APPENDIX A

Why Traditional Regulation Will Likely Be Ineffective in Controlling Anticompetitive Behavior

1. The tools and traditions of regulators are less well suited to disciplining incumbent resistance to opening up local markets to competition than to dealing with traditional regulatory issues in an unchanging regulated environment. Traditional regulatory tools may work well when dealing with issues such as revising the price for local exchange service to a particular class of customers in a stable economic environment. A traditional regulatory approach is likely to be inadequate, however, when both entrants and consumers are affected by the incumbent's compliance decision, when incumbent decisions can impose irreparable harm, or where detection and punishment for bad acts are not certain (implying optimal penalties that are a multiple of the harm in cases where violations are detected).

2. To illustrate, let us begin with an example where regulation is least likely to result in error, and then relax some critical assumptions.

(A) Traditional regulation of consumer prices charged by a regulated monopoly: Remediable harm with eventual regulatory certainty.

3. Many regulators have allowed rate increases to go into effect subject to review. If the review shows that the rate increase was not warranted, then the firm is ordered to refund the excess charges on the quantity actually purchased by the consumers. This procedure can work fairly well because: (a) only consumers are affected by the initial overcharge, (b) consumers may

have purchased little more at the lower price,[1] (c) the harm to consumers and society is easily reparable (except for the aforementioned difference in quantities) through future refunds, and (d) the probability of detection is high (i.e., the regulator eventually selects the "right" price, based on regulatory principles, after its review). Importantly, the regulated firm has no incentive to restrict consumers' purchases through non-price rationing devices. That is, the firm knows a higher price will induce lower unit sales, but the firm wants consumers to buy as much as they demand at the higher price.

(B) Irreparable harm, with eventual regulatory certainty.

4. Let us now change the example to an interconnection decision, or to a case where the LEC tries to restrict the quantities of UNE's purchased by entrants. We continue to assume that ILEC refusal is frivolous, in the sense that the RBOC believes that it will eventually be required to interconnect, or provide the quantity of UNEs that entrants demand. Under these conditions, it becomes much more likely that the penalty imposed will fail to fully reflect the harm to the rest of society, since the parties harmed include not only the entrant (or potential entrants) but also a multitude of dispersed consumers that would have benefitted from increased competition. As a practical matter, the harms to both consumers and potential entrant(s) will be difficult to estimate

[1]This is especially true if the price is a monthly lump-sum price, as in the monthly rate for unlimited local service. In that case, customers' quantities of minutes will not be affected unless they drop service due to the rate increase. The available empirical evidence indicates that the demand for local service is very price inelastic, so the difference in quantities chosen at the higher and lower prices should be small.

accurately, and many consumers will be unaware of the harm they have suffered, making it difficult and expensive to identify and compensate them. (Analogous problems that lead to irreparable harm arise in antitrust class action cases).

5. Since entry reduces total profits and increases total welfare, the gain to a monopolist from deterring entry exceeds the gain to the entrant from entry, but is less than the gain to the entrant plus the gain to consumers. The appropriate amount to charge the ILEC when it finally must comply is the present value (including interest) of the effect on the rest of society; i.e., the lost profits to the entrant plus the loss of consumer surplus to consumers. We can rank the effects of non-compliance quantitatively as:

-the harm to entrant plus harm to consumer is greater than

-the gain to ILEC, which is greater than

-the harm to entrant.

It follows that even completely compensating the entrant for the effects of delay will provide insufficient incentives for the ILEC to comply, and lead to harm to competition and to consumers.

(C) Irreparable harm, with continuing regulatory uncertainty.

6. Whenever the probability of detection and punishment is less than one, the optimal penalty to be imposed when a violation is detected and punished is a multiple of the harm caused: in its simplest formulation (i.e., assuming no false positives) the optimal penalty is:

$$F^* = H/R$$

where F^*= optimal penalty, H= harm to the rest of society, and R = probability of detection and punishment.

7. As discussed generally above, however, many acts an ILEC undertakes to inhibit entry into the local exchange may go undetected or unpunished. Thus optimal compliance requires that, when intentional violations are detected and punished, the penalty should be a multiple of the harm caused. Unfortunately, given the complexity of these decisions and the informational asymmetry between the ILEC and regulatory bodies -- and even between the ILEC and the entrant -- establishing clear intent often may be very difficult. Therefore, compliance can only be ensured by imposing truly draconian penalties when clear intentional violations are identified. To the extent that regulators would be unable or unwilling to impose such draconian penalties -- or, even more obviously, when cases of clear intent are never identified -- regulatory sanctions are unlikely to be sufficient to ensure optimal compliance.

