

CONSUMER SENSITIVITY TO INCREASES IN BOOK PRICES

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PROGRAM EVALUATION SERIES

This is one of five Arts Policy Background Studies which form part of the evaluation of Cultural Sovereignty.

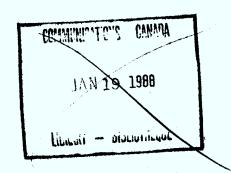
This study was conducted by the The Coopers & Lybrand Consulting Group for the Program Evaluation Division of the Department of Communications Canada.

The views expressed herein are those of the author and do not necessarily represent the views or policies of the Department of Communications.

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## DEPARTMENT OF COMMUNICATIONS

DCONSUMER SENSITIVITY TO INCREASES IN BOOK PRICES \

August 29, 1986

Submitted to: Mr. Robert Letellier

Submitted by: Douglas E. Angus
Owen A. Charlebois

The Coopers &Lybrand Consulting Group

Management Consultants

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## CONSUMER SENSITIVITY TO INCREASES IN BOOK PRICES

## TABLE OF CONTENTS

			Page
	EXI	ECUTIVE SUMMARY	
Į.	INT	RODUCTION	1
	Α.	BACKGROUND	1
	B.	OVERVIEW OF METHODOLOGY	1
	C.	RELIABILITY OF RESULTS	2
	D.	KEY DEFINITIONS	4
II.	ВО	OK PURCHASE CHARACTERISTICS	6 <sub>,,</sub>
	A.	INCIDENCE OF BOOK PURCHASERS	6
	B.	NUMBER OF BOOKS PURCHASED	6
	C.	EXPENDITURES ON BOOKS	7
	D.	TYPES OF BOOKS PURCHASED	7
	. E.	NATIONALITY OF AUTHOR	7
III.	FA	CTORS ASSOCIATED WITH NUMBER OF	
	ВО	OKS PURCHASED	9
	A.	DESCRIPTIVE CHARACTERISTICS	9
	B.	IMPORTANCE OF CANADIAN AUTHOR/CANADIAN	
		PUBLISHER IN BOOK PURCHASE DICISION	10
	C.	RELATIONSHIP OF SOCIO-DEMOGRAPHIC	
		FACTORS TO INPORTANCE OF CANADIAN AUTHOR	
		AND DURI ICHED	12

## TABLE OF CONTENTS

### (Continued)

			Page
IV.	PR	ICE SINSITIVITY WITH RESPECT TO BOOKS	14
	A.	PRICE ELASTICITY OF DEMAND	14
	B.	BAILOUT VALUES: THE MARKETING/SOCIOLOGICAL	
		PERSPECTIVE	16
	c.	BOOK VULNERABILITY	27

#### LIST OF APPENDICES

- I. COMMUNITIES IN TELEPHONE SURVEY OF BOOK PURCHASES
- II. SAMPLE DISPOSITION FOR DOC BOOKS TELEPHONE SURVEY
- III. QUESTIONNAIRES
- IV. <u>DISTRIBUTION OF SAMPLE OF BOOK PURCHASES BY COMMUNITY</u>
  <u>UNWEIGHTED AND WEIGHTED</u>

## TABLE OF CONTENTS

(Continued)

## **APPENDICES**

- I. COMMUNITIES IN TELEPHONE SURVEY OF BOOK PURCHASERS
- II. SAMPLE DISPOSITION FOR DOC BOOKS TELEPHONE SURVEY
- III. QUESTIONNAIRES

### **EXECUTIVE SUMMARY**

1

#### INTRODUCTION

During late February - early March, 1986 a telephone survey of 514 Canadian households was conducted to determine consumer sensitivity to increases in the price of books. Through this survey, The Coopers & Lybrand Consulting Group examined book purchase characteristics, factors related to the number of books purchased, and price sensitivity with respect to books. At a minimum, the results of the book purchaser telephone survey are accurate to plus or minus 4.4 percentage points, 95 times out 100.

#### HIGHLIGHTS OF THE STUDY

The major findings and conclusions of this study are presented in the following sections.

