THE COMPETITION TRIBUNAL

IN THE MATTER OF an Application by the Director of Investigation and Research under section 79 of the Competition Act R.S.C. 1985 c.C-34 as amended.

AND IN THE MATTER OF certain practices by A.C. Nielsen Company of Canada Limited.

BETWEEN:

THE DIRECTOR OF INVESTIGATION AND RESEARCH **Applicant**

- and -

A.C. NIELSEN COMPANY OF CANADA LIMITED

Respondent

- and -

INFORMATION RESOURCES, INC.

Intervenor



AFFIDAVIT OF PROFESSOR FRANK MATHEWSON (on behalf of the Respondent)

> - COMPETITION TRIBUNAL TRIBUNAL DE LA CONCURRENCE Exhibit No. No. de la pièc Filed on Déposée le Registrar Grettier وأراني المراز

AFFIDAVIT OF PROFESSOR FRANK MATHEWSON

- I, Professor Frank Mathewson, in the City of Toronto, in the Province of Ontario,

 MAKE OATH AND SAY:
- I hold an appointment as a Professor of Economics in the Department of Economics and as Research Associate in the Institute for Policy Analysis, both at the University of Toronto. My research and my university teaching is in applied microeconomics in general and the field of Industrial Organization in particular. For several years now, I have taught undergraduate and graduate courses in Industrial Organization in the Department of Economics at the University of Toronto.
- As a professional economist, I have been asked by Nielsen Marketing Research (Nielsen) and counsel to Nielsen to address the following issues:
 - 2.1 the competitive nature of the market for market tracking services for retailers and manufacturers in Canada;
 - 2.2 the competitive impact of the contracts between Nielsen and the suppliers of scanner data to Nielsen, including the competitive impact of the restrictions that prevent a supplier from making scanner data available to others.

- 3 My ability to comment on these issues is based on my experience and knowledge in the field of industrial organization and competition policy. I have also been provided with and have relied on information provided to me by Nielsen and its counsel.
- Attached hereto as Exhibit "A" to this affidavit is a true copy of the report prepared for Nielsen pursuant to its request.
- 5 My academic training and my research record are set out in my curriculum vitae which appears in Appendix A to my report. A brief summary of my experience as an expert witness appears with my curriculum vitae in Appendix A.

Sworn before me at the)
City of Toronto in the)
Province of Ontario)
this 20th day of September 1994.)

Professor Frank Mathewson

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A Commissioner, etc.

EXHIBIT A

EXPERT ECONOMIC EVIDENCE

OF FRANK MATHEWSON

IN THE MATTER BETWEEN

THE DIRECTOR OF INVESTIGATION AND RESEARCH

AND

NIELSEN MARKETING RESEARCH

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September 20, 1994

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- 1 Summary of Conclusions
- 1.1 There are alternative sources of market tracking data available in Canada.
- 1.2 Major retail grocery chains in Canada and many of the manufacturers who use market tracking services are large and capable of negotiating favourable terms in their contracts with suppliers of inputs such as Nielsen.
- 1.3 Since 1986, the contract negotiation process between the major retail grocery chains and Nielsen has been independent and sequential. This means that a firm such as IRI established in the US and other world markets could have chosen to bid on these contracts on any basis it saw fit, in accordance with each retailer's request.
- 1.4 I could find no evidence that Nielsen used financial inducements in an anticompetitive manner to induce the major retail grocery store chains to use Nielsen as their exclusive agent for scanning data.
- 1.5 I could find no evidence that the length of the contract with each of the major retail grocery chains reflects other than conventional commercial principles when parties negotiate a contract.
- 1.6 The evidence is that during the period 1986 to the present the real price of the Nielsen market tracking service was constant or declined marginally and the quality of the product increased as the scanning based data became more reliable and usable.

2 Analysis

2.1 The Products

- 2.1.1 The market for market tracking services in Canada and elsewhere is governed by contracts between suppliers and demanders of these services. It is these contracts that are the focus of the competition issues in this case. The products in this market include both data on consumer purchases and analyses of these data. Data are collected from retailers and consumers by intermediaries such as Nielsen. The data are processed, repackaged, frequently analyzed, and then sold back to retailers and manufacturers in the form of reports and applications. Conditions of sale are set out in the retailer and manufacturing contracts.

