast range of viewpoints or that their news coverage was helpful in enabling citizens to make informed choices on Election Day. It is to say, however, that we found no generalized evidence of ownership manipulation of the news in the situations of local cross-ownership we studied.¹⁴⁶

combination was a meaningful difference. For Milwaukee and Tampa, the statistic was 89%. For Phoenix, the statistic was 96%. For the News Corporations [sic] New York combination, the statistic was 99%. None of the other combinations under study had percentages higher than 65%, which we judged not adequate to support a finding of a meaningful difference.” *Id.* at note 15.

¹⁴⁴ *Id.* at 9.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 10-11.

As Professor Pritchard more succinctly states in his executive summary, “the data suggest that common ownership of a newspaper and a television station in a community does not result in a predictable pattern of news coverage and commentary about important political events in the commonly owned outlets.”¹⁴⁷

Another empirical study by Professor Pritchard submitted last spring in the Commission’s local radio ownership proceeding (MM Docket Nos. 01-317 and 00-244) corroborates these results.¹⁴⁸ This analysis, which is attached for convenience as Appendix 5, surveyed the growth in local media outlets providing local content in five variously-sized markets at ten-year intervals from 1942 to 2002 as well as in 1995, just prior to adoption of the Telecommunications Act of 1996. In these five markets, which included Lisbon, North Dakota; Florence, South Carolina; Rockford, Illinois; Syracuse, New York; and New York, New York, Professor Pritchard found a consistent increase in the availability of diverse local sources of news and information that was not undercut by any trend in consolidation of ownership:

The data presented in this study make it clear that the number of media outlets focusing on news and information about local events has increased steadily over the years. That the rate of increase has accelerated since the Telecommunications Act of 1996 was passed suggests that the economic consolidation that ensued did not diminish diversity of local media content. The patterns in all five of the communities we studied were similar.¹⁴⁹

¹⁴⁷ *Id.* at “Executive Summary.”

¹⁴⁸ David Pritchard, “The Expansion of Diversity: A Longitudinal Study of Local Media Outlets in Five American Communities,” March 2002, attached as Appendix A to Viacom Inc.’s Comments in MM Docket Nos. 01-317 and 00-244, filed March 27, 2002. This radio ownership proceeding has now been combined in the instant docket and the record incorporated by reference herein. *2002 NPRM* at ¶11 n.31.

¹⁴⁹ Appendix 5 at 22. While Media General currently owns newspaper and television properties in the Florence-Myrtle Beach DMA, these acquisitions were made only at the very tail end of the time period under review in Professor Pritchard’s radio study.

As Professor Pritchard concludes, “[t]he study presented here further challenges the wisdom of focusing on issues of ownership to attempt to maximize access to diverse media outlets.”¹⁵⁰

Thus, all three Pritchard studies support repeal of the newspaper/broadcast cross-ownership rule. While Media General has never seen a connection between ownership and viewpoint and, therefore, questions why studies regarding content are even necessary, Professor Pritchard’s reviews put to rest once and for all that, no matter what the market size, common ownership does not result in common approaches to the presentation of news and public affairs and does not harm the presentation of diverse viewpoints and diverse local content.

4. *Measurement of TV News and Public Affairs.*

Another study authored by members of the FCC staff sought to measure the news and public affairs broadcast by television stations for purposes of comparing the performance of stations owned by one of the four largest broadcast networks relative to that of their affiliates.¹⁵¹ This study also provides empirical information demonstrating that repeal of the newspaper/broadcast cross-ownership rule would be unlikely to harm the delivery of news and public affairs. In fact, it suggests repeal would have beneficial effects.

The study attempted to measure the quantity and quality of news and public affairs programming. For an assessment of quantity, the study tallied the hours of programming aired during the November 2000 sweeps period.¹⁵² For quality, it used three measures: (1) ratings for

¹⁵⁰ *Id.*

¹⁵¹ Thomas C. Spavins, *et al.*, “The Measurement of Local Television News and Public Affairs,” undated (“Spavins Study”). The study states that the views it expresses do not necessarily reflect those of the agency. The study is not paginated. Citations assume that the first page following the “Executive Summary” is page 1.

¹⁵² *Id.* at 1.

local evening news programs; (2) awards from the Radio and Television News Directors Association; and (3) an award called the Silver Baton issued at the A.I. Dupont Awards.¹⁵³

Among network affiliates, the study found a “systematic divergence” in performance between stations that were co-owned with a newspaper and all other affiliates.¹⁵⁴ “For each quality and quantity measure in the analysis, the newspaper affiliates exceed the performance of other, non-newspaper network affiliates.”¹⁵⁵

This study confirms what Media General already knows: through convergence, television stations can deliver a better, faster, and deeper news product. As the long list of awards given to Media General’s co-owned properties that is listed in Appendix 4 shows, convergence will benefit the public interest.

