**PUBLIC** 

Tribunal File No. CT-2002-004

# THE COMPETITION TRIBUNAL

IN THE MATTER OF the Competition Act, R.S.C., 1985, c.C-34, as amended;

AND IN THE MATTER OF an inquiry pursuant to subparagraph 10(1)(b)(ii) of the Competition Act into certain marketing practices of Sears Canada Inc.;

**AND IN THE MATTER OF** an Application by the Commissioner of Competition for an order pursuant to section 74.1 of the *Competition Act*.

# BETWEEN:

# THE COMMISSIONER OF COMPETITION

COMPETITION TRIBUNAL
TRIBUNAL DE LA CONCURRENCE

FILED / PRODUIT
January 16, 2004
CT- 2002-004

Jos LaRose for / pour
REGISTRAR / REGISTRAIRE

OTTAWA, ONT

# 0069a

Applicant

-andSEARS CANADA INC.

Respondent

## AFFIDAVIT OF SRIDHAR KRISHNA MOORTHY

- I, Sridhar Krishna Moorthy, of the City of Toronto, in the Province of Ontario, MAKE OATH AND SAY:
- I am the Manny Rotman Professor of Marketing at the Rotman School of Management, University of Toronto, and Research Associate at the Institute for Policy Analysis, University of Toronto.
- 2. I hold a B. Sc. Degree in Mechanical Engineering from University of Delhi (1974), an MBA from Kansas State University (1977), an M.S. in Statistics from Stanford University (1982),

and a Ph.D. in Business from Stanford University (1983).

3. Attached hereto and marked as Exhibit "A" is a true copy of my evidence. The contents of Exhibit "A" and the opinions expressed therein are to the best of my knowledge, information and belief.

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- 4. Attached hereto and marked as Exhibit "B" is a true copy of my Curriculum Vitae.
- 5. I make this affidavit pursuant to Rule 47(1) of the Competition Tribunal Rules.

SWORN BEFORE ME, at the City of	)
Toronto, in the Province of Ontario,	)
this 9 <sup>th</sup> day of October 2003.	)

COMMISSIONER OF OATHS

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SRIDHAR KRISHNA MOORTHY

Expert opinion of Professor Sridhar Moorthy

Commissioner of Competition v. Sears Canada Inc.

1. My name is Sridhar Krishna Moorthy.

# A. Qualifications

- 2. I am the Manny Rotman Professor of Marketing at the Rotman School of Management, University of Toronto, and Research Associate at the Institute for Policy Analysis, University of Toronto. My position at the University of Toronto has the rank of "tenured full professor." I am also a Senior Consultant with Charles River Associates.
- 3. Prior to joining the Toronto faculty, I was a tenured Associate Professor of Marketing and Area Coordinator at William E. Simon Graduate School of Business Administration, University of Rochester. In addition, I have held regular and visiting faculty appointments at Yale University's School of Management, University of Pennsylvania's Wharton School, UCLA's Anderson School of Management, and INSEAD (in France). I have been teaching since 1982.
- I hold a B. Sc. Degree in Mechanical Engineering from University of Delhi (1974), an MBA from Kansas State University (1977), an M.S. in Statistics from Stanford University (1982), and a Ph.D. in Business from Stanford University (1983).

This is Exhibit "A" to the Affidavit of Sridhar Krishna Moorthy, sworn before me this 9th day of October, 2003
Deluca Alexal Commissionor for Oather

- 6. My research examines issues in distribution channels, pricing, advertising, and competitive marketing strategies. I have published numerous articles in refereed journals on these topics. An article I wrote as a doctoral student won the George E. Nicholson Student Paper Competition of the Operations Research Society of America. Another article was a finalist in the John D. C. Little Competition for the best paper published in Marketing Science or Management Science in 1992. Marketing Science is the premier quantitative marketing journal in marketing in the world; Management Science is a leading quantitative journal in management. Both are published by the Institute for Operations Research and Management Sciences (INFORMS), an international society based in the U.S.
- 7. I am an Area Editor of Marketing Science, an Associate Editor of Quantitative

  Marketing and Economics, and a member of the editorial boards of Journal of

  Marketing Research, Journal of Marketing Channels and Review of

  Marketing Science.
- 8. I have consulted on marketing matters with several companies in the U.S. and Canada, and served as a marketing expert in legal cases involving marketing issues. My full curriculum vitae is attached as Appendix A to this Report.

# B. Background

- 9. In this matter I have been retained by the Commissioner of Competition to provide expert testimony on the retail marketing practices of Sears Canada Inc. ("Sears") pursuant to Subsection 74.01 (3) of the Competition Act (the "Act"). This matter relates to Sears' promotional advertisements for tires in 1999.
- 10. I have been asked to focus on a specific set of all-season passenger tires (the "Tires") and a specific set of in-store promotional leaflets/flyers and newspaper advertisements that appeared in 1999 (collectively referred to as the "Representations").
- 11. The Tires are classified as "private" in William H. McMahon's Affidavit of February 1, 2001("the McMahon Affidavit" hereafter), meaning that they were available only at Sears (NADM 4046S). Several of these Tires were dual-branded in the sense that they also carry the manufacturer's name.
- 12. For the purpose of this opinion, I have been asked to assume that:
  - a relatively small percentage of tires (not more than 10-15%) are
     purchased singly as opposed to in pairs or other multiples; and
  - consumers who purchase tires singly purchase those tires because a tire on their vehicle has been damaged, destroyed or failed, rather than as part of routine vehicle/tire maintenance.
- 13. The McMahon Affidavit suggests that consumers in this market are unable to assess directly the quality of different tires. He observes that "The BF Goodrich Tire was superior to the Tire, however, consumers tended

not to perceive the inherent value of the BF Goodrich tire when Sears

Automotive's opening price point was more than for the inferior

(NADM 4117S, paragraph 251).