#### A. BOOK PURCHASE CHARACTERISTICS

Just under half of the population surveyed had bought at least one book during the 3 month period preceding the survey. The average and median number of books bought was 6 and 4, respectively. Almost 3 of 5 books purchased were hard covered, 2 of 5 were fiction and another 1 in 5 non-fiction. Among the other 40% were reference, scholarly, professional and children's books. A substantial proportion (85%) of the books bought were for the purchasers' own reading purposes. The average and median prices of the most recently purchased books reported by those surveyed were \$13.19 and \$8.00

#### B. FACTORS ASSOCIATED WITH NUMBER OF BOOKS PURCHASED

\* Not unexpectedly, when people dicided to purchase a book, the most important factors which were considered were (in descending order of importance): content, cost, book reviews, graphics/pictures, cover, Canadian author, and Canadian publisher.

The Coopers &Lybrand Consulting Group

- \* For people who viewed Canadian publisher as an important factor in the decision to buy a book, importance was significantly related to the size of the municipality from which people came, the number of adults in the household, and language most often spoken at home. Among those who assigned the greatest importance to Canadian publisher were French speaking people, households with three children or five adults, people in the age groups 45 54 and 65 and over, people with some post-graduate education, households reporting gross income between \$70,001 \$80,000, and persons living in communities with population of 25,001 50,000.
- \* The importance of Canadian author, for people who considered this an important factor, was related to the size of the municipality, the number of adults in the household, and the age of the respondent. Canadian author was most important in households where languages other than English or French were spoken, in households with five adults, with people aged 45 54, with those having some post-graduate education, in households with gross incomes between \$70,001 \$80,000, and in communities where population was between \$,000 25,000.

#### C. PRICE SENSITIVITY WITH RESPECT TO BOOKS

\* Demand for books is price elastic in every price range. That is, for every 1% increase in the price of books there would be a 2.5% decrease in the quantity of books demanded by consumers. Canadian books, with an overall price elasticity measure of - 1.9, were noticeably less elastic than American books, where the price elasticity was - 2.6. The least price sensitive Canadian books were those costing less than \$5.00. Aside from books costing \$20.00 and more, American books were more price elastic than Canadian volumes in every price range.



- Examination of price sensitivities from a marketing/sociological perspective, i.e. in this case through analysis of "bailout values", also revealed that book purchases are sensitive to price increases. For all books, even a 10% increase in their price would result in more than one-quarter of respondents deciding not to repurchase. If prices were to increase by 20% over the original purchase price, half of those interviewed would not have repurchased their books while the other half would have repurchased. As did the economic analysis, the bailout approach showed that price sensitivities were consistent across Canadian, American and other foreign books.
- \* Again confirming the price elasticity analysis, the bailout method indicated slight, but nevertheless statistically significant differences in consumer price sensitivities by nationality of author. Canadian and foreign (other than U.S.) authored books were the least sensitive to price increases, while American books were more sensitive to price increases.
- \* The bailout approach showed that books costing less than \$5.00 were significantly less sensitive to price increases than those in other price ranges of books, the only exception being books costing more than \$20.00. Again, the demand for specialized texts (reference/scholarly/professional) is likely reflected by books in this price range.
- \* Although the evidence is not statistically overwhelming, it seems that books purchased as gifts are more price sensitive than those bought for personal use.
- \* The factors which were most significantly associated with price sensitivity of books are gross household income and the size of the municipality from which the respondent came. Those most sensitive to book price increases were households with three children, people with primary school or less, retired persons, households with gross income exceeding \$80,000, and people in communities with 5,000 25,000 population.



- \* In the face of significant price increases, foreign authored books likely would be dropped first. People who attached some importance to Canadian publisher or author in their purchase decision, would have dropped Canadian books in roughly the same proportion as they had purchased them.
- \* While it is apparent that, if prices were to increase significantly, foreign books usually would be the first to be dropped. However, among those who would drop Canadian books first were households where French is spoken most often, people who had a college education, students, and households with the highest and lowest gross incomes.
- \* As expected, if prices increased to the point where some books purchased had to be dropped, people who were the least price sensitive would have been likely to hold onto their books the longest.
- \* Neither the nationality of the author nor the purchase reason had any bearing on when the book would be dropped.
- \* Canadian books with the highest sensitivity to price increases, as compared to those with lower price sensitivities, would have been the first to be dropped. As the elasticity analysis suggested, the price sensitive Canadian books were in the \$10 \$14.99 and \$20.00 and more price ranges.