Curriculum Vitae of
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CURRICULUM VITAE

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Education

1975 Ph.D., Economics, Princeton University
1969 M.A., Economics, Princeton University
1969 M.P.A., (Master of Public Affairs) Woodrow Wilson School of Public & International Affairs, Princeton University
1967 B.A., Economics, Yale University, *cum laude* with High Honors in Economics

Experience

Principal, MiCRA: Microeconomic Consulting and Research Associates, Inc., Washington, D.C.; August 1991 - present.

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Visiting Lecturer of Public and International Affairs, Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ; Spring Semester, 1991

Senior Vice President, ICF Consulting Associates, Inc., Washington, D.C.; November 1989 - August 1991.

Research Associate Professor of Psychology, The American University, Washington, D.C.; September 1983 - 1990.

Deputy Assistant Attorney General for Economic Analysis, Antitrust Division, U.S. Department of Justice, Washington, D.C.; October 1985 - May 1989.

Director, Economic Policy Office, Antitrust Division, U.S. Department of Justice, Washington, D.C.; September 1983 - September 1985.

Research Associate, Center for the Study of American Business, Washington University in St. Louis; July 1978 - June 1985.

Associate Professor, Department of Economics, Washington University in St. Louis; July 1978 - June 1985. Chairman, Graduate Committee, 1978 - 1980. Chairman, Undergraduate Committee, 1980 - 1983.

Assistant Professor, Department of Economics, Washington University in St. Louis; September 1972 - June 1978.

Assistant in Instruction, Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, N.J.; 1969 - 1971.

Research Consultant, Ford Foundation, Kingston, Jamaica, W.I.; Summer 1969.

Fields Taught

Graduate: Industrial Organization, Economic Development and Planning, Microeconomic Theory, International Trade, International Finance, Economic Theories of Behavior, Applied Microeconomics.

Undergraduate: Government and Business, Industrial Organization, International Trade, International Finance, Economic Development, Intermediate Microeconomic Theory, Intermediate Macroeconomic Theory, Introductory Microeconomic Theory, Introductory Macroeconomic Theory.

Grants

National Science Foundation. Grant title: "Income Maximizing in Choice and Rate Effects," 1988 - 1991.

National Science Foundation. Grant title: "Application of Economic Theory to Operant Schedule Effects," 1985 - 1987.

National Science Foundation. Grant title: "Income and Choice," 1983 - 1985.

Professional Activities

Referee, *American Economic Review, The Bell Journal of Economics/Rand Journal, Economic Inquiry, Industrial Organization Review, Journal of Industrial Economics, Journal of Law and Economics, Journal of Political Economy, Quarterly Journal of Economics, Southern Economic Journal.*

Member, Editorial Board, *International Journal of the Economics of Business.*

Member, American Bar Association, American Economic Association, Southern Economic Association, Western Economic Association.

Languages

French, German

Publications

"Exclusionary Behavior in the Market for Operating System Software: the Case of Microsoft," in *Opening Networks to Competition: the Regulation and Pricing of Access*, David Gabel and David Weiman, eds.; Kluwer Publishers, 1996 (forthcoming), with Kenneth Baseman and Glenn Woroch.

"Riding the Wave: Exclusionary Practices in Markets for Microprocessors Used in IBM-Compatible Personal Computers," Conference and Festschrift in Honor of Merton J. Peck, Yale University, September 30, 1994, and *International Journal of the Economics of Business* 2-2 (July 1995), pp. 241-262, with Robert W. Wilson.

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"Efficiencies, Failing Firms, and Alternatives to Merger: A Policy Synthesis," *The Antitrust Bulletin*, 31 (Summer 1986), pp. 431-450, and *Economic Analysis Group Discussion Paper* #86-14, August 1986, with John Kwoka.

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Conference, Seminar, Working and Discussion Papers

"Privatization and Regulation in the Restructuring of Electric Utilities in Eastern Europe," IBRD Conference on the Privatization of Electric Utilities, Prague, The Czech Republic, September 1993.

