Appendix B to the Written Evidence of Dasgupta and Waverman 1280 Main Street W. Phone 905.525.9140

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CURRICULUM VITAE

Leonard Waverman

PERSONAL DATA

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(Business)

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Place of Birth: Toronto, Canada Citizenship: Canada, France

MAJOR AWARDS AND HONOURS

"Chevalier dans L'Ordre des Palmes Academiques", Government of France, 1995

"Research on mobile phones and economic growth, subject of Economics Focus section, and Front Cover", Economist Magazine, March 12, 2005

"World's Top 50 Most Influential Thought Leaders in Telecommunications", Global Telecoms Magazine, 2009

"Top 100 Alumnae of Distinction", University College, University of Toronto, November 2012

EDUCATION

B. Comm. University of Toronto 1964

M.A. (Economics) University of Toronto 1965 (also studied "Media

and Society" with Marshall McLuhan)

PhD (Economics) Massachusetts Institute of Technology 1969

PERSONAL EXPERIENCE – Academic

Jan. 2013 – present	Dean, DeGroote School of Business, McMaster University Professor, Finance and Business Economics
Jan. 2008 – Sept 2013	Dean, Haskayne School of Business, University of Calgary (to Sept 2012);
	Professor of Strategy and Global Management
Sept. 2009 – present	Member Academic Advisory Board Columbia University, Institute for Tele Information; Georgetown University's McDonough Business School's Public Policy Center.
Aug. 2009 – Dec. 2009	Fellow, Centre for Management Development, London Business School
Sept. 2007 – present	Fellow, Fisher IT Centre, Haas School of Business, University of California, Berkeley
June 2002 – present	Senior Affiliated Research Fellow, Colombia Institute for Tele-Information, Columbia University
April 2002 – July 2007	Director, Regulation Initiative and Global Communications Consortium, London Business School
Dec. 2001 – July 2006	Director, "The Social/Economic impact of Information and Communication Technology", The Leverhulme Trust, £1.1 million grant to London Business School
Dec. 2001 – Dec. 2004	Director, E-Society Research Programme Economic and Social Research Council
Aug. 2000 – July 2008	Professor of Economics, London Business School
Aug 1999 – July 2000	Research Professor, London Business School
April 1997 – July 1999	Visiting Professor, London Business School
Jan. 1997 – April 1997	Visiting Fellow, Brookings Institution
Nov. – Dec. 1995 & May 1992	Professeur <i>invité</i> , Faculté de Gestion, Université de Paris I
April 1993 – Dec. 1995	Research Associate, ENSAE-CREST, Laboratoire d'Economie Industrielle Centre de Recherche en Economie et Statistique, Paris
Jan. – Dec. 1991	Visiting Professor, INSEAD, Fontainebleau, France

Feb. – June 1989 Professeur <i>invité</i> , Faculté d'Economie Appliquée, Université d'Aix-Marseille III	
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June 1981 – July 1984 Director, Policy and Economic Analysis Program, Institute for Policy Analysis, University of Toronto	
1976 – 2000 Professor of Economics, Department of Economics, University of Toronto	
Oct. – Dec. 1976 Visiting Scholar, Department of Economics, Stanford University	
1968 – 1976 Associate Professor, Department of Economics, University Toronto	of
1968 – present Research Associate, Institute for Policy Analysis, University of Toronto	У

PROFESSIONAL EXPERIENCE

Sept. 2011 – present	Non –executive Board Member BNP Paribas Canada
June 2014 – present	Board Member, Art Gallery of Hamilton Chair, Acquisitions Committee
July 2009 – present	Editorial Board, Telecommunications Policy
Jan. 2009 – present	Director, C.D. Howe Institute
May 2009 - Sept. 2013	Member, Advisory Board to Chair of the Alberta Energy Resources Conservation Board
2011 - present	Managing Director, Berkeley Research Group
June 2002 – May 2007	Non-Executive Board member, GEMA – The United Kingdom Gas and Electricity Markets Authority
Jan. 2002 – May 2007	Member, Scientific Advisory Board, Deutsches Institut für Wirtschaftsforschung, Berlin
July 2001 - Sept. 2004	Special Advisor, NERA
June 2001 – Sept. 2008	Non-Executive Board Member, Boltblue Ltd.