 Market tracking services are used by these retailers and manufacturers to formulate, implement, and monitor their marketing strategies.
- 2.1.2 For example, quantity and price data permit the user of the data to track the impact on demand of experimental price variation initiated through such devices as local promotions in place for specific time intervals. Put simply, data on consumer purchases under various conditions are collected from retail sources and then processed and sold to demanders, frequently with additional software products and applications, and consulting services (in total, decision support services). The retailers can be food and drug retailers as well as mass merchandisers. The latter are growing in importance in the retail sector in North America. The manufacturers are all of those distributing their products to the market through the relevant set of retail outlets.

2.1.3 The sources for the data include:

- (i) data taken from the point of sale (retail outlet) and provided by the retailer using scanning technology;
- (ii) data taken from store audits conducted by the intermediary;
- (iii) data taken from withdrawals from the retailer's warehouse:
- (iv) data taken from factory shipments;
- (v) data taken from consumer panels, set-up and maintained by the various intermediaries using diary data;
- (vi) data collected from consumer panels where consumers, set-up and maintained by the various intermediaries, using a portable scanner, scan their own purchases at home.

There are two features of these data worthy of note.

2.1.4 The first is that users of these data need data compiled and aggregated along several lines. Sometimes highly disaggregated data are required, for example, the impact of selective price reductions or in-store advertising and display initiatives on specific products or product categories in specific locations. Sometimes the data needs are more aggregated such as the movement of product at specific prices within a given region or province or country-wide. Sometimes the data are aggregated by brand names or product categories for specific retail chains ('key account' data). This permits a manufacturer to track product flow through a particular retail chain. The point is that data sources and needs are diverse. This permits business opportunities at various levels (geographically or trade level specific) in this

industry both to collect data and to provide the decision support services that are demanded appropriate to the data at hand.

- 2.1.5 The second feature relates to the nature of the data collection itself. In general, the more complete the sample size, the more reliable are the data: incomplete samples can lead to sampling error. The trade-offs are in terms of the cost of increasing the sample size against minimizing sampling error. This general principle is applicable to any geographical sample. For example, this principle has relevance to national data. Reliable national or aggregate data require a representative sample from the regions of the country. Otherwise by definition, the data cannot be national. Further discussion on this point appears below.
- 2.1.6 As I note above, these data do not speak for themselves but require additional decision support services which use the data as an input, utilizing and transforming the data to produce reports and evaluations relevant to marketing and price strategy for the end user. The identity of the firm producing the software products and applications and consulting services may be the same as the intermediary collecting and repackaging the data or it may be a different firm. Nothing prevents any end user from purchasing the data from one source and then using another consultant as a marketing advisor to the firm. In general, any contract governing the purchase of any subset of data from the retailers may be the same or a different contract from that contract governing the additional services provided to the retailer

¹ This does <u>not</u> mean that regional samples are inferior to national samples. What it does mean is that within any geographical market, a larger sample will reduce sampling error.

by the data intermediary. Nielsen is one intermediary in Canada that provides both services: it collects particular marketing data and sells decision support services to both the retail and manufacturing sectors. Other intermediaries provide data from alternative sources and compete with Nielsen in providing decision support services. Even with Nielsen's current contracts with retailers, a firm such as Information Resources Inc. (IRI) could and does provide modelling and other analytic services to clients in both the retail and manufacturing sector.

2.2 The Players in the Market

- (a) retailers
- 2.2.1 The retail sector in Canada is characterized by a high degree of regional and even provincial specialization. Within each of these regions, particular regional chains have a strong market presence. In 1985, when it was considering the acquisition of scanning data, Nielsen identified each of the important regional grocery distributors as follows:

For scanning data, Nielsen currently has contracts with major retail grocery chains such as

- 2.2.2 This list reveals that the retail chains are large and have regional concentration. Provision of a national tracking service based on scanning data certainly is facilitated by having ready access to data collected from each of these large chains. An intermediary wishing to produce a national market tracking service would need data for each of the regions of Canada. These could be either collected by the intermediary or purchased from another intermediary.
- 2.2.3 The regional concentration of these retail chains also reveals that these players are unlikely to be contract takers on an individual basis. Terms of trade and other contractual conditions will actively reflect the wishes and desires of each retailer. If a retailer decides that it is desirable to have a single agent to process and market the data, then it is reasonable to expect single representation. On the other hand, if a retailer decides to sell to more than one intermediary, that too is each retailer's choice.