"Implications of the United States Experience with Regulation and Antitrust for Competition Policy in Countries in Transition from Centrally Planned Economies to Market Economies," IBRD/EDI/USAID Seminar on Microeconomics, Vienna, Austria, July 1993.

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"The Economics of Credit Card Interest Rate Caps," Seminars at the Economic Analysis Group, U.S. Department of Justice, September 29, 1992; the Board of Governors of the Federal Reserve System, October 7, 1992; and the D.C. Bar Association, November 19, 1992.

"Straws in the Bottleneck: A Proposal for Efficient Network Interconnection," presented at the Tenth Biennial Conference of the International Telecommunications Society, Cannes, France, June 1992; *Journal of Regulatory Economics* Editors' Conference, San Diego, October 1992, with John Woodbury and Glenn Woroch.

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"The State of Antitrust in 1991: A Kindler, Gentler Antitrust?," The CATO Institute Conference, 1991, with Steve Calkins.

"Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule," Telecommunications Policy Research Conference, October 1990, with John Woodbury.

"The Design and Evaluation of Competitive Rules Joint Ventures for Mergers and Natural Monopolies," American Enterprise Institute conference on Policy Approaches to the Deregulation of Network Industries, October 1990, and at the American Economic Association Meetings, December 1989, with John Woodbury.

"Regulation and the Partially Monopolized Network: Lessons from Telecommunications," American Enterprise Institute conference on Policy Approaches to the Deregulation of Network Industries, October 1990, with Roger Noll.

"Price Regulation and Common Carrier Regulation," AEI Conference on Oil Pipeline Deregulation, American Enterprise Institute.

"Regulation of New Crude-Oil Pipelines: Natural Monopoly and Information Externalities," AEI Conference on Oil Pipeline Deregulation, American Enterprise Institute.

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Other Papers

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Florida Panthers Hockey Club: Expert witness in Florida Panthers Hockey Club v. Miami Sports and Exhibition Authority and The City of Miami; U.S. District Court, Southern District of Florida Miami Division, Case No. 96-21 68-CIV Trial Testimony, August, 1996.

AT&T: (a) Direct Testimony and Deposition in State of Indiana, Indiana Utility Regulatory Commission, Cause No. 397051994, April 1994. (b) Position Paper on Docket No. 94-07-02: Development of the Assumptions, Tests, Analysis and Review to Govern Telecommunications Service Reclassifications in Light of the 8 Criteria Set Forth in Section 8 of Public Act 94-83. State Of Connecticut, Department of Public Utility Control, October 1994. (c) Comments on the Position Papers on Docket No. 94-07-02. State Of Connecticut, Department of Public Utility Control, November 1994. (d) Rebuttal Testimony in Kansas Corporation Commission Docket No. 190, 492-U, July 15, 1996. (e) Direct and Rebuttal Testimony in AT&T Communications of the Southwest Inc. , Missouri Case No. TO-97-40. (f) In the Matter of Southwestern Bell Telephone Company - Kansas Compliance with Section 271 of the Federal Telecommunications of 1996, Docket No. 97-SWBT-411-GIT. (g) Application of Ernest G. Johnson, Director of the Public Utility Division Oklahoma Corporation Commission to Explore The Requirements of Section 271 Of The Telecommunications Act of 1996, Cause No. PUD 970000064.

ADM: "An Evaluation of: The Cost to U.S. Animal-Feed Manufactures of an Alleged Price-Fixing Conspiracy by Lysine Manufactures 1992-1995", August, 1996.

MCI: (a) "Depreciation and Capital Recovery Issues, A Response to Professor Hausman", with K. Baseman and S. Woodward, FCC Docket No. 96-98, July 1996. (b) In the Matter of Southwestern Bell Telephone Company - Kansas Compliance with Section 271 of the Federal Telecommunications of 1996, Docket No. 97-SWBT-411-GIT.

K-2, Rossignol, Salomon, Tecnica, Skis Dynastar, Marker and The Ski Market: Expert witness in Sports Investment Co. vs. The Ski Market, Ltd., Inc., *et al*, U.S. District Court, District of Rhode Island, C.A. No. 95-097T. Deposition, December 1995.