Sep. 1996 – Dec. 2000	Chair, Government of Canada Advisory Committee on Telecommunications Statistics and Economic Analysis
Dec. 1995 – April 1996	Member, Advisory Committee on Competition in Ontario's Electricity System, Ministry of Environment and Energy, Province of Ontario, Canada
1994 – 2001	Principal, Law and Economics Consulting Group (L.E.C.G.), Berkeley, California, U.S.A.
1994 – 2001	Co-Director, Global Forum on Competition and Trade Policy, (Partner institution of the section on Business Law of the International Bar Association)
Dec. 1991 – Dec. 2002	Member, Canadian Competition Law and Policy Committee of the Canadian Council for International Business; & Member of the Industry Advisory Committee to the OECD and the International Chamber of Commerce
Dec. 1991 – Dec. 1996	Director, PROFMEX, the Consortium for Research on Mexico
Jan. 1991 – Dec. 1995	Advisory Board, North American Economics and Finance Association
Jan. 1990 – Dec. 1996	Editor, <i>The Energy Journal</i> and Member of Executive Council, Association of Energy Economics
Feb. 1989 – June 1994	Board Member, Ontario Telephone Service Commission and Member of National Association of Regulatory Utility Commissioners
June 1981	Program Co-Chairman, Third Annual International Conference, International Association of Energy Economists
June 1979 – May 1982	Executive Council, International Association of Energy Economists
Jan. 1979 - March 1990	Editorial Board, Energy Economics
May 1978 – May 1980	Board Member, Ontario Energy Board (part –time) and Member of National Association of Regulations by Utility Commissioners
1976 – 1980	Associate Editor, Canadian Journal of Economics

Professional Experience – Consulting

2010-Present

Public Reports and Testimony

Leonard Waverman and Kalyan Dasgupta, Berkeley Research Group, LLC, *Canada's Broadband Performance: Relevant Considerations for a Digital Economy Strategy*, Report commissioned by BCE Inc. and TELUS, October 11, 2010

Leonard Waverman and Kalyan Dasgupta, Berkeley Research Group, LLC, *Mandated access in Canada: Is Regulation Forever the Way Forward?*, Report commissioned by BCE Inc. and Telus, November 15th, 2010

Leonard Waverman and Kalyan Dasgupta, Berkeley Research Group, LLC, *Time* to Set-Aside Caps that Don't Fit: The Limits of Spectrum Policy in Canada, Appendix 1 of Bell Canada's Submission to Industry Canada's Consultation on the Auction of 700 MHz Spectrum, February 26th, 2011

Expert report and testimony on market power and market definition in pipeline open seasons before the National Energy Board in Re: an application pursuant to Part IV of the NEB Act by Trans Mountain Pipeline ULC for approval of the transportation service to be provided and the toll methodology to be applied on the expanded Trans Mountain Pipeline System. Testified in February 2013.

Testified in September 2015 before Court of Queen's Bench, Alberta, in re: Dow Chemical Canada Inc. and Dow Europe Gmbh v Nova Chemicals Corporation [Abqb] 2014 ABQB 38

Other reports

Connectivity Scorecard 2009, 2010 and 2011: Prepared a multi-dimensional index ranking countries on their economic use of information and communications technologies (ICTs). Sponsored by Nokia Siemens Networks, released each year in Washington, presented to NTIA and the Staff at the House; presented at FCC and OECD Workshops; featured in many articles

Prepared consulting report estimating the contribution of Information and Communication Technology (ICT) to the Saudi Arabian economy.

Older Testimony

(2003) Provided an expert report and testimony on the cost of capital for a crown corporation in the Matter of a General Rate Application by Newfoundland and Labrador Hydro before the Newfoundland and Labrador Public Utilities Board.

(2003) Testimony before the French Autorite De La Concurrence regarding a price fixing agreement between Texas Instruments and Noblet, Decision 03-D-45.

(2002) Provided two expert reports and testified before the Court of First Instance in Luxembourg in the merger of Schneider Electric SA and Legrand, Case T-310/01, October 2002.

(1999) Expert Report and testimony before the French Autorite De La Concurrence in an Abuse of Dominant Position (Resale Price Maintenance) investigation of Mattel, Decision 99-D-45.

