

*ANNOTATED LISTING OF
ECONOMIC AND POLICY ANALYSIS AND RESEARCH*

COMPETITION POLICY BRANCH
COMPETITION BUREAU
INDUSTRY CANADA

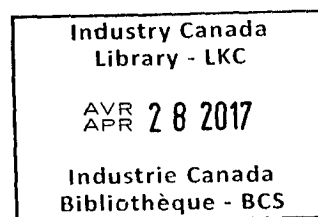
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Introductory Note

The Competition Policy Branch (CPB) provides analytical support for the Competition Bureau's enforcement and advocacy activities, and coordinates the Bureau's involvement in international relations in the field of competition law and policy. More specifically, staff of the CPB are responsible for:

- Providing expert economic advice on Bureau enforcement cases under the *Competition Act*;
- Preparing statutory interventions by the Commissioner of Competition (formerly referred to as the Director of Investigation and Research) in federal and provincial regulatory proceedings, often in collaboration with the enforcement Branches of the Bureau;
- Supporting the Bureau's involvement in departmental and interdepartmental policy development, including its participation in relevant committees of Industry Canada;
- Providing liaison between the Competition Bureau and foreign antitrust agencies regarding enforcement matters that cut across national jurisdictions; and
- Representing Canada in multilateral competition policy fora such as the OECD Committee on Competition Law and Policy.

In the course of fulfilling the above-outlined responsibilities, staff of the Branch are encouraged to prepare working papers and articles for publication in Industry Canada venues, refereed journals and other appropriate professional outlets. As well, consultants under contract to the Branch prepare analyses on designated topics. These activities contribute to public understanding and awareness of the role of competition policy in the economy as well as fostering links with researchers in the academic community and providing a valuable opportunity for professional renewal.

This document provides an annotated listing of economic and policy analysis and research prepared for the CPB in recent times. The materials listed in the document were prepared by staff members of and/or consultants under contract to the Branch in their personal capacities. The list does not include other items such as submissions prepared for regulatory hearings which constitute formal Bureau documents, and are detailed in other Bureau publications.

In most cases, copies of the materials listed herein may be obtained by contacting Susy Barre, who is secretary to Deputy Commissioner of Competition, Competition Policy Branch, at (819) 953-3318. In a few cases, copies of items noted in the attached list are available only from the publisher for reasons of copyright protection. The latter items are designated with an asterisk (*) in the attached list.

André Downs
Deputy Commissioner of Competition
Competition Policy Branch

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I. THE ROLE OF COMPETITION POLICY AS A DIMENSION OF CANADIAN ECONOMIC POLICY

1. David W. Conklin, *Canadian Competition Policy: Preparing for the Future* (A set of papers presented at the Canadian Competition Policy Conference, Toronto, Ontario, June 19-20, 2001. The conference was funded by the Canadian Competition Bureau).

This major set of papers discusses the evolution of competition policy to meet the modern demands - globalization, technology, e-business and deregulation - as well as the institutional framework required to enhance competition. The options for the future of competition policy in Canada are examined. The papers in this set include:

- (1) Michael Porter, *Competition and Antitrust: Towards a Productivity-Based Approach to Evaluating Mergers and Joint Ventures.*
- (2) Alan Rugman, *The Impact of Globalization on Canadian Competition Policy.*
- (3) Ed Clark, *The Dynamic Between Domestic Competition and International Competitiveness.*
- (4) Don Tapscott, *The Challenges Presented by the Dynamics of Dynamics of Competition in the New Economy.*
- (5) A. Paul Victor, *How is the United States Dealing with Globalization and the New Economy?*
- (6) Senator Michael Kirby, *The Politics of Competition Policy.*
- (7) Allan Fels AQ, *Governance Issues - What are the alternative structures? Australia's Experience.*
- (8) Howard Wetston and Edward M. Iacobucci, *Is It Time to Give the Commissioner of Competition a Competition Commission?*
- (9) Terry Calvani, *Lessons to be Avoided: The Experience South of*

the Border.

- (10) **Torrance Wylie, Robert Kerton, Marnie McCall and Ralph Winter, (All Authors Commented on) *Challenges of the Real World: Balancing the Incentives of Business/Consumers/ Economists & Government.***
 - (11) **Lawson Hunter, Calvin S. Goldman and Mark Katz, George Addy, and Francine Matte, (All Authors Commented on) *Where Do We Go From Here?***
 - (12) **Competition Bureau, *Competition Policy in Canada: Past and Future.***
2. **Paul Feuer and Zulfi Sadeque, *Competition Policy, Privatization and Deregulation: A Canadian Perspective* (Paper presented at the APEC Conference on Competition Law and Policy, Auckland, New Zealand, July 1995).**
3. **Robert D. Anderson and S. Dev Khosla, *Competition Policy As A Dimension of Economic Policy: A Comparative Perspective* (Ottawa: Industry Canada, Occasional Paper No. 7, May 1995).**

This paper discusses the role of competition policy in the transition from regulation to competition, with particular reference to the telecommunications, airlines and electricity sectors. It concludes with some observations regarding the potential role of competition policy in the countries of Asia Pacific Economic Cooperation (APEC).

This paper examines the evolving role of competition policy and its relation to other economic policies in Canada and other OECD countries. It reviews the microeconomic foundations of competition policy, and considers the implications of recent economic literature on productivity and competitiveness. It outlines the complementary relationship between competition policy and other microeconomic policies that foster an efficient and dynamic economy. The paper also provides a comparison of Canadian competition policy as it relates to restructuring with approaches taken in other jurisdictions including the U.S.A., the European Community, Germany, France, the U.K. and Japan, and raises a number of issues for consideration regarding the future evolution of competition policy in Canada.