# C. Opinion

# Relevant geographical market

- 14. In my opinion, for purposes of examining Sears' conduct in this matter, the relevant geographical market is Canada. My opinion is based on the following observations.
- 15. Sears' Representations are national in scope. That is, when Sears made price representations with respect to a given Tire (same brand, same model, same size) in two different geographical regions of Canada at the same time in 1999, those price representations were identical.
- 16. The McMahon Affidavit notes that "Sears Automotive did not produce or distribute separate marketing and promotional material for each region during the Relevant Period." (NADM 4003S, paragraph 8). Further: "There were no regional variations in the national advertisements which Sears Automotive published in newspapers across Canada in relation to the promotion of the Relevant Products during the Relevant Period, with the possible exception of the above-mentioned promotion of snow tires in the province of Quebec" (NADM 4004S, paragraph 9).
- 17. The McMahon Affidavit also notes that "In each market which Sears

  Automotive operated a Sears Retail Automotive Centre, the same Relevant

  Product was offered at the same Sears Regular Price. Sears Automotive did

not offer the same Relevant Product for sale at different Sears Regular Prices in different markets in Canada." (NADM 4118S, paragraph 255)

- 18. Sears' decision-making process for promotional representations, as described in McMahon's Affidavit (NADM 4090S, paragraph 153),
- 19. An illustration of Sears' geographically uniform pricing and promotional policies is the advertisement for the Response RST Touring 2000 tire that appeared in both the Calgary Sun and the Hamilton Spectator on November 3, 1999 (GFIL 146 and GFIL 83).
- 20. To summarize, in 1999 Sears had the same regular and promotional prices in each geographical region of the country for the Tires. Further, the promotional flyers and newspaper advertisements that featured these Tires in 1999 did so identically throughout the country.
- 21. A generally accepted marketing principle is that if a market can be divided into different segments that differ in either the nature of their consumers, or in the competitive conditions, or in the costs of serving them, then prices, and more generally marketing strategies, ought to reflect these differences to the extent it is cost-effective and practicable to do so (for example, see Kotler and Turner 1995, pages 261–268, 275–276; Nagle and Holden 1995, pages 213–214). When a marketer differentiates its marketing strategy in the various segments of its market then the marketer is said to be practicing "differentiated marketing." When a marketer does not differentiate its marketing strategy in the various segments of its market then the marketer is said to be practicing "undifferentiated marketing."

22. As noted above, in so far as its regular and promotional prices are concerned for the various geographical regions of its Tires market in 1999, Sears practiced undifferentiated marketing. In my opinion, in 1999, for marketing purposes in general and pricing purposes in particular, Sears treated Canada as a single geographic market.

# Ordinary price representations in Sears' promotional advertising

- 23. The Representations mention a sale price per unit and compare it to a price denoted as "Sears reg."
- 24. The prices listed as "Sears reg" in these advertisements are the same as the Regular Each Prices in Appendix H of the McMahon affidavit (NADM 4154).

  These prices are also referred to simply as Regular Prices in the 1999

  Automotive Training Program documents NADM 3048 and NADM 3049

  describing the Price Structure 1999. In this report, when we say "regular prices" we mean "Regular Each Prices."
- 25. A number of studies in marketing document that consumers respond to promotional flyers/advertisements by increasing their purchases of the promoted product at the promoting retailer (Guadagni and Little 1983; Blattberg, Briesch and Fox 1995).
- 26. A number of studies in marketing (Monroe 1990, pages 72-73, 81-84; Della Bitta, Monroe and McGinnis 1981; Urbany, Bearden and Weilbaker 1988) document that when a promotional flyer or advertisement includes a regular price in addition to the sale price, as in Sears' Representations, then consumers are likely to respond even more positively than if a sale price was

announced without an accompanying regular price. This is because, when a regular price is present in the promotional flyer or advertisement, then consumers are likely to use the regular price as a reference price to make judgments about "perceived value," and then use the perceived value to make decisions about

- a. whether to buy "now" or wait,
- b. which brand/model of tire to buy,
- c. whether to buy tires at the promoting retailer or at another retailer.

# Sears' regular and "2 for" prices

- 27. As noted in item 24, Sears' regular price in the Representations is the Regular Each Price (NADM 4119).
- 28. In its internal documents, Sears uses a price which it variously refers to as "2 for" price or as "Multiple Regular" price or as "plan to sell" price (Price Structure 1999 "2 for", NADM 3050; McMahon affidavit, NADM 4120S; Exhibit "N" of the McMahon affidavit, NADM 4157; Commodity Marketing Review Spring 1999 Opening Price Point Market Pricing Review, NADM 1872; Commodity Marketing Review Fall & Winter '99 Opening Price Point Market Pricing Review, NADM 1886). We shall refer to these prices in this report as "2 for" prices.
- 29. The "2 for" prices are not advertised in the Representations.
- 30. Sears' regular price for the tires in the Representations is higher than the corresponding "2 for" price listed in Appendix I of the McMahon affidavit (NADM 4157) in 1999. How much higher is shown in the table below, which

expresses the average difference between the Regular Each Price and the corresponding "2 for" price as a percentage of the Regular Each Price for each Tire in 1999:

	(Regular Each Price-"2 for" Price)/ Regular Each Price
BF Goodrich Plus	20%
Response RST Touring 2000	34
Silverguard Ultra IV	34
Roadhandler T Plus	37
Weatherwise	36

- 31. The McMahon affidavit defines Regular Each Prices as: "Each Sears Regular Price represented the price at which a Sears customer could purchase one unit of the Relevant Product (i.e., a single tire) during the Relevant Period" (NADM 4119S, paragraph 257).
- 32. The McMahon affidavit defines "2 for" prices as follows:
  - a. "As part of its regular pricing strategies, Sears Automotive offered a regular price for a bundle of two or more units of the same size of the same Relevant Product during the Relevant Period (i.e., Sears Multiple Regular Price)" (NADM 4119S, paragraph 260).