(1990) Expert report and testimony before the Competition Tribunal in re: Director of Investigation and Research vs. Imperial Oil Limited, 1990 CCTD No. 1.

(1990) Expert report and testimony before the Competition Tribunal in re: Director of Investigation and Research vs. Xerox Canada Limited, 33 CPR 3d 1983.

(1988) Expert report and testimony on the landed value of crude oil in Irving Oil Limited vs. R., 1988, 88 DTC 6138 (affirmed 91 DTC 5106).

(1986) Expert report and testimony before the Ontario Supreme Court in Re: James vs. AE Le Page, 37 ACWS 2d 215.

(1981) Expert report and testimony before the Restrictive Trade Practices Commission in re: Director of Investigation and Research vs. BBM Bureau of Measurement, 60 C.P.R. (2d) 26.

Other consulting work (pre-2010)

(2008-09) Authored reports on vertical integration and functional separation in telecoms networks, commissioned by a major European telecommunications company.

(2007) Provided econometric analysis of the relationship between local loop unbundling and inter-platform competition in the European Union telecommunications market. Report commissioned by the European Telecommunications Network Operators Association (ETNO).

Dr. Waverman has been retained and provided advice to the parties on a number of merger cases including Portugal Telecom/Sonaecom (2006), Agrium/CF Foods (2009) and Petro-Canada/Suncor (2009). He did not submit testimony in these matters.

Dr. Waverman has participated in hearings and provided testimony before the Canadian Radio-Telecommunications Commission (CRTC) in several proceedings, including CRTC 86-17 (submitted detailed econometric evidence forecasting Bell Canada's operating revenues in a major proceeding to determine Bell's rates) and CRTC 92-12 (opening up competition in the provision of long-distance voice services). He also appeared before the Telecom Policy Review Panel in 2005.

FIELDS OF SPECIAL TEACHING INTEREST

Micro-economics and Industrial Organization; Economics of Telecommunications, Energy and Resource Economics, International Trade, Public Utility and Public Enterprise Economics.

Courses taught: Managerial Economics and Strategy, Telecommunications Economics, Strategic Trade Policy, Economics of E-Competition, Energy and Natural Resource Economics, International Economics, Economic Regulation, Microeconomics, Industrial Organization.

PUBLICATIONS

Books

- "Who Pays for Universal Service: When Telephone Subsidies Become Transparent", with R. Crandall, Brookings Institution, June 2001; translated into Japanese 2004
- "Managing European Deregulation: Conflicting Priorities", with L. Bergman, C. Doyle, J. Gual, L. Hultkranz, D. Neven, and H. Roeller, C.E.P.R. London, September, 1998
- "Competition Policy In A Global Economy", edited with W. Comanor and A. Goto, Routledge Press, 1996
- "Talk is Cheap: The Promise of Regulatory Reform in North America", with R. Crandall, Brookings Institution, March 1996
- "Competition Policy In An Interdependent World Economy", with E. Kantzenbach, H.-E. Scharrer (eds.), Nomos Verlagsgesellschaft, Baden-Baden, 1993
- "Developments in Europe and their Spillovers to North America", with B. Heitger (eds.), Routledge Press, April 1993.
- "Modeling North American Free Trade", World Economy; (Guest Editor), January 1992
- "Costs and Productivity in Automobile Production: The Challenge of Japanese Efficiency", with M. Fuss, Cambridge University Press, April 1992
- "Corporate Globalization Through Mergers and Acquisitions", (ed.), University of Calgary Press, for Investment Canada, 1991