(b) manufacturers

2.2.4 While the list of Nielsen's Canadian manufacturing clients reveals some variation in the size of these firms, the largest of these firms are large international firms. For example, the top 10 customers (out of approximately food or grocery customers), listed in order of size of expenditures on Nielsen's mainline food tracking service are:

These top 10 customers account for % of Nielsen's gross revenues from its major customers for Nielsen's MarketTrack Grocery (food only) service.

- 2.2.5 These manufacturing firms operate internationally. It is reasonable to claim that they are sophisticated and knowledgeable and have significant bargaining power in their relationships with their suppliers to secure inputs at minimum prices and on reasonable terms. These inputs include those marketing services such as marketing data and various modelling and strategic services that use these data.
- 2.2.6 Such large firms are unlikely to be the recipient of any alleged anticompetitive

behaviour on the part of any supplier of inputs including those supplying national market tracking data and analysis. Individually or collectively, these manufacturers have bargaining power. For example, these manufacturers could cut back on their demand for Nielsen's services. They could withhold payment for services already used. They could purchase services from an alternative source of marketing tracking information such as ISL. The manufacturer's individual bargaining ability may be enhanced through common membership in the Grocery Products Manufacturers of Canada. For example, any threat from this collective of manufacturers to exercise a boycott of any potentially non-competitive provision of inputs such as national market tracking services and its applications would constitute considerable market discipline on the provision of these data and accompanying services.

2.2.7 Another option open to these international manufacturers is to influence favourably the terms and conditions that they receive in Canada through the terms and conditions that they are accorded by Nielsen in other national markets. I understand from Nielsen personnel that such efforts actually occur during contract negotiation. As a consequence, the realized competition, for example in Canada, is capable of reflecting the competitive conditions that prevail in other national markets such as the US.

2.3 The Nature of the Product Market: Market Tracking Services

2.3.1 The product market (market tracking services) is large and diverse. As I indicate above, there are alternative sources of marketing data and analysis. The data required may

be local, regional, provincial or national. The data may be sourced from store scanning, store audits, warehouse shipments, factory shipments, consumer diaries, and consumer scanning.

- 2.3.2 There is variation in the quality of these data based on the extent of coverage and reliability but no retailer or manufacturer is restricted to a single choice. For example, in the Canadian market, attributes of market tracking services vary according to the source of the data and the firm supplying the data.
- 2.3.3 Smaller manufacturers whose markets are provincial or regional may choose to use in non-scanning based marketing data and analysis. As such, they are unaffected by the contracts in force for collecting and processing national scanning data.

2.4 The Contracts in the Market

(a) historical

2.4.1 The evidence is that in 1986, IRI initiated an exclusivity game with the major Canadian retailer chains by proposing to the major food retail chains in Canada that IRI be the exclusive agent for assembling, processing and selling scanning data collected from the major Canadian grocery retailers. I understand that this initial IRI offer was on an 'all-ornothing' basis to these major grocery store retail chains. As part of its contract, IRI would process the data, offer the processed packages to the individual food retailers that were specific to each chain and also act as the sole broker of these data, possibly selling other

marketing and decision support services to the appropriate manufacturers. While other food retailers had reached an agreement with IRI, Canada Safeway, Steinbergs, and Loblaws did not. The claim is that as Canada Safeway represented a large percentage of retail grocery sales in Western Canada, Safeway's inclusion was important for a complete data set.

Safeway's hold-out afforded an opportunity for Nielsen to respond with independent bids of its own to the contractual offers made by IRI.

2.4.2 Confronted with the fact that IRI had initiated a bidding game based on exclusivity, it is reasonable to claim that Nielsen had little choice but to respond with exclusive contract proposal of its own. If Nielsen had responded with non-exclusive contractual bids, then one outcome unfavourable to Nielsen would be for IRI to have secured some exclusive retail customers and for Nielsen to have secured some customers on a non-exclusive basis. These retail customers then would have been in a position to also sell their data to IRI giving IRI the opportunity to secure a national sample, sufficiently reliable to market a national scanning based market tracking service. Under this outcome, Nielsen could have secured some retail customers but found itself unrepresented in certain regions of the country. Furthermore, Nielsen would be in a weak position to strike a deal to secure IRI's exclusive data. To produce national data, Nielsen would have had to replace the missing data with data from other sources. If this were grossly inferior, Nielsen would have had to abandon its attempt to produce national marketing tracking data services. Of course, Nielsen could have developed a regional market tracking service.