## **RÉSUMÉ ADMINISTRATIF**

#### INTRODUCTION

À la fin de février et au début de mars 1986, une enquête téléphonique auprès de 514 ménages canadiens a été menée en vue de déterminer la sensibilité des consommateurs face à une augmentation du prix des livres. Le Groupe d'experts-conseil Coopers & Lybrand a étudié les caractéristiques d'achat de livres, les facteurs liés au nombre de livres achetés, ainsi que la sensibilité à l'égard des prix des livres. Au minimum, les résultats de l'enquête téléphonique auprès des acheteurs de livres ont un taux de précision de plus ou moins 4,4 points, 95 fois sur 100.

## Faits saillants de l'étude

Les principaux résultats et conclusions de l'étude sont présentés ci-dessous.

## A. CARACTÉRISTIQUES DES ABONNEMENTS AUX PÉRIODIQUES

\* Un peu moins de la moitié des personnes interrogées avaient acheté au moins un livre au cours des 3 mois précédant l'enquête. Les nombres moyen et médian de livres étaient 6 et 4, respectivement. Près de 3 sur 5 des livres achetés étaient à reliure cartonnée, 2 sur 5 appartenaient à la catégorie des romans, et 1 sur 5 à celle des documents et essais. Les 40% restants étaient constitués d'ouvrages de référence, de livres scolaires, d'ouvrages professionnels et de livres pour enfants. Dans 85% des cas, la personne avait acheté ces livres pour son usage personnel. Les prix moyen et médian des derniers livres achetés par les personnes interrogées étaient \$13,19 et \$8.

#### B. FACTEURS LIÉES AU NOMBRE DE LIVRES ACHETÉS

\* Il n'est pas étonnant de constater que, lorsque les gens décident d'acheter un livre, les principaux facteurs pris en ligne de compte sont, par ordre décroissant d'importance: le contenu, le prix, les critiques, les illustrations ou les images, la couverture, un auteur canadien et un éditeur canadien.



- \* Chez les personnes pour qui l'éditeur canadien constitue un facteur important dans la décision d'acheter un livre, l'importance était grandement fonction de la taille de la localité habitée par ces personnes, du nombre d'adultes dans le ménage et de la langue la plus fréquemment parlée à la maison. Parmi ceux qui attribuaient la plus grande importance à l'éditeur canadien, mentionnons: les francophones, les ménages comptant 3 enfants ou 5 adultes, les groupes d'âge entre 45 ans et 54 ans et 65 ans et plus, les personnes ayant fait des études supérieures partielles, les ménages dont le revenu brut se situe entre \$70,001 et \$80,000 et les personnes habitant des localités de 25,001 à 50,000 habitants.
- L'importance de l'auteur canadien, pour les personnes qui jugeaient ce facteur important, était liée à la taille de la localité, au nombre d'adultes dans le ménage et à l'âge du répondant. L'auteur canadien était un facteur plus important pour les ménages où d'autres langues que le français et l'anglais étaient le plus fréquemment parlées, les ménages comptant 5 adultes, les groupes d'âge entre 45 et 54 ans, les personnes ayant fait des études supérieures partielles, les ménages dont le revenu brut se situe entre \$70,001 et \$80,000 et les personnes habitant des localités de 5,000 à 25,000 habitants.

#### C. SENSIBILITÉ DES PRIX D'ABONNEMENT

La demande de livres est caractérisée par une élasticité des prix à tous les niveaux de prix. En d'autres termes, chaque 1% d'augmentation du prix des livres entraînerait une diminution de 2.5% de la demande chez les consommateurs. Les livres canadiens, dont l'élasticité globale des prix est de 1,9, accusaient une élasticité des prix bien moins marquée que les livres américains, pour lesquels l'élasticité est de 2,6. Les livres canadiens dont le prix était le moins sensible étaient ceux coûtant moins de \$5. Mise à part les livres coûtant \$20 et plus, les livres américains accusaient une plus grande élasticité des prix que les livres canadiens dans toute la gamme des prix.