- "Negotiating and Implementing a North American Free Trade Agreement", (ed.), Centre for International Studies and The Fraser Institute, December 1991
- "The Dynamics of North American Trade and Investment, Canada, Mexico and the United States", with C. W. Reynolds and G. Bueno (eds.), Stanford University Press, 1991
- "Comparative Advantage in North America: Theory and Policy". Special Issue of North American Review of Economics and Finance, Vol. 1 No. 2, with C.W. Reynolds, (eds.), Fall 1990
- "Petro-Canada, An Analysis of Control, Accountability and Financial Viability", with P. Halpern and A. Plourde, Economic Council of Canada, March 1988
- "Canadian Financial Institutions: Changing the Regulatory Environment", with J. Ziegel and D.W. Conklin (eds.), Ontario Economic Council, 1985
- "Adapting to Changing Energy Prices: Proceedings of the Third IAEE International Conference", with C. Watkins (ed.), O.G.H., Cambridge, MA, 1984
- "Enterprise, Structure and Corporate Concentration", with S. Berkowitz and Y. Kotowitz, Study No. 17, Royal Commission on Corporate Concentration, Ottawa, 1977
- "The Energy Question: An International Failure of Policy", Volume I, The World; Volume II, North America, University of Toronto Press, Toronto, 1974
- "Natural Gas and National Policy: A Linear Programming Model of North American Natural Gas Flows", University of Toronto Press, Toronto, 1973
- "A Statistical Analysis of the Canadian Telecommunications Industry Demand Production & Investment", with M.D.G. Copeland, A.R. Dobell, T.H. Liu, and L.B. Taylor, Queen's Printer, Ottawa, Summer 1971

Monographs

- "Corporate Control and Industry Structure in Global Communications" (Guest Editor) with F. Trillas, *Telecommunications Policy*, April 2002
- "The Transformation of International Telecommunications" with M. Cave, (Guest Editor), *Telecommunications Policy*, November 1998
- "International Competition Policy Issues", *International Business Lawyer*, (Guest Editor), November 1995
- "Canada-China Trade and Economic Relations: Building a Strategic Partnership", with A. Alexandroff, W. Cai, S. Magun, and M. Smith, Centre for International Studies and Centre for Trade Policy and Law, **Joint Policy Paper**, November 1994

The Pricing of International Telecommunications Services, with D. Ypsilanti, **OECD**, 1994

The Optimal Structure of the European Satellite Operations Industry, with D. Neven and H. Roller, *European Space Agency*, Brussels, 1992

"The Process of Telecommunications Regulation in Canada", *Economic Council of Canada*, *Working Paper No. 28*, 324 pages, January 1982,

"The Regulation of Telecommunication in Canada", with M. Fuss, *Economic Council of Canada Technical Report*, *No. 9*, 168 pages, March 1981

Empirical Analysis of Dynamic Adjustment Models of the Demand for Energy in the U.S. Manufacturing Industries, 1947-74, with E. Berndt and M. Fuss, *Electric Power Research Institute Research Report*, 179 pages, Palo Alto, California, 1979

Energy and the Cost Structure of Canadian Manufacturing Industries, with M. Denny and M. Fuss, *Institute for Policy Analysis, University of Toronto, Technical Report No. 12*, 202 pages Toronto, Canada, August 1979

Dynamic Models of the Industrial Demand for Energy, with E. Berndt and M. Fuss, *Electric Power Research Report EA-580*, 137 pages, Palo Alto, California, November 1977

Articles in Refereed Journals, Refereed Articles in Books

"Polarization of Job Losses: Canada and the USA, the Role of ICT", *Digiworld Economic Journal, Communications and Strategies*, *No. 100/4th quarter 2015, Silver Jubilee Issue*, 2015

"The Telecommunications Global Regulatory Index", with P. Koutroumpis, *Telecommunications Policy*, 2011

"The Failure of Competitive Entry into Fixed-line Telecommunications, Who's At Fault?" with R. Crandall, *Journal of Competition Law and Economics*, 2005

"The Effects of Public Ownership and Regulatory Independence on Regulatory Outcomes", with G. Edwards, *Journal of Regulatory Economics*, 2005

"Standards in wireless telephone networks", with D. Salant and N. Gandall, *Telecommunications Policy*, *Vol. 27, No. 5 – 6*, June – July 2003 Presented to the U.S. House Committee on International Telecommunications.