- b. "In general, Sears Multiple Regular Pricing was available to a customer during the Relevant Period whenever the customer wished to purchase two or more units of a Relevant Product that was not "on sale" or promoted at a Sears Reduced Price on a per unit basis at Sears Retail Automotive Centers or at Sears Catalogues at the time" (NADM 4119S, paragraph 261).
- 33. The McMahon affidavit states that it is Sears policy not to advertise "2 for" prices in promotional advertising: "Sears Automotive never advertised or promoted Sears Multiple Regular Prices in Sears pre-prints, newspaper advertisements, promotional leaflets, promotional inserts or otherwise during the Relevant Period" (NADM 4120S, paragraph 264).

# Sears' regular pricing policies

4116S, paragraph 247).

- 34. The McMahon affidavit describes the factors that Sears takes into account when determining prices for the tires (NADM 4114S-4118S).
- 35. For private brands, the McMahon affidavit says: "An important factor which
  Sears Automotive considered when it set the price for a private brand
  Relevant Product during the Relevant Period was the price at which
  was offering similar tires for sale" (NADM
- 36. Sears' Private Label Strategy for Canada in 1999 is described in the Spring and Summer '99 and Fall & Winter '99 Commodity Marketing Reviews

  (NADM 1869, NADM 1885) as: "Index our every day pricing to

- Private Brand retailer) to be equal to or within 10% of their every day low price with a better warranty package. On sale we will be lower than the equivalent tire at a second of the control of the con
- 37. Based on my knowledge and expertise in marketing, it is my opinion that

  Sears' pricing principles for private-label tires, as expressed in items 34 and

  35 above, are theoretically sound, and the application of those principles in
  their Private Label Strategy for private tires, as described in item 36, is
  theoretically sound as well.
- 39. Sears' regular price is considerably more than the higher than every day price. So Sears' regular price does not satisfy Sears' private label strategy for private tires described in items 34 and 35 above.
- 40. For national brands (as defined in the McMahon Affidavit at NADM 4046S), the McMahon affidavit says: "Sears Regular Price for a national brand Relevant Product was based, among other things, upon "(NADM 4117, paragraph 252).
- 41. Sears' National Brand Strategy is described in Sears' Spring and Summer '99 and Fall & Winter '99 Commodity Marketing Reviews (NADM 1870, NADM 1884) as, to "index our every day pricing to be to 60% of the equivalent

- National Brand normal discounted price" in the Spring 1999 and Fall 1999 marketing reviews (NADM 1870, NADM 1884).
- 42. Based on my knowledge and expertise in marketing, it is my opinion that

  Sears' pricing principles for national brand tires, as expressed in item 34 and
  40 above, are theoretically sound, and the application of those principles in
  their National Brand Strategy as described in item 41 is theoretically sound
  as well.
- 43. With respect to the Weatherwise (competitive profile NADM 3060) and the RoadHandler T Plus (competitive profile NADM 3062), these tires are said to be private label tires, according to paragraph 68 of Sears' Response. But, as noted therein, these tires are also dual branded, in that they bear both the manufacturers' and Sears brand. In reviewing the Private Label Strategy from the Spring and Summer '99 and the Fall & Winter '99 Commodity Marketing Reviews (NADM 1869, NADM 1885), I note that the tactics set out there refer only to indexing to and not to any national brands. There is no mention of dual branding in these reviews for private labels. However, Sears' Spring and Summer '99 and Fall & Winter '99 Commodity Marketing Reviews (NADM 1870, NADM 1884), under NationalBrand Strategy, refers to the tactic of utilizing "...dual branding on exclusive products..." These same reviews, under National Brand Strategy, refer to indexing "our every day pricing to be the equivalent National Brand normal discounted price." Finally, I note that in the competitive profiles for the Weatherwise (NADM 3060) and the RoadHandler T Plus (NADM 3062), Sears compared these two tires not to private label tires

(which would be consistent with the Private Label Strategy), but rather to national brands. As such, I am of the view that for these two tires, the National Brand Strategy was adopted.

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- 44. In this regard, the only Sears price within season of the equivalent national brand discounted price is the "2 for" price (cf. 41 above). Sears' regular price is not within of the equivalent national brand discounted price. So Sears' regular price for national brand tires does not satisfy Sears' National Brand Strategy for tires described in items 34 and 41 above.
- 45. I conclude that when Sears said "every day price" or "plan to sell" price, it means the "2 for" price and not its regular price—only the "2 for" price satisfies Sears' stated pricing principles and strategies.
- 46. Furthermore, Sears' regular prices are considerably higher than the corresponding "2 for" prices (cf. item 30), and the competitive benchmarks Sears set for itself (cf. items 37 and 41 above). Therefore, whether one considers the Tires as private brands or national brands, Sears' regular prices violate its own stated competitive pricing strategy.

## Do Sears' regular prices satisfy the volume and time tests?

47. Subsection 74.01 (3) of the *Competition Act* sets two conditions which an ordinary price must meet. I will call the first condition, the "volume test," and the second condition, the "time test."

# Volume test

- 48. For a price to pass the volume test the retailer must sell "a substantial volume of the product at that price or a higher price within a reasonable period of time before or after the making of the representation, as the case may be" (subsection 74.01 (3) (a)).
- 49. The table below, which is based on the information provided by the Competition Bureau in table entitled: "Volume of Sales at Sears Regular and Reduced Prices Going Back 12 Months from Relevant Representations (as Taken from Exhibits "A" and "B")", (Tab 248 of Competition Bureau's Analysis), shows that, during the twelve months prior to the time of the flyers, Sears sold a very small quantity of tires at the regular price.

	Percentage of total sales at the regular price
BF Goodrich Plus	5.26
Response RST Touring	3.23
Silverguard Ultra IV	3.74
Roadhandler T Plus	4.18
Weatherwise/RH Sport	2.35

50. The twelve-month time period prior to the time of the Representations is a reasonable period of time to conduct a volume test for a product like all-season tires which would have been sold throughout the twelve months.