4. **Mark F. Ronayne, *Disciplining Industrial Incentives to Promote Competitive and Efficient Markets* (Working paper: August 1993).**

This paper examines the interface between industrial incentives and competition policy in Canada. The principal topics covered include: (i) micro-economic-theoretical considerations relating to subsidies and competition; (ii) the interface between industrial incentives and competition policy in the European Union; (iii) empirical trends relating to the provision of industrial incentives in Canada and the underlying legal and institutional framework; and (iv) policy alternatives regarding industrial incentives in Canada in relation to the economic challenges of the 1990s.

5. **Derek J. Ireland, *Interactions Between Competition and Trade Policies: Challenges and Opportunities* (Competition Bureau, November 1992).**

This paper outlines various global developments that have brought competition policy to the international trade agenda, and some positive and negative interactions between the two policy fields. The paper provides a starting point for the development of an analytical framework, or taxonomy, which would delineate the competition policy-trade policy interactions according to their overall effects as well as their causation and significance.

6. **Robert D. Anderson and S. Dev Khosla, *Competition Policy, the Canadian Economic Union and Renewal of the Federation*, Canadian Competition Policy Record, Vol. 12, No. 4, December 1991, pp. 57-77.***

This paper explores the links between competition policy and the Canadian economic union. It provides a conceptual discussion of competition-related aspects of the economic union and the federal system; and outlines the role of competition policy in re-inforcing economic integration in various foreign federations such as the United States and the European Community as well as transnational arrangements such as the Australia-New Zealand Free Trade Area.

II. APPLIED ISSUES IN COMPETITION POLICY AND INDUSTRIAL ORGANIZATION

1. Patrick Hughes and Margaret Sanderson, *Conspiracy Law in Canada: Implications of the 1986 Amendments and the PANS Decision* (A paper prepared for publication in a special issue of the *Review of Industrial Organization*, Vol. 13, Nos. 1-2, April 1998), pp. 153-176.

This paper discusses the economic implications of the Supreme Court of Canada's decision in respect of the conspiracy case, *Nova Scotia Pharmaceutical Society*. It analyses the market structure/behavior framework set out by the Court and the resulting case law following this landmark decision. Some observations are offered on the adequacy of this framework in meeting the underlying economic objectives of conspiracy law.

2. Halldor Palsson and Andrew N. Kleit, *Is there Anti-competitive Behaviour in the Central Canadian Cement Industry: Testing Arbitrage Cost Hypotheses*, *Canadian Journal of Economics*, Vol. XXIX, No. 2, May 1996, pp. 343-56.*

Allegations of anticompetitive behaviour in the Central Canadian cement industry have focused around the effects of cement producers buying their downstream distributors. If indeed vertical integration is causing cement prices to rise, the relevant economic theories imply that the arbitrage cost of shipping cement to Central Canada is greater than the cost of shipping cement from this region. The analysis supports the hypothesis that vertical integration has increased barriers to entry for cement in Toronto, but fails to support a similar hypothesis for Montreal.

3. Arthur Kaell, *Application of Canadian Competition Law and Policy to High Tech Markets* (Paper prepared for a Mini-Roundtable of the OECD Committee on Competition Law and Policy, April 1996).

This paper surveys key provisions of the *Competition Act*, as well as associated Competition Bureau enforcement guidelines, which pertain to research and innovation. While these provisions have not been extensively tested in the courts, the flexible, case-by-case approach generally taken in the *Act* appears to be consistent with current understanding of the nature and importance of innovation.

4. **Paul Feuer, *Canadian Competition Policy and Small Business* (Paper presented at a Mini-Roundtable of the OECD Committee on Competition Law and Policy, April 1996).**

This paper reviews the treatment of small and medium-sized businesses under the Canadian *Competition Act*. It outlines the economic role of SMEs in the Canadian economy and the flexible approach taken by the law in focusing on business practices and structural transactions that facilitate the exercise of market power, rather than on the size of particular firms or on broader, non-economic factors. This approach protects the competitive process and thereby helps to ensure maximum opportunities for small and medium-sized businesses.

5. **Robert D. Anderson, S. Dev Khosla and Joseph Monteiro, *Market Delineation in Abuse of Dominant Position Cases: Economic Principles and the Canadian Cases* (Paper presented at a Special Roundtable of the OECD Committee Law and Policy on the subject of *Abuse of Dominant Position*, February 1996), OECD/GD(96)131, Paris 1996, pp. 89-112.**

Definition of the relevant product and geographic markets is a key step in the analysis of most types of competition law cases. This paper synthesizes the lessons to be learned regarding market definition in abuse of dominant position cases from a wide range of scholarly writings as well as the Bureau's experience in three recent enforcement cases, the *NutraSweet*, *Laidlaw* and *A.C. Nielsen* matters. The paper suggests that the Competition Tribunal has developed a pragmatic approach to market definition that takes due account of economic learning and compares favorably with approaches followed in foreign jurisdictions.

6. **Halldor P. Palsson, *An Analysis of the Price Impact of Dumping Duties on the Canadian Refined Sugar Market* (Paper prepared as an Appendix to the Director's Submission in a Public Interest Determination Pursuant to Section 45 of the Special Import Measures Act, December 4, 1995).**

This paper, which was prepared in support of an intervention by the Bureau in an antidumping case before the Canadian International Trade Tribunal, argues that sugar imports have moved the domestic sugar industry toward a more competitive equilibrium and that the competitive fringe provided by imports has been an effective competitive check on the domestic monopoly-duopoly in sugar refining.

Reflecting this, it argues that the public interest would not be served by the imposition of antidumping duties in this case.