- 2.4.3 In 1986, with the initiative of IRI, rights to acquire scanning data from all major retailers were up for bidding. The collective initiative of IRI with all major retail grocery chains was promoted by the Retail Council of Canada. For 1986, it is reasonable to claim that the dominant strategy for Nielsen was to respond by offering exclusive contracts of its own. The evidence is that, in 1986 in contrast to IRI's all-or-nothing bid, Nielsen's bids were nonetheless on an individual basis to each major retail grocery chain independent of the other chains. The end result of this initial game was that Nielsen was the successful bidder.
- 2.4.4 Subsequent bids for retail grocery chain contracts were different from the 1986 period. As the contracts that were signed in 1986 did not all expire at the same moment in time, future contracts were negotiated between intermediaries such as Nielsen and retailers in a continuing independent fashion but one that was now sequential in nature. Any potential entrant to the marketing service business in Canada who wished to bid for the right to assemble, process and sell scanner data could bid on each retailer contract as it came due. Any potential entrant who successfully secured a contract with exclusive rights to broker the scanning data of a specific retailer would be in a position to negotiate with other intermediaries over the exchange of their data to facilitate a scanning based market tracking service.
- 2.4.5 The original retail contracts have all expired and, for most of the original retailers, these contracts have been renegotiated. The termination dates for the second round of contracts continues to reveal variation. For example, the second Canada Safeway contract is

currently under negotiation while the second contract does not expire until

As well, some retailer contracts have options that permit the retailer to terminate the contract before the contract's official termination date

Along the way, other retailers (for example, have become suppliers of scanning data to Nielsen.

(b) prospective

- 2.4.6 While Canada provides one example of how the business of collecting and processing national scanner data might evolve, other potential arrangements are possibilities. For example, intermediaries and sellers of marketing services such as Nielsen could act as brokers, collecting and processing the data for retailers and manufacturers (together with selling other decision support services) with those manufacturers desiring to purchase key account data paying the retailer directly. A market with two major retailers might have two intermediaries assembling, processing and marketing scanning data on an exclusive basis for each. Under this arrangement each intermediary could provide key account data by respective retailer. Each manufacturer desiring a national tracking sample could enter into a separate contract with an intermediary (such as Nielsen or IRI) to assemble and collate the data bases to form a national sample. This illustrates another possibility for organizing market tracking services.
- 2.4.7 Recently both and requested that Nielsen submit contractual bids on both an exclusive and non-exclusive basis. This evidence supports the

claim that major grocery distributors in Canada are contract makers. In a world of sequential negotiation, each retail grocery chain selects that contract which is in the best interest of that chain.

(c) exclusivity

- 2.4.8 As contracts for scanning data continue to be negotiated and renewed upon their termination, for each retail contract, the process continues to be independent and sequential. In the face of retailer power to alter the form of the contract and to request bids from alternative suppliers, there is no ex ante guarantee that any exclusive contractual bid from Nielsen will be successful.
- 2.4.9 IRI had and continues to have the option to bid on any contract of Nielsen that expires. Based on its experience in the US, IRI is already present in market tracking service. IRI is also present in Canada marketing software services to retailers as well as to manufacturers. This is not an issue of a de novo potential entrant. Furthermore, IRI's position for these expiring contracts does not mirror Nielsen's position in 1986. As I note, Nielsen's contractual bids were and are on an independent not an all-or-nothing basis. IRI could compete for the renewal business of the major retail grocery chains in Canada, on any basis it chooses.
- 2.4.10 For example, suppose that IRI also bid on the contract on both an exclusive and a non-exclusive basis. One possible solution is that

choose IRI as its exclusive agent. (When the contracts were simultaneously bid in 1986 with the all-or-nothing exclusive initiative by IRI, division of the contracts across Nielsen and IRI did not appear to be a possibility.) This would leave IRI in a position to control as an exclusive agent an important data set from Western Canada.

2.4.11 There is evidence that the exclusionary and termination provisions vary across retailer contracts

For example,

This could have broad application. This suggests that exclusionary and termination features in the contracts were not blanket provisions but were influenced through individual negotiation. This variability also provides some support for the claim that retailers do bargain over contractual provisions.