U.S. Department of Justice, Antitrust Division: (a) Expert witness in U.S. v. AT&T, 1981; (b) Regulation of oil pipelines, August 1983. (c) Expert witness in United States of America v. Engelhard Corporation, Floridin Company, U.S. Borax Inc., U.S. Silica Inc. Case No. 6:96-CV-45 (WLS), Depositions, Trial Testimony August 1995.

City of Los Angeles: Declaration in Air Transport Association of America, *et al.*, v. City of Los Angeles, City of Los Angeles Department of Airports and Los Angeles Board of Airport Commissioners, Docket No. 50176, March 1995.

The Bon-Ton Stores, Inc.: Declaration in The Bon-Ton Stores, Inc. v. The May Department Stores

Company, McCurdy & Company, Inc., and Wilmorite, Inc., Civil Action No. 94-CV-6454L, November 1994.

Cyrix Corporation: Deposition in Cyrix Corporation v. Intel Corporation, December 1993.

Thermadyne Industries: Deposition in Thermadyne Industries, Inc. and Coyne Cylinder Co. v. K.C. Cylinder *et al.*, December 1993.

IBRD (World Bank): (a) Privatization and Regulation in the Restructuring of Electric Utilities in Eastern Europe, September 1993; (b) Implications of the United States Experience with Regulation and Antitrust for Competition Policy in Countries in Transition from Centrally Planned Economies to Market Economies, July 1993.

Credit Card Coalition: "The Economics of Credit Card Interest Rate Caps," 1993, with Laurence H. Meyer.

Coalition to Preserve the Financial Interest and Syndication Rule: (a) Testimony before the Federal Communications Commission, December 7, 1990, in the matter of Evaluation of the Syndication and Financial Interest Rules, MM Docket No. 90-162. (b) Submitted reports: "Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule," June 14, 1990; "Reply Comments," August 1, 1990; "Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule," January 24, 1991, with John Woodbury. (c) Declaration of Frederick R. Warren-Boulton, August 7, 1992, Exhibit 7, Comments of the Coalition to Preserve the Financial Interest and Syndication Rule on Proposed Modification of Network Consent Decrees. In United States of America v. CBS, Inc. Civil No. 74-3599-RJK, United States of America v. American Broadcasting Companies, Inc. Civil No. 74-3600-RJK, and United States of America v. National Broadcasting Company, Inc. Civil No. 74-3601-RJK.

California Public Utility Commission, Division of Ratepayer Advocacy: Proposed merger of Southern California Edison Company and San Diego Gas and Electric Company, July 1990.

Altai, Inc.: Expert witness in Computer Associates, Inc. v. Altai, Inc., April 1990.

NFL Players Association: Deposition in Marvin Powell v. National Football League, September 1989.

Consolidated Aluminum Corporation: Deposition in Indal, Inc. v. Consolidated Aluminum Corp., April 1983.

Battelle, Pacific Northwest Laboratories. Analyses of bidding for offshore oil leases and of the effects of Building Energy Performance Standards on energy demand, September 1979 -1981.

U.S. Senate Commerce Committee, Senator Danforth presiding: Testimony on corporate average fuel economy (CAFE) standards, November 15, 1979.

State of Missouri, Office of the Public Counsel: Expert witness on electric utility rate structures, 1978.

Federal Trade Commission: Study on Vertical Distribution Arrangements, January 1, 1977 - August 1, 1978.

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Education

1975 Ph.D. Candidate, Economics, Stanford University (M.A. plus two years additional course and seminar work required for admission to Ph.D. candidacy.)
1975 M.A., Economics, Stanford University
1971 B.A., Economics, *magna cum laude*, Carleton College

Experience

Mr. Baseman is a Principal of Microeconomic Research and Consulting Associates, Inc., (MiCRA). He was a founder of the firm in 1991.

Prior to joining MiCRA, Mr. Baseman was a vice president of ICF Consulting Associates and previously employed by the Antitrust Division of the U.S. Justice Department (1975-1981, 1983-1985) and by Economists, Inc. (1981-1983). In these positions, he developed expertise in a wide variety of industries, including: telecommunications; computer software; cable television; crude oil markets; tires; numerous chemicals; newspapers; electric utilities; air conditioning; elevators; jet engines; and various aspects of the television industry, including program production, contractual licensing arrangements, music licensing, TV set manufacturing and R&D joint ventures.