7. **Margaret Sanderson, *Efficiency Analysis in Canadian Merger Cases* (Remarks prepared for the Federal Trade Commission Hearings on Global and Innovation-Based Competition, November 2, 1995).**

This paper examines the subject of efficiency analysis in merger cases under the Canadian *Competition Act*. It was prepared for a set of hearings undertaken by the U.S. Federal Trade Commission which examined the implications of globalization and innovation-based competition for antitrust policy. The paper notes that the essential difference in Canada's approach to merger enforcement from that of the U.S. federal antitrust authorities is the use of a total welfare standard when evaluating efficiencies. This difference has not led to a flood of anticompetitive mergers being approved on the basis of efficiencies. The paper argues that the infrequency of efficiency trade-off cases should not be surprising when one considers the infrequency with which mergers are found to give rise to a substantial lessening or prevention of competition under the Canadian statute.

8. **Arthur Kaell, *The Role of Efficiencies in the Treatment of Mergers and Horizontal Agreements* (Paper prepared for a Mini-Roundtable of the OECD on Efficiencies, November 1995).**

This paper reviews the treatment of efficiency defense claims in respect of criminal and civil provisions of Canada's competition law, including criminal conspiracy, abuse of dominance, specialization agreements, mergers, and joint ventures. It explains the total welfare approach to defining efficiencies that is adopted in Canada and discusses the acceptable savings that can be claimed as well as relevant decisions of the Competition Tribunal.

9. **Halldor Palsson and Andrew N. Kleit, *Horizontal Concentration and Anticompetitive Behavior in the Central Canadian Cement Industry: Testing Arbitrage Cost Hypotheses*, International Journal of Industrial Organization, Vo. 17, 1999, pp. 1189-1202. ***

The paper provides a theoretical and empirical assessment of alternative hypotheses regarding collusion and arbitrage costs with reference to the post-1971 Toronto cement market. Evidence discussed

in the paper indicates that market price has a negative effect on concentration, implying that the firms in this market act, with significant though limited success, as a cartel.

10. **Margaret Sanderson, *Antitrust and Health Care: A Canadian's Perspective*, *Antitrust Bulletin*, Vol. 39, No. 2 (Summer) 1994, pp. 415-429.***

This paper provides commentary, from a Canadian perspective, on four American papers that consider the role which antitrust policy should play within changing health care markets. While health care markets display unique characteristics which differentiate them from other markets, American policy-makers have determined that competition is desirable and feasible, and hence there is a role for antitrust authorities. But, without recognition of health care's unique features, antitrust authorities risk losing sight of the ultimate objective, namely preventing reductions in overall welfare.

11. **James Langenfeld and Margaret Sanderson, *Practices that May Facilitate Collusion in an Oligopoly: The Canadian and U.S. Experience* (Mimeo, June 1994).**

The paper explores some of the issues presented by business practices that facilitate collusion. Possible approaches to facilitating practices under the Canadian and U.S. competition laws are described, along with a number of illustrative case examples. The analysis highlights some of the difficulties of implementing antitrust challenges to facilitating practices that ensure vigorous rivalry without imposing unnecessary restraints on business.

12. **Patrick Hughes, *Most-Favoured-Customer Clauses and Competition Policy* (Paper presented at Carleton University Industrial Organization Research Unit Conference, May 1994).**

The paper examines the effects of most-favoured-customer clauses on horizontal competition in a two-stage model of duopoly behaviour. Building on earlier results, it is argued that most-favoured-customer clauses are less likely to be unilaterally profitable when they are used to tie pricing behaviour in multiple oligopolistic markets. In this case, the strategic effect of these clauses is to soften competition in some markets while at the same time inducing more aggressive competition in others.

13. **Halldor Palsson, *Refusal to Supply ISOs: Xerox Digital and Kodak Reconsidered* (Paper presented at the Carleton University Summer Conference on Industrial Organization, May 1994; submitted for publication in the *Review of Industrial Organization*, December 1995).**

This paper models the welfare implications of the vertical restraints cases involving Xerox and Digital in Canada and Kodak in the U.S. It argues that substitution to ISOs motivated the brand name manufacturers' refusal to supply in court cases involving Xerox and Kodak, and tying in an undertaking to the Bureau by Digital in 1992. The efficiency justifications for the refusals examined all depend on competition in the inter-brand market being strong enough to act as a check on the exercise of market power in the after-sale intra-brand market for parts and services. No direct evidence of this effect was presented in any of the cases examined.

14. **Roger Ware, *Understanding Raising Rivals' Costs: A Canadian Perspective*, Canadian Competition Record, Vol. 15, No. 1, March 1994.***

This article reviews the concept of raising rivals' costs and the various critiques that have been made of it as a contribution to antitrust economics. The basic concept is that a dominant firm may be able to exclude rivals from a market by bidding up the price of an input. The author concludes that the theory of raising rivals' costs provides important insights, but has failed to provide a comprehensive framework for the understanding of strategic behaviour.

15. **Margaret Sanderson, *It is Better to Know Some of the Questions Than All of the Answers* (Paper prepared for the Canadian Bar Association Conference on Living with the *Competition Act* in the 1990s, Vancouver, October 1993).**

This paper explores issues of joint dominance and some of the exclusionary practices that may be associated with it. To deal with these issues, the relevant economic theory is discussed, following which is an outline of recent case examples, primarily from the United States. The final section explores some of the possible reactions Canadian competition authorities may have in dealing with this behaviour.

16. Margaret Sanderson and Ann Wallwork, *Divestiture Relief in Merger Cases: An Assessment of the Canadian Experience*, McGill Law Journal, Vol. 38, 1993.*

Divestiture is the most common form of relief used by antitrust authorities to address anti-competitive mergers. In this article, the authors discuss whether competition authorities, in using this tool, have achieved effective relief to anti-competitive mergers. It is the authors' opinion that, not unlike the American experience, the initial use of divestitures as a remedy to anti-competitive mergers in Canada was characterized by a number of problems. As a result, the authors recommend that Canadian authorities further formalize their procedures in respect of divestiture relief.