- L'analyse de la sensibilité des prix d'un point de vue marketing et sociologique (analyse des valeurs "d'abandon") a également révélé que les achats de livres sont sensibles aux augmentations de prix. Pour tous les livres, même une augmentation de 10% du prix entraînerait plus d'un quart des répondants à ne pas acheter de nouveau. Si les prix devaient augmenter de 20% par rapport au prix d'achat initial, la moitié des personnes interviewées ne referait pas ces achats, alors que l'autre moitié le ferait. Tout comme l'analyse économique, l'analyse des valeurs d'abandon a révélé une constance de la sensibilité des prix entre les livres canadiens, les livres américains et les autres livres étrangers.
- \* Corroborant encore les résultats de l'analyse de l'élasticité des prix, l'analyse des valeurs d'abandon a révélé une différence légère, quoique statistiquement significative, de la sensibilité des consommateurs aux prix selon la nationalité de l'auteur. Les ouvrages d'auteurs canadiens et étrangers (autres qu'américains), étaient les moins sensibles aux augmentations de prix, alors que les livres américains étaient plus sensibles aux augmentations de prix.
- \* L'analyse des valeurs d'abandon a révélé que les livres coûtant moins que \$5 étaient considérablement moins sensibles aux augmentations de prix que ceux des autres des autres catégories de prix, à la seule exception des livres coûtant plus que \$20. Là encore, la demande de textes spécialisés (ouvrages de référence, livres scolaires, ouvrages professionnels) est probablement reflétée par les livres dans cette gamme de prix.
- \* Bien que les conclusions ne soient pas statistiquement renversantes, il semble que le prix des livres achetés en cadeau soit plus sensible que celui des livres achetés pour usage personnel.
- \* Les facteurs les plus fortement associés à la sensibilité des prix des livres sont le revenu brut du ménage maisonnée et la taille de la localité habitée par le répondant. Les plus sensibles aux augmentations de prix des livres sont: les ménages comptant 3 enfants, les personnes ayant fait au plus



des études primaires, les retraités, les ménages dont le revenu brut dépasse \$80,000 et les personnes dans les localités comptant entre 5,000 et 25,000 habitants.

- \* Dans l'éventualité d'une augmentation de prix marquée, ce sont les livres d'auteurs étrangers qui sont les plus susceptibles d'être abandonnés en premier. Les personnes qui accordaient une certaine importance à l'éditeur ou à l'auteur canadien dans leur décision d'achat abandonneraient les livres canadiens selon environ la même proportion qu'elles en achèteraient.
- \* De toute évidence, si les prix devaient augmenter de façon considérable, ce sont, dans l'ensemble, les ouvrages étrangers qui seraient abandonnés en premier. Néanmoins, parmi ceux qui abandonneraient les livres canadiens en premier, mentionnons: les ménages où le français est le plus couramment parlé, les personnes ayant un niveau d'instruction collégial, les étudiants et les ménages dont le revenu brut est soit le plus élevé, soit le plus faible.
- \* Comme on pourrait s'y attendre, si les prix devaient augmenter au point où certains livres achetés devraient être abandonnés, les personnes les moins sensibles aux prix seraient les plus susceptibles de maintenir leur achat de livres le plus longtemps.
- \* Ni la nationalité de l'auteur ni la raison de l'achat n'avaient d'incidence sur le moment auquel la décision d'acheter un livre était abandonnée.
- \* Les livres canadiens les plus sensibles aux augmentations de prix, seraient abandonnés les premiers. Tout comme l'analyse de l'élasticité le laisse entendre, les livres canadiens caractérisés par une sensibilité des prix sont ceux coûtant entre \$10 et \$14,99 et ceux coûtant \$20 et plus.



#### I. INTRODUCTION

#### A. BACKGROUND

This report presents and discusses the findings of a telephone survey of Canadian households conducted during March 1986, regarding consumer sensitivity to increases in the price of books.

The research was carried out by the Coopers & Lybrand Consulting Group to provide the Program Evaluation Branch of the Department of Communications with an assessment of consumer reaction to increases in book prices.