"Competition in wireless: spectrum, service and technology wars" (with M. Jamieson, N. Levine), *Telecommunications Policy*, *Vol. 27, No. 5 – 6*, June – July 2003

"Econometric Cost Functions", with M. Fuss, in M. Cave, S. Majumdar and I. Vogelsang, (eds.) *Handbook of Telecommunications Economics,* Kluwer, 2002

"Telecommunications Infrastructure and Economic Development: A Simultaneous Approach" with H. Roeller, *American Economic Review*, September 2001

"The Implosion of the International Accounting Rate Mechanism and What it Means for Global Telecommunications", with M. Cave, *Telecommunications Policy*, November 1998

"European Telecommunications – On the Verge of Liberalization", with E. Sirel, *Journal of Economic Perspectives,* November 1997

"Regulation of the Public Sector Electricity in Canada", with A. Yatchew, in R. Gilbert and E. Kahn (eds.) *International Comparisons of Electricity Regulation*, Cambridge University Press, 1996

"International Mergers and State Aid: What Should Competition Do About Industrial Policy?" with A.N. Campbell and J.W. Rowley, in G.-A. Horn and H. Trabold (eds.), *Konjunkturpolitik (Applied Economics Quarterly)*, September 1994

"Sunk in Space: The Economics of the European Satellite Industry and Prospects for Liberalization", with D. Neven and L.-H. Roller, *Economic Policy*, October 1993

"Costs, Productivity and Import Substitution Programs in the Automobile Industries of Argentina, Korea and Mexico", G. Helleiner (ed.), *The New Trade Theories and Industrialization in the Developing Countries*, Oxford University Press, 1992

"Japan's Challenge to Canadian Manufacturing Industries: Productivity Growth and Levels", with M. Denny, M. Fuss, J. Bernstein and S. Nakamura, *Economic Studies Quarterly*, 1992

"Has the Manufacturing Slowdown of the 1970's been Reversed: New Evidence for Canada, the USA and Japan", with M. Denny and M. Fuss, *Canadian Journal of Economics*, 1992

"Econometric Modeling of Energy Demand: When are Substitutes Good Substitutes", *Energy Demand: Evidence and Expectations*, D. Hawdon (ed.), Academic Press, 1991

"Productivity Growth in the Automobile Industry: A Comparison of Canada, Japan and the United States", with M. Fuss, *Productivity Growth in Japan and the United States*, N.B.E.R. Studies in Income and Wealth, University of Chicago Press, 1990

"Canadian Competition Law: 100 Years of Experimentation", *Competition Policy in Europe and North America: Economic Issues and Institutions*, *Vol. 43* in the series *Fundamentals of Pure and Applied Economics*, J. Lesourne and H. Sonnenscheim (eds.), Harwood Academic Publishers, 1990

"Costs and Productivity in Automobile Production: A Comparison of Canada, Germany, Japan and the United States", with M. Fuss, *The Journal of the Japanese and International Economies*, 1990

"The Regulation of Inter-exchange Telecommunications Services in the USA", *The Future of Telecommunications and Computers*, R. Crandall and K. Flamm (eds.), Brookings Institution, 1989

"The Impact of \$(US) 15 Oil: Good News and/or Bad News?", *Canadian Public Policy*, March 1987

"The Canada U.S. Auto Pact: Protectionism vs. Free Trade", *Perspectives on a U.S.-Canadian Free Trade Agreement*, R.M. Stern, P.H. Trezise and J. Whalley (eds.), Brookings, 1987

"Canadian Export Pricing for Natural Gas: Price Discrimination or Competition", with C. Watkins, *Canadian Public Policy*, 1985

"Energy Conservation Policies: Value or Waste", *The International Oil Market Ten Years After the 1973 Crisis*, A. Ayoub (ed.), Les Presses de L'Université Laval, Quebec, 1984

"Estimating the Effects of Diffusion of Technological Innovations in Telecommunications: The Production Structure of Bell Canada", with M. Denny, M. Fuss and C. Everson, *Canadian Journal of Economics*, February 1981

"The Distribution of Resource Rents: For Whom the Firm Tolls" *Journal of Business Administration*, *Vol. 12*, *No. 2*, Spring 1981, reprinted P.N. Nemetz (ed.), *Energy Crisis: Policy Response*, IRPP, Montreal, 1981

"Substitution Possibilities for Energy: Evidence from U.S. and Canadian Manufacturing Industries", with M. Denny and M. Fuss, *Modelling and Measuring Natural Resource Substitution*, E. Berndt and B. Field (eds.), M.I.T. Press, 1981