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- 51. The data in item 49 above are consistent with Sears' own expectations:
  - a. In Sears' Buying Plans for 2000 (NADM 16028, 16031, 16032, 16035, 16036 and 16039), "Total Sales" are the sum of "Total 2 For Sales" and "Total Promo Sales."
  - b. From Sears' Spring/Summer 1999 and Fall 1999 reviews, it is clear that Sears considers the "2 for" price as their "every day price" and the price at which they "plan to sell" (cf. items 28 and 45 above).
- 52. Furthermore, the data in item 49 are what I would expect given that
  - a. Not more than 10 to 15% of consumers replace one tire only on any given purchase occasion (cf. item 12 above).
  - b. The regular price is considerably higher than the "2 for" price (cf. item 30 above).
  - c. The regular price is not price-competitive with other retailers identified by Sears as their relevant competition whereas the "2 for" price is (cf. items 38, 43, and 46 above).
- 53. In my opinion, the best indication that a retailer's volume of sales at regular prices was not substantial is whether that retailer itself considers the sales substantial. As noted in 51 above,

- Similarly, in 1999, in collecting data about its sales volumes of tires, including the Tires, Sears did not keep track of its volume of sales at the regular price, but rather aggregated regular sales volumes with "2 for" sales volumes (see transcript of the oral examination of Mr. Paul Cathcart, March 4, 2002, at pp. 1307–1314).
- 54. Based on the analysis above, it is my opinion that Sears did not sell a substantial volume of tires at the regular prices advertised in the Representations.

## Time test

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- 55. For a price to pass the time test the retailer must offer "the product at that price or a higher price in good faith for a substantial period of time recently before or immediately after the making of the representation, as the case may be" (subsection 74.01 (3) (b)).
- 56. It is important to note at the outset that the substantial time requirement is meaningless without the "good faith" qualification. Offering a product at a certain price for a substantial period of time does not automatically make the price satisfy the time test. For example, offering to sell a mass-market tire at \$5,000/unit, even for an entire year, would not meet the time test because \$5,000/unit is not a good-faith offer for such a tire.
- 57. What is good faith in a price offer? In my view, in marketing terms good faith is ultimately tied to whether the retailer expects the price offer to generate enough sales to produce a positive profit, or, more generally, whether there is

58. Would any rational retailer knowingly make a price offer for its product that it is so high that it would not be expected to yield positive profits for a substantial period of time? The answer is clearly no if that price offer was the only one being made by the retailer. However, a retailer may simultaneously make another price offer, or even several other price offers, lower than the price offer in question, at which prices the retailer expects to make substantial sales and profits.

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59. But how might a retailer gain from making a price offer that is not expected to yield profitable sales? A price offer that does not result in profitable sales may still be useful to a retailer if it can be used as a reference price in promotional advertising (as described in item 26 above) to create the impression among consumers that better value is being offered in a promotion than actually is the case. As noted in item 26 above, this can induce a consumer to buy tires at the retailer in question rather than at a competing retailer. For a multi-product retailer such as Sears there is the additional benefit that the consumer attracted to the store by the promotion may buy other products (e.g., cordless drills) that yield positive profits.

- 61. As noted in item 49 above, in 1999 Sears only sold a small quantity of tires at its regular prices. In my opinion, in 1999, Sears' tire business would have been unprofitable if it depended on sales at regular prices. In other words, Sears' regular prices in 1999 did not make rational economic sense given Sears' expectations with respect to tire sales at those prices, which were informed by, among other things, its experience with low levels of sales at those prices.
- 62. Sears' regular prices, however, were credible enough, in my opinion, to serve as a reference price for consumers when juxtaposed next to a sale price in promotional flyers and newspaper advertisements.
- 63. Therefore, as noted in item 26 above, when Sears juxtaposed the regular price next to a sale price in the Representations, consumers likely inferred that:
  - a. Sears' regular price for the Tires was its true ordinary or everyday price.
  - b. Sears' "promotional value" was better than it really was, inducing them to buy "now" rather than wait when waiting might have been better, or choose a promoted brand/model of tire instead of another

brand/model that offers a better value, or buy tires at Sears rather than at another retailer who truly offers a better value.

- 64. The evidence that Sears intended its regular price to serve only as a reference price in promotions (as opposed to a good faith price offer) includes the following:
  - a. Sears did not even plan for the possibility of sales at the regular price (cf. item 51, Competitive profiles and bar graphs: BF Goodrich Plus NADM 3054-5; Siverguard Ultra IV NADM 3058-9; Weatherwise NADM 3060-1; RoadHandler T Plus NADM 3062-3, and Response RST Touring 2000 NADM 3090-1).
  - b. Sears' periodic reviews of its performance did not show any concern for the low sales at the regular price (cf. item 51).
  - c. Sears' periodic reviews of its performance did not show any concern that the regular price violates its own pricing principles (cf. items 39 44 above).
  - d. A rational firm operating in good faith and generating negative profits from a price would take steps to replace that price with a more profitable price. In this case, despite low levels of sales at regular prices, Sears rarely changed or adjusted those prices (see transcript of the oral examination of Mr. Paul Cathcart, March 4, 2002, at p. 442). For a case history on how such a firm might behave see American Airlines' price changes as documented in the Harvard Business School case 9-190-029.

65. Based on the analysis above, in my opinion Sears' use of the regular price in the Representations is not in good faith, and does not meet the time test.

# D. Conclusion

66. In conclusion, it is my opinion based on the evidence presented to me, and my knowledge, expertise, and understanding of the marketing and economics literatures, that Sears' regular prices in the Representations were not intended to generate substantial sales or to be profitable in and of themselves, but rather to serve as a reference price for consumers to convey the impression to them that better value was being offered in the promotions than was actually the case.

Dated at Toronto, October 9, 2003

Professor Sridar K. Moorthy

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Urbany, Joel E., William O. Bearden and Dan C. Weilbaker (1988), "The Effect of Plausible and Exaggerated Reference Prices on Consumer Perceptions and Price Search," *Journal of Consumer Research*, 15 (June), 95–110.