As a private consultant, his work has been primarily focused on providing economic analysis for antitrust or regulatory issues. Mr. Baseman has headed or (where indicated) shared lead responsibility for the following projects:

Telecommunications and FCC Issues

- Preparation of a report submitted to the FCC, co-authored with Frederick Warren-Boulton and Susan Woodward, on appropriate principles of depreciation and capital recovery under the 1996 Telecommunications Act.

- Analysis for MCI and AT&T of various interconnection pricing and costing issues under the 1996 Telecommunications Act.

- Preparation of a report submitted to the FCC, co-authored with Harold Van Gieson, on appropriate depreciation for local exchange carriers.

- Preparation of a report submitted to the FCC on appropriate bidding restrictions to prevent anticompetitive pre-emption in spectrum auctions.

- Preparation of an affidavit for MCI on the effects of expanded interconnection between local telephone companies and competing providers of access.

- Preparation of several reports for MCI, some of which were co-authored with Stephen Silberman, on the effects of price cap regulation; especially as applied to the local exchange carriers. Presentation of the analysis to the FCC staff.

- Preparation of a report for the National Cable Television Association on integration by local telephone companies into video programming markets.

- Preparation of a report for MCI, co-authored with Stephen Silberman, on the economics of line-of-business restrictions.

Antitrust

- Deposition and trial testimony on behalf of the Antitrust Division in its lawsuit challenging the acquisition of the Northwest Arkansas Times by the owners of the Morning News of Northwest Arkansas.

- Preparation of economic analysis regarding Outdoor Systems' acquisition of Gannett's Houston area billboard business.

- Preparation and presentation of economic analysis to the Antitrust Division about Michelin's acquisition of Uniroyal Goodrich.

- Preparation of a report, co-authored with Frederick Warren-Boulton, on the competitive effects of Microsoft's licensing practices for operating systems and complementary software.

- Preparation and presentation of "disruptive buyer" analysis to the FTC regarding Brunswick's partial equity interest in and supply contract with Tracker.

- Preparation of an affidavit filed on behalf of McClatchy Newspapers on the absence of any competitive effect of the purchase by McClatchy of the Raleigh News & Observer.

- Economic testimony on behalf of Trane on market power, market definition, and vertical restraint issues in Tarrant v. Trane.

- Preparation and presentation of economic analysis to the FTC on St. Gobain's acquisition of Carborundum.

- Affidavit and deposition testimony on behalf of PMBR in its antitrust litigation with BAR/BRI.

- Economic testimony on behalf of the Antitrust Division in hearings on the proposed newspaper joint operating agreement in Detroit.

- Preparation and presentation of economic analysis to the FTC on First Data Corporation's proposed acquisition of Western Union.

- Preparation and presentation of economic analysis to the FTC on Illinois Tools Works' acquisition of Cyklop.

- Preparation of economic analysis submitted to the FTC on Brunswick's licensing and acquisition agreement with Perry-Austen.

- Preparation and presentation of economic analysis to the FTC concerning Witco's acquisition of DeSoto.

- Presentation of economic analysis and deposition testimony to the FTC involving a merger in the chemicals industry (Henkel Corp. acquisition of Parker Chemical).

Other Regulation

- Testimony filed at the FERC on behalf of wholesale customers in litigation against Maine Public Service's proposed tariff for transmission and ancillary service.

- Preparation of an affidavit, co-authored with Robert J. Reynolds, on the market power issues in an FERC abandonment proceeding in the natural gas pipeline industry.

- Preparation of a report, co-authored with John Woodbury, Frederick Warren-Boulton and Daniel Sherman, for the National Cable Television Association on the effects on consumers of cable deregulation.

- The preparation of testimony to be presented by Mr. Baseman, on behalf of the U.S. Justice Department, in an electric utility monopolization case (U.S. v. Kentucky Utilities).

In addition, Mr. Baseman was substantially involved in the following projects:

Telecommunications and FCC Issues

- Preparation of a report on principles for evaluating "significant economic harm," submitted by INTELSAT to its members in treaty consultation over the entry of the Orion satellite network.

Antitrust

- Preparation and presentation of economic analysis to the Antitrust Division concerning Akzo's acquisition of Filtrol.

- Iron ore damages litigation.

- Preparation and presentation of economic analysis to the FTC concerning General Electric's acquisition of Roper Corporation.

- Preparation and presentation of economic analysis to the FTC concerning Stanadyne's proposed acquisition of United Technologies Diesel Systems Division.