"Demand for Energy in Manufacturing: Applications for Dynamic Models of Factor Demand to U.S. and Canadian Dis-aggregated Data", with M. Denny and M. Fuss, *Symposium on Modeling Large Scale Energy Systems*, Pergamon Press, Oxford, U.K., 1981

"The Measurement and Interpretation of Total Factor Productivity in Regulated Industries, with an Application to Canadian Telecommunications", with M. Deny and M. Fuss, *Productivity Measurement in Regulated Industries*, T. Cowing and R. Stevenson (eds.), Academic Press, 1981

"Regulation and the Multiproduct Firm: The Case of Telecommunications in Canada", with M. Fuss, *Studies in Regulation*, G. Fromm (ed.), M.I.T. Press, 1981

"An Application of Optimal Control Theory to the Estimation of the Demand for Energy in Canadian Manufacturing Industries", with M. Denny and M. Fuss, *Proceedings of the Ninth IFIP Conference on Optimization Techniques*, Springer-Verlag, Berlin, 1980

"Flexible Design for Large Scale Corporate Data Base", with S.D. Berkowitz, P.J. Carrington and J. Corman, *Social Networks*, *Vol.* 2, 1980

"The Determination of Enterprise Groupings Through Combined Ownership and Directorship Ties", with S.D. Berkowitz, P.J. Carrington and Y. Kotowitz, **Social Networks**, Vol. 2, No. 4, 1979

"Economic Structure and Market Power in Canada", with S.D. Berkowitz, Y. Kotowitz and P. J. Carrington, International Conference on Mathematical Approaches to the Study of Social Power, Werner Reimers Stiftung, Bad Homburg, BRD, March 1978, Social Wirtschaftwissenschaftlich Schriften 14, 1979

"The New Competition Policy and Regulated Industry in Canada", *Chapter 15*, *Canadian Competition Policy, Essays in Law and Economics*, J.R.S. Prichard, W.T. Stanbury and T.A. Wilson (eds.), Butterworths, Toronto, 1979

"The Regulated Utility under Uncertainty", with R. Chapman, *Journal of Public Economics* 11, 1979

"Factor Markets in General Disequilibrium: Dynamic Models of the Industrial Demand for Energy", with E. Berndt and M. Fuss, *Workshops on Energy Supply and Demand*, International Energy Agency, Organization for Economic Cooperation and Development, pp. 222-239, Paris, France, 1978,

"Energy Conservation: Policies for the Transport Sector", with D. Dewees, *Canadian Public Policy*, Spring 1977

"The Demand for British Trunk Telephone Services: Quasi Optimality Reconsidered", *Industrial Organization Review*, Vol. 5, No. 1, 1977

"Estimating the Demand for Energy: Heat Without Light", Conference on the Economics of Oil and Gas Self Sufficiency, Department of Economics, University of Calgary, 1976, published in *Energy Policy*, March 1977

"Residential, Commercial and Industrial Demand for Energy in Canada: Simulations with Three Alternative Models", with M. Fuss and R. Hyndman, *Proceedings of the Workshop on Energy Demand*, (ed.), IASSA (Vienna, 1976), pp. 345-405. (Revised version) *Chapter 9, International Studies of the Demand for Energy, Contributions to Economic Analysis*, *Vol. 120*, W.D. Nordhaus (ed.), North-Holland Publishing Company, 1977, pp. 151-179

"Peak Load Pricing Under Regulatory Constraint: A Proof of Inefficiency", *Journal of Political Economy*, July 1975

"The Demand for Gasoline in Canada, 1956-1972", with D. Dewees and R. Hyndman, *Energy Policy*, June 1975

"The Federal Communications Commission and the Regulation of the Intercity Telecommunications", *Promoting Competition in Regulated Industries*, A. Phillips (ed.), Brookings Institution, Washington, D.C., 1975

"The Two Price System for Energy: Subsidies Forgotten", *Canadian Public Policy*, Vol. 1, No. 1, December 1974

"Resources Allocation and the Regulated Firm: A Comment", with A.B. Atkinson, **Bell Journal of Economics and Management Science**, Spring 1973

"The Dual in Linear Programming and the Preventive Tariff", *American Economic Review*, September 1972