17. Civettini Sofia and Lapointe Alain, *Le marché international du pétrole brut*, Monograph on International business and Economics, Centre d'Études en administration internationale (CETAI), École des Hautes Études Commerciales, Montreal, January 1997, pp. 1-109.**

The international crude oil market has undergone many profound structural changes since it emerged late in the nineteenth century. The various stakeholders have had to adapt periodically to a new competitive environment by devising new strategies. This paper uses the analytical framework of industrial organization to establish links between the organization of the oil market, the evolution of its structure and the resulting operational mode.

18. Civettini Sofia, *The intensity of competition in the American steel industry and the strategic group concept*, Research paper on international business and economics, Centre d'Études en administration internationale (CETAI), École des Hautes Études Commerciales, Montreal, March 1995, pp. 1-17. (Paper presented to the 4th Annual Congress of the Mineral Economics and Management Society, Boulder (Colorado), March 9-11, 1995, 2nd best research paper).**

This research paper discusses changes in the intensity of competition in the United States steel industry. We present a model whereby the changes vary along with the source of exogenous disruptions, structural variables and behaviours indicating the scope of the oligopolistic consensus. The last group of variables concerns the

characteristics of the strategic group. They are used to explain how the use of strategic groups improves an analysis of competition. The findings of our research, based on a period spanning three decades (1960-1991), make it possible to verify empirically the assumptions underlying our theoretical model and to corroborate the strategic vision that such a model is based on. The intensity of competition in the U.S. steel industry is due to the structure of the market and to the behaviour of firms. If firms must adapt to the new conditions of the environment (structuralist vision), they also use strategies intended to master such an environment and to reposition themselves within it (behavioural vision).

19. **Robert D. Anderson and Brian Rivard, *The Competition Policy Treatment of Shared EFT Networks: The INTERAC Case*, Payments Systems in the Global Economy: Risks and Opportunities, 34th Annual Conference on Bank Structure and Competition, May 1998, Federal Reserve Bank of Chicago, pp. 174-198.**

This paper reviews the application of competition law in network industries. The application of competition policy in network industries can be discussed with reference to three conceptual models: a model focussing on the maintenance or promotion of inter-network competition, a traditional public utility approach, and a model emphasizing the creation of opportunities and incentives for intra-network competition. Thereafter, the paper reviews the INTERAC Case brought before the Competition Tribunal. The Consent Order implemented in November 1996 largely represents an attempt to implement a model creating intra-network competition. The preliminary evidence to date suggests that the Order's effects in stimulating competition and new entry into the market has been limited.

20. **Joseph Monteiro and Gerald Robertson, *The Use of Economic Analyses in Competition Cases - Analysis of an Intervention and Predatory Pricing in Transportation Cases - Part I*, Canadian Transportation Research Forum Proceedings of the 2000 Annual Conference, Charlottetown, Prince Edward Island, June 4 -June 7th, 2000, pp. 502-525.**

This paper shows how economic analyses provided the background in the consideration of two transportation matters: An intervention; and A predatory pricing case. In each matter, the respective provision under the *Competition Act* is examined together with the complaint or submission. It then evaluates the complaint or submission under the respective

provision and provides an economic analysis underlying the case or submission.

21. **Joseph Monteiro, Richard Annan and Andrew Eckert, *The Evolution of Airlines in Canada with Emphasis on the Competition Bureau's role in the Restructuring of the Airlines Industry*, Canadian Transportation Research Forum Proceedings of the 2001 Annual Conference, Vancouver, British Columbia, May 6-9, 2001, pp. 136-155.**

This paper traces the evolution of the airlines in Canada and the regulatory changes that have occurred. It then reviews the role of the Competition Bureau in the Restructuring of the Airlines as a result of the failure of Canadian Airlines International.

22. **Joseph Monteiro and Andrew Eckert, *The Use of Economic Analyses in Competition Cases - Analysis of the Conspiracy and Merger Case in Transportation Cases - Part II*, Canadian Transportation Research Forum Proceedings of the 2001 Annual Conference, Vancouver, British Columbia, May 6-9, 2001, pp. 646-665.**

This paper shows how economic analyses provided the background in the consideration of two transportation matters: A conspiracy; and a merger case. The respective provision under the *Competition Act* is examined together with the complaint or submission. Then the complaint is evaluated under the respective provision together with the underlying economic analysis.

III. COMPETITION POLICY AND INTELLECTUAL PROPERTY RIGHTS

Nancy Gallini and Robert D. Anderson, *Competition Policy, Intellectual Property Rights in the Knowledge-Based Economy* (A set of papers commissioned by the Competition Bureau in cooperation with the Canadian Intellectual Property Office and the Microeconomic Policy Analysis Branch of Industry Canada, were published in a 1998).

This major set of papers explores the relationships between intellectual property rights, competition policy and innovation with reference to market structure and business practices in the Canadian and U.S. economies. In addition to framework and empirical issues, the

papers provide guidance regarding the application of competition law to particular business practices. The papers in this set include:

- (1) Rob Anderson and Nancy Gallini, *Competition Policy, Intellectual Property Rights, and Efficiency: An Introduction to the Issues.*
- (2) Nancy Gallini and Michael Trebilcock, *Intellectual Property Rights and Competition Policy: A Framework for the Analysis of Economic and Legal Issues.*
- (3) Don McFetridge, *Intellectual Property, Technology Diffusion, and Growth in the Canadian Economy.*
- (4) Robert Merges, *Antitrust Review of Patent Acquisitions: Property Rights, Firm Boundaries and Organization.*
- (5) William Baxter and Dan Kessler, *The Law and Economics of Tying Arrangements: Lessons for the Competition Policy Treatment of Intellectual Property.*
- (6) Patrick Rey and Ralph Winter, *Exclusivity Restrictions and Intellectual Property.*
- (7) Suzanne Scotchmer, *R& D Joint Ventures and Other Cooperative Arrangements.*
- (8) Jeffrey Church and Roger Ware, *Network Industries, Intellectual Property Rights and Competition Policy.*
- (9) Derek Ireland, *Competition Policy, Intellectual Property and the Consumer.*
- (10) Willard Tom and Joshua Newberg, *U.S. Enforcement Approaches to the Antitrust-Intellectual Property Interface.*
- (11) Rob Anderson, Paul Feuer, Brian Rivard and Mark Ronayne, *Intellectual Property Rights and International Market Segmentation in the North American Free Trade Area.*