- Preparation and presentation of economic analysis to the Antitrust Division concerning General Electric's acquisition of Thomson - CGR's medical imaging business.

- Antitrust assessments of possible mergers or joint ventures in several industries, including the HVAC, elevator, and jet engine industries.

Other Regulation

- Preparation of expert testimony submitted to FERC by an ICF colleague on the effect of Northeast Utilities' acquisition of Public Service of New Hampshire.

Publications

"Exclusionary Behavior in the Market for Operating System Software: the Case of Microsoft," in *Opening Networks to Competition: the Regulation and Pricing of Access,* David Gabel and David Weiman, eds.; Kluwer Press, 1996 (forthcoming), with Frederick R. Warren-Boulton and Glenn Woroch.

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The Economics of Intellectual Property Protection for Software: The Proper Role for Copyright," co-authored with Frederick R. Warren-Boulton and Glenn A. Woroch, Standard View, June 1995.

"Copyright Protection of Software Can Make Economic Sense," co-authored with Frederick R. Warren-Boulton and Glenn A. Woroch, The Computer Lawyer, February 1995.

"The Detroit Newspaper Joint Operating Agreement," in Kwoka and White, eds., *The Antitrust Revolution*, Harper Collins (1993).

"Sustainability and the Entry Process," *American Economic Review* (May 1981) pp. 272-277.

"Open Entry and Cross-Subsidization in Regulated Markets," in Gary Fromm, ed., *Economics of Public Regulation,* National Bureau of Economic Research and M.I.T. Press, Cambridge, Massachusetts, 1981.

Other Papers

"Depreciation Policy in the Telecommunications Industry: Implications for Cost Recovery by the Local Exchange Carriers", co-authored with Harold Van Gieson, December 1995.

"Microsoft Plays Hardball: Use of Exclusionary Pricing and Technical Incompatibility to Maintain Monopoly Power in Markets for Operating Software," co-authored with Frederick R. Warren-Boulton and Glenn A. Woroch, presented at Columbia University Institute for Tele-Information on Sustaining Competition in Network Industries through Regulating and Pricing Areas, November 1993.

"The Economics of Intellectual Property Protection for Software: The Proper Role for Copyright," co-authored with Frederick R. Warren-Boulton and Glenn A. Woroch, presented at American Committee for Interoperable Systems, June 1994.

"The Effect of Deregulation on Cable Subscribers," co-authored with John Woodbury, Oct. 1990, presented at American Enterprise Institute conference, Policy Approaches to Deregulation of Network Industries.

"The Economics of Bell Operating Company Diversification in the Post-Divesture Telecommunications Industry," co-authored with Stephen Silberman, with the assistance of Roger Noll, ICF, Inc., September 1986.

"A Framework for Economic Analysis of Electronic Media Concentration Issues," co-authored with Bruce Owen, Economists, Inc., December 1982.

Other Professional Experience

Journal referee: *International Economic Review*, *Journal of Industrial Economics*, and *International Journal of Industrial Organization*.

Trial Testimony

Testified on market definition and competitive effects of joint ownership of two competing daily newspapers in U.S. vs. Nat, L.C. and D. R. Partners, (May 1995).

Testified on market power, market definition and vertical restraint issues in Tarrant v. Trane (November 1993).

Expert witness for the Antitrust Division on the Detroit Newspaper Joint Operating Agreement (August 1987). Testified that the Detroit *Free Press* was not a failing newspaper when it agreed to joint operations.

Deposition Testimony

- U.S. vs Nat, L.C. and D. R. Partners, (April 1995).
- PMBR v. Harcourt Brace Jovanovich, et.al (February 1994).
- Deposed in Detroit JOA proceeding (July 1987).
- Deposed by the FTC concerning Henkel's acquisition of Parker Chemical (January 1986).
- U.S. v. Kentucky Utilities, (July 1985).

Expert Affidavits

- PMBR v. Harcourt Brace Jovanovich, et al. (February 1994).
- AD/SAT v. McClatchy Newspapers (July 1995).

Expert Statements Submitted to Regulatory Agencies

- "The Economics of Bidding for Scarce Resources: The Lessons of Monopoly Preemption as Applied to FCC Auctions of LMDS Licenses", August 1996, submitted on behalf of WebCel in FCC Docket No. 96-98.