5. *Advertising Substitutability.*

The results of a study by another FCC staff member on the substitutability of local newspaper and television advertising additionally support repeal of the newspaper/broadcast cross-ownership rule.¹⁵⁶ This paper examines the issue of whether there is a single local advertising market or several distinct local markets for newspaper, radio, and television advertising by estimating the ordinary own-price and cross-price elasticities of substitution for newspaper, radio, and television advertising.¹⁵⁷ While the author cautions that there are

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 4.

¹⁵⁵ *Id.*

¹⁵⁶ C. Anthony Bush, “On the Substitutability of Local Newspaper, Radio and Television Advertising in Local Business Sales,” September 2002, FCC Media Bureau Staff Research Paper, 2002-10 (“Study No. 10”). The study explicitly states that the views it expresses are not those of the agency. While the study also discussed radio advertising, because Media General’s focus is on newspaper and television, it does not address that aspect of the report.

¹⁵⁷ *Id.* at 4.

limitations inherent in the underlying data,¹⁵⁸ the results suggest that local newspaper and television advertising are complementary inputs in the sales efforts of local businesses.¹⁵⁹ As such, they are in separate markets, meaning there is no justification from an economic standpoint for prohibiting their common ownership.

First, the study estimates the ordinary own-price elasticities of substitution for newspaper, radio, and television advertising. It determined the estimated own-price elasticity of television advertising to be -0.7960 .¹⁶⁰ This finding that television advertising's own-price elasticity is less than one in absolute value indicates that the industry is operating in the inelastic portion of its demand curve. The result suggests that, if a single firm acquired control of all the television stations within a DMA, that firm could profitably raise price. Next, the study finds that the estimated own-price elasticity of newspaper retail advertising is -1.0406 .¹⁶¹ This finding that newspaper retail advertising's own-price elasticity is just slightly greater than one in absolute value is consistent with a high likelihood that, if there were a single firm controlling all newspapers within a DMA, that firm could profitably raise prices. These results indicate that television advertising and newspaper retail advertising are each likely to constitute separate markets.

The study also finds that the cross-price elasticities for newspaper retail advertising and local television advertising are negative.¹⁶² This result implies that newspaper and television advertising are complements. That is, if the price of newspaper advertising increases, then not

¹⁵⁸ *Id.* at 12-13.

¹⁵⁹ *Id.* at 14.

¹⁶⁰ *Id.* at 12.

¹⁶¹ *Id.*

¹⁶² *Id.*

only does the amount of newspaper advertising decrease, but the quantity of television advertising also decreases. In like fashion, if the price of television advertising increases, then not only does the amount of television advertising decrease, but the amount of newspaper advertising also decreases.

The author's results demonstrate that television and newspapers do not, from an economic standpoint, directly compete for advertising, a result that further supports the elimination of the newspaper/broadcast cross-ownership rule. Indeed, given the author's finding of a complementary relationship between newspaper and television advertising, a company that owned both a newspaper and a television station in the same DMA has less incentive to increase its newspaper or television advertising prices than does a company that just owns either a newspaper or a television station in that same DMA. This study shows that the Commission has no reason to find that the newspaper/broadcast cross-ownership rule is "necessary in the public interest as the result of competition."

6. *Consumer Substitutability Among Media.*

In another study released by the FCC, Professor Joel Waldfogel of the University of Pennsylvania attempts to answer the question whether changes in the availability or use of some media bring about changes in the availability or consumer use of other media.¹⁶³ While his study may shed some light on consumer preferences for various media, it provides no insight into the effect of changes in media ownership on media usage, and, as noted below, suffers from a serious methodological error and also fails to synthesize earlier studies it cites with the more recent data it presents.

¹⁶³ Joel Waldfogel, "Consumer Substitution Among Media," FCC Media Ownership Working Group, 2002-3, September 2002 ("Study No. 3").