The above papers were presented and critically reviewed at an Authors' Symposium held in Aylmer, Québec in May 1996. Currently, it is anticipated that they will be published as a volume in the Industry Canada Research Series. Interest in reviewing the papers for possible publication has also been received from a major U.S. academic publisher as well as a leading U.S. legal and economic journal.

IV. COMPETITION POLICY AND ECONOMIC REGULATION

(N.B. -- The list of papers in this section does not include formal submissions by the Competition Bureau to federal and provincial regulatory and other bodies to which CPB staff have contributed. These would include recent submissions to the CRTC, the Ontario Advisory Committee on Competition in the Provincial Electricity System, Canada Transportation Act Review Panel and other bodies. These submissions are available from the Bureau's Resource Centre.)

1. **Robert D. Anderson, Abraham Hollander and Joseph Monteiro, *Regulatory Reform and the Expanding Role of Competition Policy in the Canadian Economy, 1986-96* (A paper prepared for publication in a special issue of the *Review of Industrial Organization*, Vol. 13, Nos. 1-2, April 1998, pp. 177-204).**

This paper examines the interface between competition policy and industry-specific regulation in the Canadian economy. It discusses conceptual differences between direct economic regulation and competition policy, and the factors underlying the reforms implemented in key economic sectors over the past decade. It delves into jurisprudential issues regarding the interface between competition law and regulation, as well as the implications of regulatory forbearance. The paper as a whole highlights the role of competition policy in supporting pro-competitive reforms of direct economic regulation.

2. **G. Bruce Doern, *Institutional Relations Between Sectoral and Framework Regulators: Implications for the Telecommunications Sector* (Competition Bureau and Telecommunications Sector, Industry Canada, Joint Working Paper, March 1996).**

The purpose of the paper is to examine key institutional issues in the relationships between competition regulators and sectoral regulators with a particular focus on the implications of these issues for the regulation of the telecommunications sector. The examination draws on the institutional experience of Canada, the United States, the United Kingdom, and the European Union.

3. **Randall E. Westgren and Larry J. Martin, *Public Policy Implications of the Resource-Based Theory of Firm Strategy* (Competition Bureau, Working Paper, November 1995).**

This paper extends earlier work done by the George Morris Centre on the Resource-Based Theory of the Firm. It fleshes out the concepts of the model further and relates it to the product characteristic model developed some years ago by Kevin Lancaster and uses the model for public policy analysis. Three distinct types of public policy are analyzed: competition policy, farm incomes and quality assurance policy, and technical regulations.

4. **Efichios Sophocles Sartzetakis, *Emission Permits Markets as Vehicles for Raising Rivals' Cost Strategies* (Competition Bureau, Working Paper, September 1995).**

The paper examines two ways in which a firm in an oligopolistic industry that is emissions are regulated with the use of a tradable emissions permits system, can use its power in the permits market to limit competition the product market. First the paper examines the extent to which the price of emission permits can be manipulated by a firm that has power in the permits market and second whether permits price manipulation can lead to entry deterrence.

5. **Val Traversy, *The Information Highway Marketplace: Competing for the Consumer* (Insight Conference, October 1995).**

These remarks provide a competition policy perspective on four dimensions of the rapidly-evolving electronic marketplace: recent developments in the federal government's policy thinking on telecommunications and the information highway; the current set of big policy issues in this field; the challenges of this economic and policy environment for competition law and law enforcement; and the growing significance of international markets and international rules.

6. **Edward Kahn, *Competition Issues in the Electricity Sector* (Paper prepared for the Bureau of Competition Policy, April 1994).**

This paper reviews current economic thinking regarding the scope for efficient competition in the electricity industry and related regulatory policy issues. In addition, the paper examines international experience on the introduction of competition in the electricity industry. The countries surveyed include Norway, the U.K., New Zealand, the U.S. and Australia.

7. **Timothy Denton, *Transactions not Transmissions: The Electronic Marketplace and the Computer Revolution* (A paper prepared for the Bureau of Competition Policy, March 1994).**

This paper comments upon key trends relating to the "electronic marketplace" and outlines some basic dimensions of a strategy and approach for competition advocacy in this sector. The conventional view of the "electronic highway" focuses attention on the means of transmission rather than the markets that will be assembled from these new technical possibilities. The paper argues, however, that the combination of networks, computers, software and services will create an electronic marketplace (hence, the subtitle: *Transactions, not Transmissions*).

8. **Joseph Monteiro, *Representations by the Bureau of Competition Policy: The First Fifteen Years, Canadian Competition Record*, Vol. 15, No. 1, March 1994, pp. 17-38.**

This article examines the nature of representations by the Bureau of Competition Policy in the period 1976-1991, the overall impacts and contributions of these representations, and new directions in the Director's regulatory interventions in recent years. The paper concludes by indicating the significant contributions of the Director in fostering competitive based solutions in the regulated sector by interventions. A sectoral breakdown of the Director's representations is also provided.