# **SRIDHAR MOORTHY**

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#### PRESENT POSITIONS

Manny Rotman Professor of Marketing, Rotman School of Management, University of Toronto; Research Associate, Institute for Policy Analysis, University of Toronto; Senior Consultant. Charles River Associates.

This is Exhibit "B" to the

Affidant of Sadher Krishna Morathy. Sovern before me this 9th day of October. 2013 Stephen Auad Commissioner For Daths

## PREVIOUS POSITIONS

July 1990-June 1997: Associate Professor of Marketing and Area Coordinator. William E. Simon Graduate School of Business Administration, University of Rochester.

July 1984-June 1990: Assistant, then Associate Professor of Marketing, Yale School of Management, Yale University.

January 1982-June 1984: Assistant Professor of Marketing, Graduate School of Management, University of Rochester.

## VISITING APPOINTMENTS

July 1997-June 1998: Visiting Associate Professor of Marketing, The Wharton School, University of Pennsylvania.

January-June 1990: Visiting Associate Professor. The John E. Anderson Graduate School of Management, UCLA.

May-June 1988 Visiting Associate Professor, INSEAD, France

# **EDUCATION**

Ph. D., Graduate School of Business, Stanford University, March 1983. M.S. in Statistics, Department of Statistics, Stanford University, January 1982. M.B.A., College of Business Administration, Kansas State University, December 1977. B.Sc. in Mechanical Engineering, University of Delhi, India, February 1974.

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## EDITORIAL BOARDS

Area Editor, Marketing Science (1997-).

Associate Editor, Quantitative Marketing and Economics (2002-).

Member, Editorial Board: Journal of Marketing Research (1996–2001, 2003–), Marketing Science (1984–1997), Review of Marketing Science (2001–), Journal of Marketing Channels (1995–).

# **HONORS AND AWARDS**

#### Research

Finalist for the John D. C. Little Award for the Best Marketing Paper published in Marketing Science or Management Science in 1992.

One of four winners of the Marketing Science Institute's Competition for Research Proposals in Packaged Goods Pricing, January 1985.

Won the George E. Nicholson, Jr. Student Paper Competition of the Operations Research Society of America, 1982.

# Teaching

Professor of the Year, Second Year MBA Class, Rotman School of Management, University of Toronto, 1999.

Nominated for the Superior Teaching Award by the MBA class of 1984, Graduate School of Management, University of Rochester.

#### Grants

\$72,000 from the Social Sciences and Humanities Research Council of Canada, Initiative on the New Economy, for "Buyer Seller Interactions on the Internet: Shop Bots, Banner Advertising, and Online Bargaining," 2002–2005.

\$52,500 from the Social Sciences and Humanities Research Council of Canada for "Advertising Spending and Product Quality," 1999-2002.

Member, research team, SSHRC INE Research Alliance Grant, "Harnessing the Web-Interaction Process for Canadian Competitiveness" 2003–2006. Project Director: Paul Messenger, University of Alberta. \$865,750.

## Others

Cited as a "Best reviewer of 1984" by Marketing Science.

Doctoral Merit Fellowship at the Graduate School of Business, Stanford University, Stanford, California, 1979–80.

Merit Fellowships at the University of Delhi, Delhi, India, 1968–70.

## TEACHING AND COURSE DEVELOPMENT

# **MBA**

Applied Marketing Projects, at Yale.

Branding, at Toronto (introduced new course)

Competitive Strategies, at Rochester (introduced new course).

Consumer Behavior, at Rochester and Yale.

Distribution Channels and Sales Force Management, at Rochester and Toronto (introduced new course).

Marketing Management, at Rochester and Yale.

Marketing Strategy, at Rochester and Wharton (introduced new course).

Marketing Models, at UCLA and Yale.

Pricing Policies, at INSEAD, Rochester, UCLA, and Yale.

Probability & Statistics, at Rochester.

# Executive

Strategic Market Planning, Executive MBA program, University of Toronto, 2003.

Marketing Management, Air Canada program, University of Toronto, 1999.

Marketing Strategy, Executive MBA program, University of Rochester, 1995, 1997.

Marketing Management, Executive MBA program, Australian Simon University, Sydney, Australia, 1991, 1992.

Marketing Strategy, Nortel, February 1997.

"Marketing in the 1990s," Hotel and Tourism executives, Aruba School of Hotel Technology, Oranjestad, Aruba, August 10–11, 1989.

"Competitive Analysis for Marketing Decisions," Bausch and Lomb, Inc. executives, September 1983.

## Ph.D.

- 1

Marketing Theory, at Toronto, Rochester and Yale.

Current Topics in Marketing Strategy, at Toronto.

Workshop in Marketing, at Toronto and Rochester.

## **BOOKS & CASES**

Marketing Models, with Philip Kotler and Gary Lilien. Englewood Cliffs, New Jersey: Prentice Hall, 1992.

Crown Plastic Corporation of Toronto, with Tracey Black.

## RESEARCH PUBLICATIONS

- "Advertising Spending and Quality for Services: The Role of Capacity," (with Ignatius Horstmann). Quantitative Marketing and Economics, forthcoming.
- "Advertising Repetition and Quality Perceptions," (with Scott Hawkins), Journal of Business Research, forthcoming.
- "Advertising and Perceived Quality" (with Hao Zhao), *Marketing Letters*, 11 (August 2000), 221–233.
- "A Model of Price Promotions with Consumer Search," (with Jeffrey Banks).

  International Journal of Industrial Organization, 17 (1999), 371–398.
- "Managing a Distribution Channel under Asymmetric Information with Performance Requirements," (with Ramarao Desiraju). *Management Science*, 43, No. 12, December 1997. Special Issue: Frontier Research on Information Systems and Economics.
- "Consumer Information Search Revisited: Theory and Empirical Analysis," (with Brian Ratchford and Debabrata Talukdar). *Journal of Consumer Research*, March 1997.
- "Signaling Quality with a Money-Back Guarantee: The Role of Transaction Costs," (with Kannan Srinivasan), Marketing Science, Volume 14, No. 4, 1995.
- "Theoretical Modeling in Marketing," Journal of Marketing, April 1993.
- "Competitive Marketing Strategies: Game-Theoretic Models," in *Handbooks in Operations Research and Management Science: Marketing*, Josh Eliashberg and Gary Lilien (editors). Amsterdam: North-Holland, 1993.