Professor Waldfogel's study rejects the view that various media are entirely distinct and provides purported evidence of what he describes as substitutability by consumers between and among various media outlets. In Part I, he presents examples of consumer substitution across media.¹⁶⁴ In Part II, he presents examples of substitution between various combinations of media.¹⁶⁵ Professor Waldfogel notes that, for "technical reasons," the true extent of substitution may be greater than indicated in his study.¹⁶⁶ The most notable finding is that consumers would readily substitute Internet usage for television viewing, both overall and for news.¹⁶⁷

Professor Waldfogel's conclusions, however, are extremely suspect due to a serious methodological error in the first part of his paper. The study claims that the measure of "households using television" represents an overall measure of television viewing, excluding cable.¹⁶⁸ In reality, the "households using television" measure has generally captured not just the viewing of broadcast television stations but also the viewing of cable and satellite television programming and the videotaping of television programming.¹⁶⁹ Contrary to the claims in his study, this measure does not capture just broadcast television viewing. Any substitution, therefore, that the study finds between a particular medium (such as newspapers) and television is not really a valid measure of substitution between that medium and broadcast television, but rather a measure of substitution between that medium and all television viewing, including the

¹⁶⁴ *Id.* at 5-24.

¹⁶⁵ *Id.* at 25-41.

¹⁶⁶ *Id.* at 6-7.

¹⁶⁷ *Id.* at 3.

¹⁶⁸ *Id.* at 14.

¹⁶⁹ *See, e.g.*, National Cable Communications (visited Dec. 30, 2002) <<http://www.spotcable.com/asp/abo/glossary.asp?section=publicresources&sub=glossary>>; Charter Media (visited Dec. 30, 2002)

viewing of over-the-air television and cable and satellite services and the videotaping of television programming.

Even if Professor Waldfogel's paper were flawless, it provides no basis to assess whether the current cross-ownership rule remains necessary in the public interest as the result of competition. Whether consumers substitute from one medium to another or not is not a sufficient basis for finding the cross-ownership rule to be necessary in the public interest. Consumers no doubt substitute among newspapers or substitute among weekly newspapers or news magazines or substitute among Internet sites, but there is no rule at the FCC -- or any other government agency -- limiting the cross-ownership of such media assets. Acquisitions of such assets are, however, reviewed by appropriate antitrust authorities. Demonstration of substitutability or the presence of a "market," from an antitrust standpoint, is not a basis that the newspaper/broadcast cross-ownership rule, or any rule, remains necessary in the public interest.

In summarizing his conclusions, Professor Waldfogel refers to results from earlier papers he has authored on voting behavior;¹⁷⁰ however, there is nothing in the present study that examines voting behavior or that could be used to support or contradict any previous study of voting behavior. The present study is sufficiently different in its purpose and methods that its conclusions should not be compared with the voting behavior studies for purposes of testing for consistencies. Thus, the references to and reliance upon the voting behavior studies are beside the point when evaluating the conclusions Professor Waldfogel posits regarding consumer substitution among media. In short, Professor Waldfogel's study is of extremely limited utility

<<http://www.chartermedia.com/cm/aboutcable/glossary.asp>>; Nielsen Media Research, *Your Guide to Reports & Services* at 2 (1996).

¹⁷⁰ Study No. 3 at 40.

in analyzing the newspaper/broadcast cross-ownership rule, even if its methodological flaws are overlooked.

* * * *

By themselves, these six studies do not provide any foundation for retaining the newspaper/broadcast cross-ownership rule. They separately and collectively undermine any attempt to find that the rule is necessary in the public interest as the result of competition. They show the dramatic growth of new media and most, with the exception of newspapers, of the more traditional media outlets; the increasing use of new media by the American public; the lack of any connection between content and ownership; the better public service provided by newspaper-owned television stations when compared to other television stations; the complementary nature of newspaper and television advertising from a competitive standpoint; and, at most, that consumers would readily substitute Internet usage for television viewing. In short, they presage no damaging effect from elimination of the newspaper/broadcast cross-ownership rule.

Ultimately, these studies support its repeal.

V. Diversity of Ownership Never Did and Now Clearly Does Not Bear a Credible Link to Diversity of Viewpoint, and the Commission’s Responsibility To Foster Competition, Localism, and Innovation Requires Repeal of the Rule.

A. Given That Diversity of Ownership Is, at Best, an “Aspirational” Proxy for Diversity of Viewpoint, the FCC Cannot Reasonably Determine That the Newspaper/Broadcast Cross-Ownership Rule Is Necessary in the Public Interest.

In the course of remanding the FCC’s decision on the national television ownership cap, the court in *Fox* addressed the FCC’s reliance on diversity as a rationale in support of that rule.¹⁷¹ Even though the panel posited that diversity of ownership may not always be an irrational proxy

¹⁷¹ *Fox*, 280 F.3d at 1042-1043, 1047.