9. **Civettini Sofia and Lapointe Alain, *Nouvelle dynamique concurrentielle dans les industries du gaz et de l'électricité*, Monograph on International business and Economics, Centre d'Études en administration internationale (CETAI), École des Hautes Études Commerciales, Montreal, August 1996, pp. 1-69. ****

This paper analyses the new competitive environment that characterizes the gas and electrical industries internationally. It first discusses the traditional model along which the gas and electrical industries were organized as well as the various structural disruptions that are the reason for the re-examination. Emphasis then shifts to an analysis of the organization and structure of the gas and electrical industries in industrialized countries and amendments to the regulatory framework. An examination of the experience of certain countries shows that certain trends are at work, including de-concentration of output, especially in the electrical industry, vertical de-integration and financial disengagement on the part of governments. Lastly the issues surrounding this new competitive environment are examined, as well as the resulting strategic orientations, especially delimitation of occupations and globalization of activities.

10. **Joseph Monteiro and Gerald Robertson, *Conference Legislation - Emerging Developments, Trends and A Few Major issues*, in *Logistics in a Changing Global Economy* (Canadian Transportation Research Forum Proceedings of the 1998 Annual Conference, Edmonton, Alberta, May 1998), pp. 286-314.**

In this paper, the background to Shipping Conference Legislation in Canada, EEC and USA; emerging developments and trends; and the debate on major issues in liner shipping are briefly examined.

11. **Joseph Monteiro and Gerald Robertson, *Competition Policy Activities Related to the Transport Sector, 1976-1996* in *Logistics in a Changing Global Economy* (Canadian Transportation Research Forum Proceedings of the 1998 Annual Conference, Edmonton, Alberta, May 1998) , pp. 503-532.**

This paper examines the three major activities of the Competition Bureau in transportation over the past two decades (1976-1996). These are Competition Enforcement; Regulatory Interventions; and Policy Development.

12. **Joseph Monteiro and Gerald Robertson, *Recent Trends in Regulatory Interventions (1991-1998)* Competition Policy Record, Vol. 3. 1999, pp. 46-63.**

This paper reviews the major trends in regulatory interventions by the Competition Bureau over the period 1991-1998. In particular it focuses on the major sectors of resources and telecommunications in which most of the interventions were made in the last ten years.

13. **Joseph Monteiro and Gerald Robertson, *Shipping Conference Legislation in Canada, EEC, and the USA: Background, Emerging Developments, Trends and a Few Major Issues*, Transportation Law Journal, Spring 1999.***

This paper examines the background to the Conference legislation in Canada, the EEC and the USA. It reviews the legislation in these respective countries together with their rationale. It points out the major developments and trends that are occurring in shipping and some of the major issues that are likely to arise. The paper also contains a short Bibliography of recent developments, a table of legislative changes in the three countries, and the major theories in shipping used to justify the continued need for conference legislation.

14. **Anindya Sen, *Testing The Offset Hypothesis* (Canadian Transportation Research Forum Proceedings of the 1999 Annual Conference, Montreal, Québec, May 1999).****

The enactment of mandatory seatbelt legislation may be significantly correlated with a decline in total driver fatalities. However, the presence of such legislation may give drivers an increased sense of security resulting in an increase in accidents which may offset the decline resulting from the mandatory legislation. This paper examines these various claims using econometric techniques.

15. **Joseph Monteiro and Gerald Robertson, *Amendments to the US Shipping Act 1984. How do these Reforms Compare to the Existing Provisions in the Shipping Conferences Exemption Act, 1987? Is there need for Change?* Competition Policy Record, Summer/Autumn 1998, Vol. 19, No. 2, pp. 25-33.**

This brief note examines the major provisions in the recent shipping reforms of the US. It compares these provisions with the existing provisions in the *Shipping Conferences Exemption Act, 1987* in Canada and inquires if there is need to revise the Canadian legislation in light of the changes in the US.

16. **Alan Gunderson, Joseph Monteiro, and Dr. Robertson C. Gerald, "Competition Bureau Advocacy of Competition in the Canadian Telecom", *Global Competition Review*, June/July 1999, pp. 20-26.**

This article traces how the Canadian Competition Bureau has used regulatory intervention to pursue competition policy goals in the telecommunications industry. It briefly examines the enforcement activities; and advocacy activities in the peripheral markets, the long distance telephone market, cable TV and local telephone market, and the overseas telephone market. It then examines the regulated conduct defence and forbearance and whether competition creates any benefits.

17. **André Lafond, "Evolution of the Regulatory Process The Impact of Deregulation", *Adapting to New Realities*, Canadian Telecommunications Policy Conference, 1998, pp. 103-108.**

This brief article provides the Competition Bureau's perspective on the transition to competitive markets in telecommunications and the interface between regulation and competition law at a time when the Canadian Radio-television and Telecommunications Commission is increasingly exercising its forbearance powers under the *Telecommunications Act*.

18. **Joseph Monteiro, *Economic Issues in Marine Pilotage-Will the Recent Reforms Succeed?*, Canadian Transportation Research Forum Proceedings of the 2000 Annual Conference, Charlottetown, Prince Edward Island, June 4 - June 7th, 2000, pp. 58-87.**

This paper examines marine pilotage in Canada, pilotage regulations and provides an analysis of the major economic issues in the provision of pilotage services. It reviews attempts to bring about industry reforms.

19. **Joseph Monteiro, *Regulatory Reforms in Canadian Transportation Since 1987*, Canadian Transportation Research Forum Proceedings of the 2001 Annual Conference, Vancouver, British Columbia, May 6-9, 2001, pp. 101-120.**

This paper reviews the regulatory changes that have occurred in the various transportation modes since 1987.

20. **Joseph Monteiro and Gerald Robertson, *The Shipping Conferences Exemption Act: a Step Towards the US Reforms - But Are We Moving in***

the Right Direction?, Canadian Transportation Research Forum Proceedings of the 2002 Annual Conference, St. John's, Newfoundland, May 12-15, 2002, pp. 302-318.

This paper examines amendments to the Shipping Conferences in Exemption Act to increase competition and to enhance efficiency. It compares it to the recent changes adopted in the US.