"Natural Gas and National Policy: The Costs of a Border", *Canadian Journal of Economics*, August 1972

"A Partial Econometric Model of the Canadian Telecommunications Industry", with A.R. Dobell, L.B. Taylor, T.H. Liu and M.D.G. Copeland, *Bell Journal of Economics and Management Science*, Spring 1972

"The Technical Economies of Integration: Message Switching and Data Processing", with D.D. Cowan, *Bell Journal of Economics and Management Science*, Fall 1971

"Sales Revenue Maximization", Journal of Industrial Economics, November 1968

Published Articles - Other

"Two-sided Telecom Markets and the Unintended Consequences of Business Strategy", **Competition Policy International**, 2007

"Comments on Network Neutrality", **Journal of Competition Law and Economics**, *Volume 2(3)*, 2007

"Do We Need European Merger Review?" (With Jacques Steenbergen), in C. Robinson ed. **Governments. Competition and Utility Regulation**, (Beesley Lectures 2004.) Edward Elgar, 2005

"State aids: bring back economic analysis", published in *Global Competition Review*, *Volume 6, Issue 11*, December 2003 / January 2004

"Regulatory incentives and deregulation in telecommunications", published in C. Robinson (ed.) *Competition and Regulation in Utility Markets*, June 2003

"Harmonised Introduction of Third Generation Mobiles in the EU" with E. Sirel, *Communications Law Newsletter*, July 2000

"Broadcasting Policy Hits the Internet", *Global Internet Project*, www.gip.org, June 2000

"The Race for 3G – A Briefing" with E. Sirel, *Business Strategy Review*, June 2000

"The Transformation of International Telecommunications", with M. Cave, *Business Strategy Review*, March 1999 reprinted in *Trends and Trends Review*, (Belgium), April 1999

"Policies for Ensuring Liberalisation in European Telecommunications", with J. Gual, *Business Strategy Review*, October 1998

"Innovation versus Regulation – Telecommunications at a Crossroads", **Business Strategy Review**, February 1998

"The Extent of Competition in US and Canadian Telecommunications", with R. Crandall, in T. Wilson (ed.), *The Future of Telecommunications*, Kluwer, 1998

"Economics" with M. Flynn and M. Fuss, in M.J. Frieman and M.L. Berenblut, *The Litigator's Guide to Expert Witnesses*, Canada Law Book, Toronto, 1997

"The Impact of Telecommunications Infrastructure on Economic Development: A First Look at the Data", with L.H. Röller, in *Implications of Knowledge-Based Growth for Micro-Economic Policies*, P. Howitt (ed.), Ottawa, March 1995

"The Trinational Equation: Canada's Role in a North American Free Trade Area", in E.L. Echevarri-Carroll (ed.), *NAFTA and Trade Liberalisation in the Americas*, Bureau of Business Research, The University of Texas at Austin, 1995

"A Critical Analysis of Porter's Framework on the Competitive Advantage of Nature" in A.M. Rugman, J. van den Broeck and A. Verbacke, **Beyond the Diamond**, **Research in Global Strategic Management**, Volume 5, JAI Press, 1995

"Efficiency Principles for Telecommunications Pricing: Fairness for All", with M. Fuss, in S. Globerman, W.T. Stanbury and T. Wilson (eds.) *Future of Telecommunications Policy in Canada*, 1995

"Post-NAFTA: Can the United States, Canada and Mexico Deepen Their Economic Relationship?" in S. Weintraub (ed.), *Integrating the Americas: Shaping Future Trade Policy*, Transaction Publishers, New Brunswick, U.S.A., 1994. Also in J. Daudelin and E.J. Dosman (eds.) *Beyond Mexico*, Carleton University Press and Canadian Foundation for the Americas, Ontario, Canada, 1995

"Competition Policy In a Globalised World: Conflicts Across Borders", in *Europe* and *Global Independence*, L. Bekemans and L. Tsoukalis, (eds.), Bruges: College of Europe 1993

"The Changing Infrastructure of North America and Its Impact on Canada's Relations with Latin America", in J. Haar and E.J. Dosman (eds.) *A Dynamic Partnership: Canada's Changing Role in the Americas*, North South Centre, University of Miami, 1993