#### B. OVERVIEW OF METHODOLOGY

During late February - early March 1986 a telephone survey of 514 households was conducted. A probabilistic selection procedure which involved two steps was used. First, the households were selected via a technique which generates random telephone numbers. Households were stratified on the basis of thirteen communities across the country (see list in Appendix I). Next a random method of selection was applied to select an eligible book purchaser within each qualified household. The eligible book buyer had to be at least 18 years of age. Fieldwork was completed during evening hours between February 24 and March 3, from constantly supervised regional telephone facilities. See Appendix II for sample disposition.

### (i) Questionnaire Design

The questionnaires used in this study were designed by the Coopers & Lybrand Consulting Group and reviewed by the Project Team of the Department of Communications and by Statistics Canada. The instruments were pretested in actual field conditions with



representative respondents. The results of the pretest were discussed with the Project Team, following which modifications were made. A copy of the questionnaire is included as Appendix III.

#### C. RELIABILITY OF RESULTS

### (i) Sample Representativeness

The survey of book purchasers attempted to obtain a representative sample of book buyers in Canada. Finding a reasonable benchmark against which to compare our data proved to be difficult. In "The Retail Bookstore Study", one of a three-report study prepared for the Department of Communications in 1984, it was noted that "it appears that given the lack of serious research into the book buying (and non book-buying) population, booksellers are content to practice a measure of pragmatism..." (p.14). In the conclusion to the overview of the trade, the authors remarked that "James Lorimer's study, Book Reading in Canada (1983), reports that there are close to 7-million people in this country who read books regularly. At present we know next to nothing about the buying behaviour of these readers" (p.17).

Notwithstanding the paucity of information, we did try to relate our results to industry data and to information from any related studies. Data from Statistics Canada for 1984 estimate that "scholarly and reference" books accounted for 19.1% of the total Canadian domestic book market. The unweighted results of our survey of book purchasers indicate that of books purchased during the 3 month reference period prior to the survey, 18.5% were "reference and scholarly" books. A survey of retail bookstores done for the

Department of Communications, <u>Development of Options for Action in Key Sectors of Canadian Book Distribution</u>, Ottawa, August 1984.



Department of Communications (1984),<sup>2</sup> reported that "on average, the independent bookstores claim that just under a quarter (23%) of all titles carried are Canadian" (p.22). Our survey found that, of the five most recent books that respondents reported having purchased, 23% were Canadian. Finally, James Lorimer<sup>3</sup> using 1978 data indicated that 52% of English language respondents reported reading a book in the six-week period prior to the survey. "Reading" here encompasses books purchased, received as a gift, or borrowed from a library or friend/relative. Our survey, which covered English and French people, found that 49% of those surveyed reported having purchased at least one book during the 3-month period prior to the survey. Respondents indicated that 80% of their book purchases were for their "own reading."

As sketchy as the data are with which to reconcile our results, we think (with guarded optimism) that our sample may be a reasonable representation of the book purchasing population.

Our sample of respondents across the thirteen communities reported significantly different numbers of books purchased during the 3-month reference period prior to the survey. As noted above, without sufficient benchmark data, it is difficult to ascertain the reasonableness of this situation. Based on these results, the Department of Communications requested us to weight the sample distribution according to the distribution of the population aged 18 years and over, as estimated by the Census for June 1, 1985 for

<sup>&</sup>lt;sup>3</sup> Lorimer, James and Susan Shaw, <u>Book Reading in Canada</u>, Association of Canadian Publishers, Toronto, 1983.



Just Marketing Research Ltd., A Study of Retail Bookstores: Report of a Survey, Prepared for Department of Communications, Ottawa, May 1984.

these communities.<sup>4</sup> Weights were constructed by multiplying the inverse of the ratio of the sample in community "X" to the total sample size for all thirteen communities by the ratio of the total population 18+ in community "X" to the total population 18+ for these communities. The sample in each community was multiplied by its respective weight, and hence is statistically adjusted for composition with respect to community size. Although restricted to certain sites, the communities were chosen to be representative of the population 18 years of age and over for Canada (exclusive of the Yukon and the Northwest Territories). The results of the study should be descriptive of the Canadian population (see Appendix IV for unweighted and weighted distributions of book purchasers).