21. Joseph Monteiro, David Krause and André Downs, *The Open Skies Agreement Between the United States of America and Canada - the Results. Does it Suggest the Need for a Wider Pact and a More Liberal Air Pact?*, Canadian Transportation Research Forum Proceedings of the 2002 Annual Conference, St. John's, Newfoundland, May 12-15, 2002, pp. 319-337.

This article reviews the major elements of Open Skies Agreement between the United States of America and Canada in 1995. To determine whether there is need for widening the Agreement, statistical data relating to new services, volume of services, concentration and fares are examined. The findings of other studies are also reported.

22. Joseph Monteiro and Benjamin Atkinson, *Rotary Wing Aviation in Canada*, Canadian Transportation Research Forum Proceedings of the 2002 Annual Conference, St. John's, Newfoundland, May 12-15, 2002, pp. 353-370.

This paper examines the changes in the structure that have occurred in the helicopter industry between 1986-1999 together with regulations in the pre-deregulation and post-deregulation period. The extent of competition in this industry is then examined.

V. THEORETICAL ISSUES IN INDUSTRIAL ORGANIZATION

1. Jeffrey Church and Roger Ware, *Delegation, Market Share and Limit Price in Sequential Entry Models*, International Journal of Industrial Organization, Vol. No. 5, July 1996, pp. 575-609.*

This paper examines issues relating to entry deterrence and limit pricing. The authors construct a model of equilibrium market structure

with sequential entry in which firms have U-shaped average cost curves. The equilibrium is characterized completely in the case of linear demand and quadratic costs. The authors determine the circumstances under which delegation of entry deterrence occurs. Whether firms delegated the task of entry deterrence find it costly or not is shown to depend in a parametric way on the limit price. The authors show that the strategic equilibrium is socially inefficient relative to the free-entry Churned equilibrium.

2. **Andy Baziliauskas and Brian Rivard, *Impeding Toe-Hold Entry Through Exclusive Contracts* (Draft Working Paper, June 1996).**

This paper provides a theoretical analysis of issues relating to exclusive contracting and entry deterrence. In particular, it provides a novel explanation of how exclusive contracts can successfully deter new entry by foreclosing access to new buyers. It is argued that such an explanation is relevant to issues regarding exclusive contracts that arose, for example, in the *NutraSweet* case.

3. **Andy Baziliauskas, *Optimal Incentive Compatible Mechanisms With Investment* (Fall 1995; an early version of this paper was presented at the Western Economics Association Meetings, June 1994).**

This paper studies two theoretical problems relating to the optimal structure of contracts and investment. In each case, the designer of the optimal contract must take into account investment incentives and the fact that agents have private information about their preferences.

4. **Ignatius Horseman and Brian Rivard, *A Note on Advertising* (Draft Working Paper, May 1996).**

This paper presents a model of endogenous product differentiation and advertising. It examines the role of advertising as a direct and indirect signal of product quality. It also demonstrates the existence of equilibria with cyclic advertising campaigns.

5. **Jeffrey Church and Neil Randal, *Systems Competition, Vertical Merger and Foreclosure* (Discussion Paper: University of Calgary, August 1995).***

This paper addresses the issue of market foreclosure through vertical integration in the context of markets where consumers purchase systems composed of hardware and software. Foreclosure occurs when a hardware firm merges with a software firm and the integrated firm ceases to supply compatible software for a rival technology or system. The authors find that foreclosure can be an effective strategy to monopolize the hardware market. They also conclude that the foreclosure equilibrium is inefficient: total surplus would be higher without foreclosure.

6. **Brian Rivard, *Monopolistic Competition, Increasing Returns and Self-Fulfilling Prophecies*, Journal of Economic Theory, Vol. 62, 1994, pp. 346-362.*,****

This paper examines a model in which extraneous uncertainty can generate economic fluctuations. In particular, economic agents form expectations of future fundamental economic variables based on the realization of random, non fundamental economic variables. In equilibrium, these expectations are self-fulfilling. Equilibria of this nature are referred to as Sunspot equilibria.

7. **Lilla Csorgo, *Subcontracting Patterns and Their Policy Implications* (Paper presented at the Western Economics Association Meetings, June 1994).**

Subcontracting is of interest not only because it may be a conduit for linkages between the formal and informal sectors or between small/medium sized enterprises and large industry, but because it may contribute directly to the efficiency and equity of the economy as a whole. The main findings of this study are that market forces tend to create subcontracting, as opposed to in-house production, in cases where it is efficient, with the rate, timing, and the goods involved in subcontracting being very closely related to transaction costs and technology.

8. **Patrick Hughes, *Cournot Oligopoly Distortions, Efficiency Gains and the Competition Policy Approach to Horizontal Mergers* (Paper presented at the Canadian Economics Association Meeting, May 1993).**

This paper examines the effect of horizontal mergers on Cournot distortions and efficiency. It is argued that mergers can have effects on both internal and external efficiency and that the magnitude of these effects depends not only on the combined pre-merger market shares of

the parties relative to outside firms, but also on the disparity between the parties' individual market shares. The paper then concludes that an assessment of "efficiency justifications" can act as a criteria for determining the likely net effect of a merger on welfare.

9. West, Doug and Gary Draper, "Evaluating Challenges to Non-price Vertical Restraints," *Canadian Competition Record*, Vol. 19, No. 3, Winter 1999- 2000.

There are several types of vertical restraints that have been of interest to antitrust economists such as resale price maintenance, territorial restrictions, exclusive dealing and tying. These restraints in certain circumstances can have a bearing on competition in the marketplace. In this paper, the authors evaluate the challenges to non-price vertical restraints.