**REASONS WHY A DIVERSITY INDEX AND ITS
CONTINUED REGULATION OF NEWSPAPER/BROADCAST
CROSS-OWNERSHIP WILL NOT SURVIVE APPELLATE REVIEW**

1. As various trade reports of the index have indicated, its effect will be re-regulatory and violative of Section 202(h).
 - a. May reimpose cable/television cross-ownership.
 - b. May reach previously unregulated outlets.
 - c. May impose index on top of current rules.
 - d. All three of these results would be absolutely contrary to deregulatory purpose of 96 Act and, in particular, Section 202(h).
2. With respect to newspaper/broadcast cross-ownership rule, staff is wrong that record supports retention.
 - a. Methodological flaws aside, Waldfogel does not demonstrate newspapers and television stations are substitutes. *See* Hausman and Rosse studies attached to Media General's Letter to Kathleen Q. Abernathy, April 22, 2003.
 - b. Nielsen study shows other sources seriously compete with newspaper and television.
 - c. UCLA Internet report does not address newspaper ownership.
 - d. Nothing else in record supports retention of newspaper/broadcast cross-ownership rule in way that satisfies Section 202(h).
 - e. Nothing in the record shows viewpoint diversity requires ownership diversity. Relying on personal experience and personal sense that newspapers "dominate" local news, given the record, violates Section 202(h) and the APA.
3. Index will involve judicially indefensible line-drawing.
 - a. Medium-by-medium data is too irreconcilable and "markets" too differently defined to allow the FCC to "weight" different voices on a logical and consistent basis.
 - b. To be accurate, such "weighting" will have to get into content analysis, *e.g.*, does an outlet provide purely entertainment, all news, or a mix of both?
 - c. Index will have to determine what are local vs. national sources and which of the latter should be counted in evaluating local diversity.

- d. Any ceiling, cap, or percentage screen aimed at preserving competition in smaller markets would undoubtedly be too restrictive in large markets.
4. Including newspapers will violate equal protection.
 - a. All “other owners of major media of mass communications” may own more than one TV and radio station in a market. TV duopoly, multiple radio stations, cable/television cross-ownership, and television/radio cross-ownership are all allowed.
 - b. Businesses related to broadcasting may own broadcast stations -- ad agencies, rep firms, broadcast networks, equipment manufacturers, program suppliers. Newspapers are the only businesses in the nation that may not.
 - c. All other businesses unregulated by FCC (many of which compete with newspapers and TV stations, such as Internet sites and outdoor advertising) may own broadcast stations in their home markets. Newspapers are the only businesses in the nation that may not.
 - d. “Legitimate objective,” *i.e.*, enhancing diversity is gone. Note profusion and scarcity arguments. Also note that “diversification” is no longer taken into account in initial licensing, a point upon which the Supreme Court had relied. (*NCCB* at 794.)
 - e. Even if diversity objective is legitimate, rule is not “narrowly tailored” because FCC cannot show rule directly and materially advances diversity. No empirical evidence of any link. To the contrary, rule is harming diversity.
 5. Retaining the newspaper/broadcast cross-ownership rule violates the First Amendment.
 - a. Technological advances, media proliferation, and the FCC’s revised approach to licensing spectrum have rendered the spectrum scarcity rationale obsolete. Because broadcast licenses are now auctioned and, for all practical purposes, traded on the open market, there is nothing unique about spectrum that distinguishes it from other economic goods.
 - b. Absent spectrum scarcity, the newspaper/broadcast cross-ownership rule must be measured under intermediate or strict scrutiny, and it can survive neither analysis. (Strict scrutiny requires the FCC to show the rule is the “least restrictive means available of achieving a compelling state interest”; intermediate security requires the FCC to demonstrate the harm posed by cross-ownership, produce a record that validates the regulation, and show that the rule is “narrowly tailored to further a substantial governmental interest.”)
 6. Bottom line:
 1. Media General does not care if newspapers are counted as a “voice” in whatever metric the FCC devises to regulate spectrum users’ acquisition of other spectrum

using properties. It objects to the FCC applying its ownership rules to non-spectrum users, such as newspapers.

2. Instead of being deregulatory Republican agency that abolishes the 28-year-old newspaper/broadcast rule, for which the FCC never documented a concrete need, and finally finds spectrum scarcity is dead, this FCC will be known for imposing additional layers of regulation that can be easily tightened in future administrations and perpetuating a First Amendment violation.
3. The result will be embarrassing in the courts, on the Hill, and in the press.