2.4.12 Ex-post, Nielsen's success at gaining exclusivity in its independent negotiations with the major retail chains in Canada at renewal time did offer the virtue of a complete national sample that facilitates a national market tracking service based on a complete sample from each retail region of the country.² Similar to the hypothetical discussed above in 2.4.6, this outcome also satisfies the demand for national market tracking data. I can find no evidence that suggests that the ex-post exclusive arrangement currently in place in Canada is more or

² The ease of assembling a representative national sample of data was recognized as an ex ante objective by IRI in its initiation of the exclusivity game across all major Canadian food retailers in 1986.

less competitive than the individual broker arrangements hypothesized above.

(d) financial inducements

- 2.4.13 With sparse and separated population centres, Canada has correspondingly sparse and separated retail markets. It is reasonable to claim as a consequence that even modest efficiencies from size in retailing (warehousing, distribution, and brand name capital) plus diseconomies associated with large distances will lead to a limited number of significant retail chains in Canada with geographical specialization.
- 2.4.14 With retail contracts for scanning data independently negotiated across the retail grocery chains, the expectation is that the payments to each retailer negotiating a contract with Nielsen will reflect at least the alternative opportunities available to that retailer to sell its data elsewhere (for example regional or key account) and be no greater than the value added by the inclusion of that retail chain's scanning data into an overall national market tracking product.
- 2.4.15 If access to national data provide higher quality and more reliable data, then a product with enhanced value will be worth more to users and should be associated with a higher payment to retail participants. To no one's surprise, larger and more powerful chains whose data is more critical to the end product are able to bargain for a larger proportion of the gains from trade associated with the product. This is consistent with competition. It suggests that larger retail organizations will command a larger price for their data and that

this price is limited by the value accorded the product in the larger market for marketing services. One option open to any retailer is to sell its scanning data to an intermediary who would use the data to provide either a regional market tracking service or to provide chain-specific key account data to manufacturers.

- 2.4.16 As I note above, exclusive contracts accepted by all major retailers have the ex-post advantage of national coverage. But, as I also note above, other contractual arrangements could exist that offer consistent national representation for sampling purposes.
- 2.4.17 Consider another hypothetical: If the existing contractual arrangements in the

 Canadian market were anticompetitive, then the food manufacturers would be faced with
 anticompetitive prices for market tracking products. Consistent with the Director's claim,
 suppose further that there are no substitute marketing service products available to
 manufacturers to discipline the sale of scanning based national market tracking data. Any
 alleged financial inducement offered to retailers from a single intermediary would flow from
 the ensuing inflated and anticompetitive revenues from the sale of the product to
 manufacturers. Under this hypothetical, enhanced competition from other intermediaries
 should then reduce the financial inducements as the prices faced by manufacturers would be
 lower as would be the intermediaries' revenues. Is this is the expectation of IRI? Based on
 the evidence from its promotional material to retailers, IRI's answer is no.
- 2.4.18 In its promotional material, IRI claims that IRI's entry into the Canadian market

would simultaneously both enhance competition and lead to larger payments to retailers.

This claim runs counter to the anticompetitive hypothetical posed in 2.4.17 above.

2.5 Competitive Effects

- (a) length of contract
- 2.5.1 There are a number of commercial factors that determine the length of the contract.

 For the retailer contracts at issue here, I am informed by Nielsen personnel that the pressure from retailers is for comparatively shorter contracts.

The rationale is that shorter term contracts enhance flexibility for retailers to adapt to unfolding events. For example, a retail chain that realized an enhanced market share might argue that its scanning data are more valuable and the fees paid for the use of this data should increase. With exchange governed by the contracts currently in place, this would require a renegotiation of the existing contract. A shorter term contract would permit more frequent negotiation. Intermediaries such as Nielsen wish to have comparatively longer term contracts. The rationale is that securing retailers for a longer period permits the intermediary to plan its investments and product development with enhanced security. The observed contract length is determined in the negotiation process between the retail grocery chain and the intermediary. Its length reflects these commercial factors. I could find no evidence of strategic manipulation of contract length by Nielsen to facilitate any anticompetitive objective.