10. Duhamel, Marc, "Essays on Second-Best Economic Policymaking with Price Makers," Ph.D. Dissertation, *University of British Columbia*, August 2000, pp. 1-110.*,**

VI. CANADIAN AND COMPARATIVE COMPETITION POLICY INSTITUTIONS

1. G. Bruce Doern and Stephen Wilkes, eds., *Comparative Competition Policy: National Institutions in a Global Market* (Oxford: Clarendon Press, 1996).*,**

This volume examines the implications of globalization and the growing interest in the international dimensions of competition policy for the institutional structure of competition policy in OECD countries. It examines the evolving role and boundaries of competition policy as well as the institutional culture of competition agencies from a political scene and public administration point of view. The book contains separate chapters outlining the institutional structure of competition policy in the U.S., Canada, Japan, the European Community, the United Kingdom and Germany, as well as the implications of current pressures for reconciliation of trade and competition policies.

2. G. Bruce Doern, *Fairer Play: Canadian Competition Policy Institutions in a Global Market* (Toronto: C.D. Howe Institute: 1995).*,**

Professor Doern's analysis provides an explicit political economy and institutional perspective on the structure and dynamics of competition policy in Canada and elsewhere. It examines the implementation of the major reforms enacted to Canadian competition legislation in 1986 and the organization and structure of the Bureau. The study highlights the increasing international focus of competition agencies in major OECD countries as well as the countervailing towards assertion of domestic policy priorities in the context of international relations.

3. **W.T. Stanbury, *Expanding Responsibilities and Declining Resources: The Strategic Responses of the Competition Bureau, 1986-1996* (A paper prepared for publication in a special issue of the *Review of Industrial Organization*, Vol. 13, Nos. 1-2, April 1998, pp. 177-204).**

This paper examines the changes in the responsibilities of the Director of Investigation and Research and the Competition Bureau in relation to the resources the Bureau needs to properly carry out its statutory mandate. It also examines various types of services produced by the Bureau. These changes and demands are related to changes in the financial resources available to the Bureau. A major part of the paper analyzes how the bureau has responded to its enlarged responsibilities, in light of a declining budget in real terms.

VII. INTERNATIONAL ASPECTS OF COMPETITION POLICY

1. **Zulfi Sadeque, *Competition Law and Policy: A Canadian Perspective* (Paper presented at the first meeting of the Working Group on Competition Policy of the Free Trade Area of the Americas, Lima, Peru, May 16-17, 1996).**

This paper identifies the principal features of the *Competition Act* and describes the administrative structure of the Competition Bureau and of the Competition Tribunal. It articulates reasons why the adoption and enforcement of competition law and policy is vital in the countries of the Western Hemisphere, to ensure that the benefits of trade and investment liberalization are not offset by the presence of private restrictive business practices.

2. **Arthur Kaell, Derek Ireland and Zulfi Sadeque, *Trade, Competition Policy, Innovation and Market Access* (Paper presented to a Roundtable of the OECD Trade Committee on New Dimensions of Market Access in a Globalizing World Economy, in Paris, June 1994).**

This paper examines the compatibility of competition and trade policy in light of the requirements of innovation policy. It concludes that the need to accommodate innovation complicates the relationship between trade and competition policy, though the severity of these problems will vary, depending on the characteristics of the countries in question.

3. **S. Zulfi Sadeque, *Competition Law, Market Integration and the NAFTA: The Canadian Perspective*, in *Competencia Economica Y Tratado de Libre Comercio* (Mexico City: Konrad Adenauer Stiftung, May 1994).***

This is the text of a presentation made to a conference on Mexican Competition Law and the North American Free Trade Agreement held in Mexico City. The paper emphasizes the general importance of competition policy for ensuring that the gains from trade liberalization are not offset by private barriers to trade. By way of illustration, it discusses the role that competition policy has played in sustaining Canadian competitiveness in the presence of freer trade.

4. **Derek Ireland, Zulfi Sadeque and Don Partridge, *Globalization, the Canadian Competition Act, and the Future Policy Agenda* (May 1993).**

This paper was prepared for the Conference on Trade, Investment and Competition Policies: Conflict or Convergence which was held by the Centre for Trade Policy and Law in Ottawa, May 18-19, 1993. It examines the role and importance of Canadian competition policy under a freer trade regime. It also offers some thoughts on the role of competition policy in Canada's future policy agenda, both internationally and domestically.

5. **Arthur Kaell, *International Linkages: Competition and Industrial Policies* (Bureau of Competition Policy, mimeo, December 1992).**

This paper provides a theoretical and analytical context for assessing the complex interactions between competition and industrial policies in the international setting. It points out that, in comparison to

other policy instruments, competition policy is based on legal statutes, a fairly common set of underlying principles, national treatment, and transparent procedures. These attributes suggest the possibility of an expanded role for competition policy in bringing efficiency and harmony to global markets.

6. **Gerald Robertson, W.T. Stanbury, Gernot Kofler and Joseph Monteiro, *Competition Policy, Trade Liberalization and Agriculture* (In *Harmonization/Convergence/Compatibility in Agriculture and Agri-Food Policy: Canada, United States and Mexico, Proceedings of the Third Agricultural and Food Policy Systems Information Workshop*, Edited by R.M.A. Loynes, Ronald D. Knutson, Karl Meilke and Daniel Sumner, 1997), pp. 119-154.***

This paper reviews the linkages between trade liberalization and competition policy. A brief comparison is made between the competition laws in Canada, USA and Mexico. It identifies emerging issues for the Competition Bureau in the Agri-food sector including its role in agricultural policy issues.

7. **Patricia M. Smith, *A Long and Winding Road: TRIPS and the Evolution of an International Competition Framework*, *Journal of International Economic Law*, Vol. 2, No. 3, September 1999, pp. 435-440.***

* For copyright-related reasons, copies are available only from the publisher.

** N.B. These studies were not prepared directly for the CPB.

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