"Canada and the Enterprise for the Americas Initiative: A Case of Reluctant Regionalism", *Business Economics*, April 1992 "Strategic Trade Policy & 1992", in B. Burgenmeier & J.L. Mucchielli (eds.) *Multinationals & Europe 1992: Strategies for the Future*, Routledge 1991

"A Canadian Vision of North America", *Continental Accord: Free Trade in North America*, S. Globerman (ed.), Fraser Institute, May 1991

"Foreign Direct Investment Canada, USA, Mexico: The Impacts of Liberalization", *Economic Integration in Europe and North America*, G. Bertin and A. Raynauld (eds.), Sixth France-Canada Round Table of Economists, September 1991

"Canada – USA Transborder Investment: Will Further Liberalization Take Place", *The Canada USA Free Trade Agreement: How Is It Working*? C. Doran (ed.), Johns Hopkins University Press, 1991

"Foreign Ownership and Corporate Strategy", with A.M. Rugman, *Corporate Globalization Through Mergers and Acquisitions*, L. Waverman (ed.), 1991

"The State of Competition in U.S. Telecommunications" with B. Egan, in B. Cole (ed.), *The Impacts of Divestiture in U.S. Telecommunications*, Columbia University Press, 1990

"Canadian Business in A Global Trading Environment", in A. Rugman (ed.) **Research in Global Strategic Management**, Volume 1, 1990

"Trade in Energy Products", with A. Plourde, *Energy Markets in the 1990's*, G.C. Watkins (ed.), Fraser Institute, 1989

"The Free Trade Agreement and the Automobile Industry", *Proceedings of the National Conference on the Canada-U.S. Free Trade Agreement*, M. Gold (ed.), 1988

"Energy Scarcity, Security, Development and Trade: The Energy Chapter of the Canada-U.S.A. Free Trade Agreement", a paper prepared for **Energy Options**, mimeo available from the Department of Energy, Mines and Resources, Ottawa.

"Energy Pricing and Fiscal Policies", Report of the Rapporteur, **Energy Options** Conference on Pricing and Taxation, November 15 – 17, 1987

"Export Prices for Canadian Natural Gas: Exploitation vs. Benign Discrimination", with G.C. Watkins, *Proceedings of the Sixth Annual I.A.E.E. North American Meetings*, J. Wayant (ed.), October 1987

"Canadian Energy Policy After 1985: Lessons from the Present", *Canada's Energy Policy, 1985 and Beyond*, E.A. Carmichael and C.M. Herrera (eds.), C.D. Howe Institute, Toronto, 1984

"Investments in Energy Supply Industries and the Economy of the OECD, 1970 – 1990", *Adapting to Higher Prices*, G.C. Watkins and L. Waverman (eds.), op. cit. "Pricing Principles for Postal Service", *Perspectives on Postal Service Issues*, H. Sherman (ed.), American Enterprise Institute, Washington, D.C., 1981

"The Visible Hand: The Pricing of Canadian Oil and Natural Gas Resources", *Energy Policies for the 1980s, An Economic Analysis*, *Vol. 1*, Ontario Economic Council, Toronto, 1980

"Canadian Energy Future", *Canada: The Third Option*, S. Berkowitz and R. Logan (eds.), McGraw-Hill, Toronto, 1979

"Markets for Regulation", with M. Trebiloeck and R. Priehard, *Government Regulation*, Ontario Economic Council, Toronto, 1978

"Life Cycles Costs for Nuclear vs. Coal Powered Generator Stations", with S. Banerjee. Paper prepared for the Royal Commission on **Electric Power Planning**, Toronto, December 1977

"The Demand Model of the National Energy Outlook: A Critique", **Review of Federal Energy Administration, National Energy Outlook**, H. H. Landsberg (ed.), Resources for the Future, Washington, D.C., 1977

"The Regulation of Telecommunications: Pandora's Telephone Box", *Challenge*, November/December 1976

"Energy Economics", *Conference on Canada's Energy Future*, University of Toronto, Faculty of Applied Science and Engineering, 1976

"The Demand for Electricity in Ontario to 1985", with M. Fuss and R. Hyndman, Paper presented to the **Select Committee of the Legislature Investigating Ontario Hydro**, University of Toronto, mimeo 1976

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