- (b) prices and services in Canada
- 2.5.2 The evidence from Nielsen is that its real prices in Canada for its scanning based market tracking product not only have not risen over the period from 1986 to the present but have fallen slightly. Real prices remained constant in spite of the difficulties experienced by Nielsen in bringing on stream its scanning-based market tracking services. These difficulties resulted from the low and variable quality of raw data submitted to Nielsen by the retail grocery chains.
- 2.5.3 During this period, Nielsen maintained data collection from both its former data sources (consumer panels, store audit, and warehouse withdrawal) and the scanning based sample of retail grocery outlets. The evidence is that Nielsen's costs increased at the same time as it commenced significant payments to the retailers under its obligations in the retail contracts.
- 2.5.4 As the scanning based data improved, Nielsen personnel maintain that the quality of the market tracking services provided to both retailers and manufacturers improved. In sum, the period from 1986 to 1992 was characterized by constant or marginally declining real prices associated with a national market tracking product, a discrete improvement in the quality of the product as scanner based data became more reliable and useable, and increased costs to Nielsen during the transition phase because of the need to maintain the former data sources and collection until the quality of the scanning based data met minimum quality and regional representation standards.

(c) entry

2.5.5 Entry into marketing services was feasible during the period from 1986 to 1994. First a firm providing marketing services could obtain any required data input from its client whether this client was a retail grocery chain or a manufacturer. Entry into the data generation business using data provided by non-scanning sources of data was also feasible. Finally there were the critical points when retail contracts expired where entrants could bid against Nielsen on whatever terms they chose and the retail grocery chains requested. Of course, in the face of competition, there is no guarantee that a given entrant or entry strategy will be successful. A potential entrant into Canada such as IRI building on its US and worldwide base would appear to have a considerable advantage over a de novo entrant. There is nothing to prevent IRI from bidding aggressively and sequentially for each retail contract in Canada as it terminated. As I point out above, given the nature of the market for retail groceries in Canada, successfully winning the contract for one retail chain would provide an entrant with something of value to trade with Nielsen to satisfy market demands for a national market tracking product. As an alternative, IRI could consider a toehold-entry strategy of building from a regional or key account to a national service.

3 Conclusions

- 3.1 In Canada in 1986, the contractual process for the sale of scanner data to data intermediaries was initiated by IRI's exclusive, all-or-nothing bids to major retail grocery chains.
- 3.2 This bid by IRI was unsuccessful. Nielsen successfully negotiated contracts with these chains on an chain-independent basis.
- 3.3 There are alternative sources of market tracking data available in Canada.
- 3.4 Major retail grocery chains in Canada and many of the manufacturers who use market tracking services are large and capable of negotiating favourable terms in their contracts with suppliers of inputs such as Nielsen.
- 3.5 Since 1986, the contract negotiation process between the major retail grocery chains and Nielsen has been independent and sequential. This means that a firm such as IRI established in the US and other world markets could have chosen to bid on these contracts on any basis it saw fit, in accordance with each retailer's request.
- 3.6 I could find no evidence that Nielsen used financial inducements in an anticompetitive manner to induce the major retail grocery store chains to use Nielsen as their exclusive agent

for scanning data.

- 3.7 I could find no evidence that the length of the contract with each of the major retail grocery chains does not reflect conventional commercial principles when parties negotiate a contract.
- 3.8 The evidence is that during the period 1986 to the present the real price of the Nielsen market tracking service was constant or declined marginally and the quality of the product increased as, among other things, the scanning based data became more reliable and usable.

APPENDIX A

CURRICULUM VITAE

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May 1994

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Economics, University of Toronto (1969 to present)

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Previous Positions: Visiting Research Fellow, Department of Political Economy, University

College, University of London, 1976-77.

Professor of Economics, Faculty of Management Studies, University of

Toronto, 1970-82.

Senior Research Associate, Ontario Economic Council, 1978-79.

Associate Chairman and Director of Graduate Studies, Department of

Economics, University of Toronto, 1978-83.

Visiting Scholar, Graduate School of Business, University of Chicago,

Spring Quarter, 1984.

Visiting Professor, Center for the Study of the Economy and the State,

University of Chicago, Spring Quarter, 1985.

Education:

B.Com. University of Toronto 1965 Ph.D. Stanford University 1970

Fellowships and Other Honors:

Social Science and Humanities Research Council

Research Fellowship (1994, 1991, 1989, 1987, 1986, 1985).

Social Science and Humanities Research Council Leave Fellowship

(1983-84).

Canadian Council Leave Fellowship (1976-77).

Canada Council Doctoral Fellowship (1966-69).

Woodrow Wilson Fellowship (1965).

Editing:

Associate Editor, International Journal of Industrial Organization

(1982-1988).

Co-editor with J. Stiglitz, New Developments in the Analysis of Market

Structures, 1985, Cambridge: MIT Press.