"Market Segmentation, Cannibalization, and the Timing of Product Introductions," (with Ivan P'ng), Management Science, March 1992. Finalist, John D. C. Little Award, 1992.

5

- "Strategic Decentralization in Channels," Marketing Science, 7 (Fall 1988), 335-355.
- "Strategic Interaction Within a Channel," (with Pete Fader) in *Retail and Marketing Channels*, L. Pellegrini and S. Reddy (editors), London: Routledge (1988).
- "Product and Price Competition in a Duopoly," *Marketing Science*, 7 (Spring 1988), 141–168.
- "Consumer Expectations and the Pricing of Durables," in *Issues in Pricing: Theory and Research*, Tim Devinney (editor), Lexington: Lexington Books (1988).
- "Product Line Competition," Annales des Télécommunications, 42 (November-December 1987), 655-663.
- "Managing Channel Profits: Comment," Marketing Science, 6 (Fall 1987), 375-379.
- "Using Game Theory to Model Competition," Journal of Marketing Research, 22 (August 1985), 262–282.
- "Cournot Competition in a Differentiated Oligopoly," Journal of Economic Theory, 36 (June 1985), 86–109.
- "Market Segmentation, Self-Selection, and Product Line Design," *Marketing Science*, 3 (Fall 1984), 288–307.
- "Comments on 'Firm Specific Differentiation and Competition Among Multi-Product Firms'," Journal of Business, 57 (January 1984), S167–S171.

# **WORKING PAPERS**

- "A General Theory of Pass-through in Channels with Category Management and Retail Competition." Under second revision, *Marketing Science*.
- "Coupons versus Rebates," (with Qiang Lu). Under review, Marketing Science.
- "Price-Matching Guarantees" (with Ralph Winter). Under review, Journal of Political Economy.
- "Rebates as Insurance," (with Yuxin Chen and John Zhang). Being revised for resubmission to *Management Science*.
- "On the Marketing of Rebates: Having Your Cake and Eating It Too?" (with Dilip Soman). Working Paper, University of Toronto.

- "When is Umbrella Branding a Signal of Product Quality?" (with L. Wei), Working Paper, University of Toronto.
- "Price-Matching Guarantees and Service Differentiation" (with Xubing Zhang).
- "Advertising and Learning," (with I. Horstmann and B. Rivard).
- "Effects of Time of Judgment and Search Attributes on Inferences about Unknown Experience and Credence Attributes" (with M. Cronley, F. Kardes and D. Houghton).

## CURRENT RESEARCH

- "Brand Equity and Learning from Experience: Sequential versus Simultaneous Trials," (with Pankaj Aggarwal).
- "Content versus Repetition in Advertising," (with Sharmistha Law).
- "Diffusion of Movies," (with Seethu Seetharaman).
- "Who Buys Private Labels?" (with Ying Zhao).
- "Pricing for Social Networks" (with Mengze Shi)
- "Bargaining over the Internet versus Bargaining Face to Face: Cross-Cultural Factors and Body Language," (with Sharmistha Law).
- "Presence Effects of Line Extensions" (with Pankaj Aggarwal).

## **PRESENTATIONS**

## At INFORMS Marketing Science Conferences

- "Advertising-Based Learning versus Experiential Learning," Edmonton, June 29, 2002.
- "A New Theory of Rebates," (with Y. Chen and J. Zhang), Wiesbaden, July 6, 2001.
- "Advertising and Quality for Services," Syracuse, May 1999.
- "Advertising Repetition and Quality Perceptions," Berkeley, March 1997.
- "On the Speed of the Product Life Cycle" (with Dipak Jain) and "Quality and Advertising: An Empirical Analysis," Tucson, March 18–19, 1994.
- Discussant for "Bilateral Bargaining: Review of Experimental Studies," by Amnon Rapaport, Tucson, March 19, 1994.

- "A Model of Price Promotions with Consumer Search," St. Louis, March 12, 1993.
- "Money-Back Guarantees," London, July 13, 1992.
- "The Effects of Advertising Repetition," Wilmington, March 21, 1991.
- "The Timing of Product Introductions," Duke University, March 16, 1989.
- Discussant for "A Game-Theoretic Model of Quantity Discounts," by Rajeev Kohli, University of Washington, Seattle, March 26, 1988.
- "On Vertical Integration in Channels," Jouy-en-Josas (France), June 25–27, 1987.
- "Consumer Expectations and the Pricing of Durables," Vanderbilt University, March 6–9, 1985.
- "Sequential Competition in Products and Prices," University of Chicago, March 11–14, 1984.

#### At INFORMS Joint National Conferences

- "Advertising and Quality," San Francisco, November 3, 1992.
- "Measuring Overall Judgments and Attribute Evaluations: The Order of Items in a Questionnaire," Denver, October 24, 1988 and Miami Beach, November 2, 1986.
- "Competitive Product Positioning," Atlanta, November 4, 1985.
- "The Role of Information Asymmetries in Determining Channel Structure," and "On Using Game Theory to Model Competition," Dallas, November 26, 1984.
- "On the Theory of Conjoint Measurement," Orlando, November 7, 1983.
- "Product Line Competition in an Oligopoly," San Diego, October 25, 1982.
- "On the Foundations of the Theory of Market Segmentation," Detroit, April 20, 1982.
- "Market Segmentation in an Oligopoly," Houston, October 14, 1981.

# At University Workshops

- On the Marketing of Rebates: Having Your Cake and Eating It Too?" at University of Central Florida, February 17, 2003
- "Price-Matching Guarantees?" at ISI (Delhi), December 23, 2002; HKUST, December 4, 2002; University of California, Berkeley, May 16, 2002; University of Texas at Dallas, April 5, 2002 and (with R. Winter) at the Business Economics/Strategy Workshop, Rotman School of Management, University of Toronto, December 12, 2001.