Editorial Board, Economic Inquiry (1987-present)

Editorial Board, Journal of Industrial Economics (1990 - present)

Editorial Board, Journal of Economics of Business (1992 - present)

Editorial Board, Managerial and Decision Economics (1994 - present)

Co-editor with M. Trebilcock and M. Walker, The Law and Economics

of Competition Policy, 1990, Vancouver: The Fraser Institute

Other Activities:

Program Committee, Conference on Industrial Organization,

International Economics Association, 1982.

Program Committee, European Association for Research in Industrial

Economics, 1983 - 91.

Publications:

"A.Consumer Theory of Demand for the Media", <u>Journal of Business</u>, 45(2), April 1972: 212-224.

"A Note on the Price Effects of Market Power in the Canadian Newspaper Industry", <u>Canadian Journal of Economics</u>, 5(2), May 1972: 298-301.

"Metering Costs and Marginal Cost Pricing in Public Utilities", with G.D. Quirin, <u>Bell Journal of Economics</u>, 3(1), May 1972: 335-339.

Cents and Nonsense: The Economics of Canadian Policy Issues with J. Carr and J. McManus, Holt, Rinehart and Winston, 1972, 124 pages.

"Price Effects of Market Power in the Canadian Newspaper Industry: Reply", <u>Canadian Journal of Economics</u>, 7(1), February 1974: 130-132.

"Economies of Scale in Financial Institutions: A General Model Applied to Insurance" with P. Halpern, <u>Journal of Monetary</u> <u>Economics</u>, 1(2), April 1975: 203-220.

"The Benefits and Costs of Rate of Return Regulation" with J. Callen and H. Mohring, <u>American Economic Review</u>, 66(5), June 1976: 290-297.

"Economies of Scale in Financial Institutions: Reply" with P. Halpern, Journal of Monetary Economics, 3, 1977: 127-131.

"The Residential Demand for Electrical Energy and Natural Gas: A Model Estimated for Canada" with R. Hyndman and Y. Kotowitz in W.T. Ziemba et al (eds.), Energy Policy Modelling: United States and Canadian Experiences, Martinus Nijhoff Press, 1980, pp.86-102. (Paper presented at the Canadian Energy Policy Modelling Conference, Vancouver, 1978.)

Economics of Fiscal Transfer Pricing in Multinational Corporations with G.D. Quirin, University of Toronto Press (Ontario Economic Council Research Studies), 1978, 208 pages.

"Some Issues on Public Advertising" with Y. Kotowitz, <u>Journal of Contemporary Business</u>, 7(4), 1979: 123-124.

"Informative Advertising and Welfare" with Y. Kotowitz, American Economic Review, 69(3), June 1979: 284-294.

"Advertising, Consumer Information and Product Quality" with Y. Kotowitz, <u>Bell Journal of Economics</u>, 10(2), Fall 1979: 566-588. (Paper presented at the European Econometric Society Meetings, Geneva, 1978).

Information. Entry and Regulation in Markets for Life Insurance, University of Toronto Press (Ontario Economic Council Research Studies), 1982, 117 pages.

"An Economic Theory of Union-Controlled Firms" with Y. Kotowitz, Economica, 49 (196), November 1982: 421-433. (Paper presented at the Canadian Economics Association Meetings, Quebec City, 1978).

"The Rationale for Government Regulation of Quality"; "Policy Alternatives in Quality Regulation" with D. Dewees and M. Trebilcock, "Markets for Insurance: A Selective Survey of Economic Issues", in D. Dewees (ed.), The Regulation of Quality, Toronto: Butterworths 1983.

Regulation of Canadian Markets for Life Insurance with R. Winter, Department of Consumer and Corporate Affairs, Government of Canada, 1983.

"Entry, Size Distribution, Scale and Scope Economies in the Life Insurance Industry" with S. Kellner, <u>Journal of Business</u>, 56(1), January 1983: 25-44.

"Vertical Integration by Contractual Restraints in Spatial Markets" with R. Winter, <u>Journal of Business</u>, 56(4), October 1983: 497-518.

"The Incentives for Resale Price Maintenance" with R. Winter, Economic Inquiry, 21(3), July 1983: 337-348. (Paper presented at the Western Economic Association Meetings, San Francisco, 1981).

"Information, Search and Price Variability of Individual Life Insurance Contracts", <u>Journal of Industrial Economics</u>, 32(2), December 1983: 131-148. (Paper presented at the Canadian Economics Association Meetings, Montreal, 1980).