- "Advertising and Quality for Services" at the Columbia University Summer Camp, University of Alberta, University of California at Berkeley, Washington University at St. Louis, and others, 1999-2000.
- "Trade Promotion Design," at The Wharton School, University of Toronto, Yale University, and others, 1998.
- "Advertising Repetition and Perceived Quality," at The Wharton School, November 1997.
- "Comparative Advertisements Are Processed More Centrally than Non-Comparative Advertisements," at The Hong Kong University of Science & Technology, February 1996.
- "A Model of Price Promotions with Consumer Search," at University of Chicago, Stanford University, Indian Statistical Institute, and others, 1996–98.
- "Advertising and Quality: An Empirical Analysis," at The University of Chicago, The University of Rochester, London Business School, and others, 1996.
- "Theoretical Modeling in Marketing," at the University of Toronto 1992.
- "Information Asymmetries and the Incentives for Cooperation in Distribution Channels," at the Indian Statistical Institute, New Delhi, 1991.
- "The Effects of Advertising Repetition," at the Indian Statistical Institute, New Delhi, 1991.
- "Measuring Overall Evaluations and Attribute Evaluations: An Application of Information-Processing Theory," at the Third Northeast Marketing Consortium at Cornell University 1989, Yale School of Management 1989, and at UCLA 1990.
- "Market Segmentation, Self-Selection, and the Timing of Product Introductions," at the Columbia/NYU/Yale Marketing Workshop 1989, at the Wharton School 1989, at University of Rochester 1990, and others.
- "Strategic Interaction within a Channel," at INSEAD on June 3, 1988.
- "On Vertical Integration in Channels," at the Columbia/NYU/Yale Marketing Workshop 1986, the University of Illinois (Urbana-Champaign) 1986, the First Northeast Marketing Consortium at Dartmouth College 1987, and others.
- "Consumer Expectations and the Pricing of Durables," at The University of Chicago, 1985.
- "The Long-Term Effects of Dealing," at the Columbia-NYU Marketing Workshop, New York University, 1985.

- "Market Segmentation, Self-Selection, and Product Line Design," at Cornell University and Vanderbilt University 1983.
- "Product and Price Competition in Oligopolies," at Yale University 1983.
- "Dynamic Games," at the Cornell-Rochester Marketing Workshop, University of Rochester 1983.
- "Cournot Competition in a Differentiated Oligopoly," at the Economic Theory Workshop, Department of Economics, University of Rochester, 1983.
- "Market Segmentation in an Oligopoly: Single-Product Firms," at the Cornell-Rochester Marketing Workshop, Cornell University, 1982.

#### At Other Conferences

- Panelist in session entitled "Game-Theoretic Models in Marketing," at the 2003 AMA Doctoral Consortium at The University of Minnesota, June 28, 2003.
- "A General Theory of Pass-Through in Channels with Category Management and Retail Competition," at the Summer Institute in Competitive Strategy, University of California, Berkeley, June 27, 2003.
- "Retail Pass-through of Trade Promotions: Intrabrand and Interbrand Competition Effects," at the MSI Conference on Competitive Responsiveness, Boston, May 17, 2001.
- "Information Sequence and Decision Quality," at the Society for Consumer Psychology Conference, Scottsdale, February 17, 2001.
- "Economic Perspectives in Consumer Analysis," at the 1996 AMA Doctoral Consortium at The University of Colorado, August 2, 1996.
- "Performance-based Trade Promotions," at the EIRASS Conference, Telfs-Buchen, Austria, June 24, 1996.
- "The Economics and Psychology of Consumer Behavior," at the 1995 Association of Consumer Research Conference, Minneapolis, October 21, 1995.
- "Is There a Presence Effect?" at the University of Washington Marketing Camp, Seattle, September 30, 1995.
- "A Model of Price Promotions with Consumer Search" at the International Workshop on Dynamic Competitive Analysis in Marketing, September 2, 1995, Ecole des Haustes Etudes Commerciales, Montreal, Canada.
- "A Model of Price Promotions with Consumer Search," at the Marketing Science Institute Conference on Pricing Decision Models, Boston, April 23, 1994.

- "Empirical research on channel issues using scanner data." Invited plenary talk at the TIMS College of Marketing Special Interest Conference on New Directions & Current Issues in the Analysis & Use of Scanner Data, Toronto, September 17-19, 1993.
- "How Advertising Works on Repetition," at the EURO XII/TIMS XXXI International Conference in Helsinki, June 29, 1992.
- "Information and Channel Structure," at the TIMS XXX-Sobrapo XXIII Joint International Meeting in Rio de Janeiro, July 16, 1991.
- Panelist in a special session on "Creation of Innovative Marketing Knowledge: An Interdisciplinary Perspective," at the American Marketing Association's 1989 Summer Marketing Educators' Conference in Chicago, August 8, 1989. My topic: "The Contribution of Economics."
- Panelist in the session on Channels of Distribution at the 1989 Doctoral Consortium held at Harvard University, Cambridge, August 3, 1989. My topic: "Insights from Mathematical Models of Channels."
- Panelist in the session on Channels of Distribution at the 1988 Doctoral Consortium held at the University of California, Berkeley, August 6, 1988. My topic: "Channel Modeling."
- Discussion Leader at the MSI Conference on "Competing in a Deregulated or Volatile Market," in Dedham, Massachusetts on December 2, 1987.
- "On Vertical Integration in Channels," at the Fourth International Conference on Distribution organized by CESCOM-NYU at the Universita L. Bocconi, Milan (Italy), July 3-4, 1987.
- "Product Line Competition," at the Conference on Telecommunications Services Marketing at INSEAD (France), June 22–24, 1987.
- "The Long-Term Effects of Deal Retraction," at the 1985 Association of Consumer Research Conference in Atlanta, October 19, 1985.
- "The Long-Term Effects of Dealing," at the Packaged Goods Steering Group Meeting, Marketing Science Institute, Cambridge, February 8, 1985.
- Discussant for "Firm Specific Differentiation and Competition Among Multi-Product Firms," by Michael Katz at the Pricing Strategy Conference, Graduate School of Management, University of Rochester, September 25, 1982.

#### PROFESSIONAL MEETINGS CHAIRED

Organized and chaired panel discussion on "Theoretical Models in Marketing" at the second Marketing Science Doctoral Consortium, University of Maryland, June 14, 2003.

- Organized and chaired Panel Discussion on "Analytical Models" at the first Marketing Science Doctoral Consortium, Edmonton, June 27, 2002.
- Organized and chaired (with Florian Zettelmeyer) an International Workshop on "Consumer and Firm Choices on the Internet" for the 2001 UC Berkeley Invitational Choice Symposium, Asilomar, California, June 1-5, 2001.
- Organized and chaired the Buffalo-Cornell-Rochester-Syracuse-Toronto Marketing Workshop held at the Rotman School of Management, University of Toronto, April 27, 2001.
- Session entitled "Price/Promotion Models," at the Marketing Science Conference, St. Louis, March 13, 1993.
- Session entitled "Applications of Game Theory in Marketing," at the 1992 Fall ORSA/TIMS Meetings, San Francisco, November 2, 1992.
- Session entitled "Modelling Retail Dynamics" at the 1992 ORSA/TIMS Marketing Science Conference, July 13, 1992.
- Organized and chaired the first Buffalo-Cornell-Rochester-Syracuse-Toronto Marketing Workshop held at the William E. Simon Graduate School of Business Administration, University of Rochester, May 8, 1992.
- Session entitled "Issues Relating to the Managerial Use of Coupons" at the 1988 ORSA/TIMS Marketing Science Conference, March 24, 1988.
- The 1986 Columbia/NYU/Yale Marketing Workshop held at Yale University, May 16, 1986.
- Session entitled "Models of Technological Goods" at the 1985 ORSA/TIMS Marketing Science Conference, March 6-9, 1985.
- Conference on "Managing Marketing Channel Relationships" sponsored by the Marketing Science Institute and Duke University, Duke University, September 13–14, 1984.
- Session entitled "Dynamic Pricing" at the ORSA/TIMS Marketing Science Conference, University of Chicago, March 11–14, 1984.
- Session entitled "Models of Individual Decisions" at the Joint Conference of the Operations Research Society of America and The Institute of Management Sciences, Orlando, Florida, November 7, 1983.

## PH. D. ACTIVITIES

Ph.D. Program Coordinator for Marketing and member, Ph.D. committee, Rotman School of Management, University of Toronto.

Advising: Xubing Zhang, Liyuan Wei, Qiang Lu, Rotman School of Management, University of Toronto.

Chair of Dissertation Committee: Hao Zhao, University of Rochester, 1996; Debabrata Talukdar, University of Rochester, 1995.

External examiner: Khai Lee, Ph.D. candidate in Marketing, University of Toronto, 1992.

Reader: William Blozan (1983), Val Lambson (1983), and Mark Hertzendorf (1991).

# OTHER ACTIVITIES

# Consulting

LEGAL CASES

Charles River Associates; Competition Bureau of Canada; Marusyk, Miller & Swain; Beard, Winter

MARKETING STRATEGY

Mobil Chemical Company; Eastman Kodak Company; Procter & Gamble Company; Science Park Associates

LECTURES
JTI-MacDonald

# Writing

"Has Brand Leveraging Gone Too Far?" Rotman Management (Spring 2001). Special Branding issue. Cited in Marketing Magazine, June 18, 2001.

"Marketing at the Speed of the Internet," *Rotman Management* (Spring-Summer 2000). Special E-Commerce issue.

## **Editorial**

Ad hoc reviewer for American Economic Review, American Marketing Association, International Journal for Research in Marketing, International Journal of Industrial Organization, Journal of Business, Journal of Consumer Research, Journal of Economic Theory, Journal of Economics and Management Strategy, Journal of Industrial Economics, Journal of Marketing, Journal of Retailing, Management Science, Marketing Letters, Marketing Science Institute, Operations Research, The Rand Journal of Economics, National Science Foundation, and Social Science and Humanities Research Council of Canada.

Invited member, Editorial Advisory Group, special Journal of Marketing Research issue on "Innovation in New Product Development," 1995.

# Corporate

Moderated Rotman Marketing Association Panel on "Marketing 2.0". September 2000.

Moderated Panel Discussion on "Marketing's Evolving Role in a Downsized Corporate Environment," sponsored by the Rochester Chapter of the American Marketing Association, January 19, 1995.

Member, Board of Directors, Rochester Chapter of the American Marketing Association, 1994–1997.

#### Administrative

- Chair, Connaught Committee Social Sciences Review Panel, University of Toronto, 2001-. Member: 2000-.
- Committees at Rotman School of Management: Curriculum, Promotions, Complement Advisory, Marketing Recruiting.
- Marketing Area Coordinator, William E. Simon Graduate School of Business Administration, 1991-1997.
- Committees at William E. Simon Graduate School of Business Administration: Dean Search, Ph. D., Teaching, MBA, Administrative, and Dean's Advisory Council.
- Committees at Yale School of Management: Curriculum, Affirmative Action, Administrative, Library, Student Grievance, and Special Projects.

#### Alumni

Spoke on "Integrative Thinking in Brand Management," at the Rotman Life-Long Learning Lectures: A Focus on Integrative Thinking, Rotman School of Management, June 2, 2000.

## Advising

Faculty Advisor to Simon Marketing Association; International Students Advisor, Yale School of Management, 1988–89; Faculty Advisor to several MPPM and Ph. D. students, Yale School of Management, 1986–1989.

## MEMBER OF

American Marketing Association, INFORMS, Advertising Steering Group, Marketing Science Institute.

# PERSONAL DATA

Married, two children, citizen of U.S.A.