"The Economics of Vertical Restraints in Distribution" with R. Winter in J. Stiglitz and G.F. Mathewson (eds.), New Developments in the Analysis of Market Structure, 1986: MIT Press. (Paper presented at the IEA Conference, Ottawa, 1982).

"An Economic Theory of Vertical Restraints" with R. Winter, Rand Journal of Economics, 15(1), Spring 1984: 27-38. (Paper presented at the EARIE Conference, Louvain, 1982).

"The Economics of Life Insurance Regulation: Valuation Constraints" with R. Winter in J. Finsinger and M. Pauly (eds.), <u>The Economics of Insurance Regulation</u>, 1986, MacMillan and Company Limited. (Paper presented at IIM Conference on Regulation in Insurance Markets, Berlin, 1984).

"The Economics of Franchise Contracts" with R. Winter, <u>Journal of Law and Economics</u>, (3), October 1985: 503-526. (Paper presented at the EARIE Conference, Fontainebleau, 1984).

Competition Policy and Vertical Exchange with Ralph Winter, University of Toronto Press, (Royal Commission on the Economic Union and Development Prospects for Canada), 1985, 119 pages.

"Advertising and Consumer Learning" with Y. Kotowitz, in FTC Conference Volume, Consumer Protection Economics, 1986. (Paper presented at the FTC Conference on Advertising, Washington, 1984).

"Is Exclusive Dealing Anti-Competitive?" with R. Winter, <u>American</u> Economic Review, 77(5), December 1987: 1057 - 1062.

"Unlimited Liability as a Barrier to Entry" with Jack Carr, <u>Journal of Political Economy</u>, 96(4), August 1988: 766-784.

"Vertical Restraints and the Law: A Reply" with Ralph Winter, Rand Journal of Economics, 19(2), Summer 1988: 298 - 301.

"Unlimited Liability and Free Banking in Scotland: A Note" with Jack Carr and S. Glied, Journal of Economic History, 49(4), 1989: 974-78.

"The Economic Effects of Automobile Dealer Regulation" with Ralph Winter, <u>Annales d'Economie et de Statistique</u>, 15/16, Juillet-Décembre 1989: 409 - 426.

"The Economics of Law Firms: A Study in the Legal Organization of the Firm" with Jack Carr, <u>Journal of Law and Economics</u>, 33(2), 1990: 307 - 330.

"Reply to R. Gilson" with Jack Carr, <u>Journal of Political Economy</u>, 99(2) 1991: 426 - 428.

"Territorial Rights in Franchise Contracts" with Ralph Winter, (presented at the EARIE Conference, Budapest Hungary, 1989), Economic Inquiry, 32(2), 1994: 181 - 192.

Ensuring Failure with Jack Carr and Neil Quigley, 1994 Toronto: C.D. Howe Institute.

"Stability in the Absence of Deposit Insurance: The Canadian Banking System 1890 - 1966" with Jack Carr and Neil Quigley, forthcoming Journal of Money, Credit and Banking.

Papers Under Review:

"Tying As a Response to Demand Uncertainty" with Ralph Winter (presented at the EARIE Conference, Lisbon Portugal 1990).

"The Political Economy of Deposit Insurance" with Jack Carr and Neil Quigley.

"Buyer Groups: Towards a Theory of Managed Competition" with Ralph Winter (presented at the EARIE Conference Tel Aviv Israel 1993).

"Rent Capture in Canadian Medical Care" with Jack Carr (presented at the EARIE Conference, Tel Aviv Israel 1993).

"Stability in the Absence of Deposit Insurance: The Canadian Banking System 1890 - 1966" with Jack Carr and Neil Quigley.

Work in Progress:

"Buying Groups and Strategic Behavior," with Ralph Winter.

"Partnership Dissolution," with Aloysius Siow.

Expert Evidence:

I was the economic expert for the Pharmacy Association of Nova Scotia (and the other accused) in November 1992 -- Queen V. Nova Scotia Pharmaceutical Society et al.

I was the economic expert for Aerospatiale/Alenia in their bid to acquire the assets of the deHavilland Division of the Boeing Corporation. In 1991, I testified before the European Economic Commission in a hearing on this matter.

I was the economic expert for the NutraSweet Company in hearings before the Competition Tribunal in 1990.

I was the economic expert for the Epson Company in 1987 during the sentencing phase of its trial over charges on resale price maintenance.