The book purchaser telephone survey results are, at a minimum, accurate to plus or minus 4.4 percentage points, 95 times out of 100.

#### D. KEY DEFINITIONS

Throughout this report, the reader should be aware of certain terms:

\* "Bailout" is a variable defined in our analysis as the price at which a book would have to rise in order for an individual to have a zero percent probability of repurchase. It is expressed as the percent increase over the original book price. While not price elasticity of demand, per se, there is some relationship between the bailout variable and demand for books.



<sup>&</sup>lt;sup>4</sup> This assumes that the book purchasing population is distributed in relatively the same proportion as the population age 18 years and older.

"Elasticity of Demand" is the relative responsiveness of quantity demanded to changes in price. Suppose the price of a good "x" declines by I percent. The demand for "x" is said to be price elastic, of unitary price elasticity, or price inelastic according as the quantity of "x" demanded expands by more than I percent, by exactly I percent, or by less than I percent. For example, a price elasticity of -1.5 for "x" means that an increase of I percent in the price of "x" tends on average to reduce the quantity bought by 1.5 percent. The formula for calculating price elasticity of demand is:

 $\begin{array}{ccc} Ep = \underline{\Delta}q \cdot \underline{p} \\ \underline{\Delta}p & q \end{array}$ 

where Ep = price elasticity;

 $\triangle q = \text{change in quantity}$ 

△p = change in price;

p = lower of the two prices; and

q = lower of the two quantities.



#### II. BOOK PURCHASE CHARACTERISTICS

#### A. INCIDENCE OF BOOK PURCHASERS

At the time the book purchase telephone survey was conducted, 48.4% of individuals in households contacted had purchased at least one book (either as a gift or for their own use) during the previous 3 month period. Fewer people (44.4%) bought books strictly for their own reading purposes. Since Lorimer (1983) reported that about 7 million Canadian read books regularly (or about 28% of the Canadian population), perhaps our estimate of people buying books for their own purposes (about 44%) may be on the high side. Yet, as was pointed out in the discussion of sample representativeness (Section I), there are virtually no data on the book-buying population. Hence, it is difficult to know whether or not this proportion of the population actually represents book purchasers during any given period in Canada.

It should be stressed that analysis in the following sections is based on weighted data (see Section I).

#### B. NUMBER OF BOOKS PURCHASED

During the 3 month reference period prior to the survey, respondents indicated that they had bought a total of 3,206 books, or an average of 6.2 books each. The median number of books purchased was 4.2. In addition to asking questions about books bought during this 3 month period, individuals were requested to provide information on up to the five most recent books purchased. Information on a total of 1,765 most recently purchased books was reported, on an average of 3.4 books per respondent. The median number of most recent purchases was 3.5.



#### C. EXPENDITURES ON BOOKS

The average cost of the first most recently reported book was \$14.71; the median price was \$10.00. The average and median costs of the next most frequently reported books were: \$12.45 and \$8.00; \$11.78 and \$7.00; \$13.25 and \$7.00; and \$13.24 and \$7.00 (see Table 2.1). For all most recently purchased books combined the average and median costs were \$13.19 and \$8.00.

#### D. TYPES OF BOOKS PURCHASED

Of the books reported during the 3 month reference period, 41% were fiction, followed by non-fiction (21%), scholarly/school (10%), professional/technical (9%), reference (8%), children's (7%), and other (3%) (see Table 2.2). More than half the books purchased (57%) were hard covered, as opposed to paperback editions. A substantial proportion of the books bought were for the purchasers' own use (85%), rather than for a gift (Table 2.2).

Individuals reporting their five most recent book purchases, indicated that 83% of them were for their own reading purposes (see Table 2.3). There was no significant difference in reason for purchase of book between the five most recent purchases and those bought during the 3 month period prior to the survey.

#### E. NATIONALITY OF AUTHOR

Almost half of the most recently purchased books were reported to be American authored (48%), followed by Canadian (19%), British (17%), French and other (both 8%) (see Table 2.3).



TABLE 2.1

Average and Median Costs of Most Recently Purchased Books

Most Recently	Average	Median	
Purchased Book	Cost	Cost	Base $(n =)$
	\$	\$	
Title A	14.71	10.00	(510)
Title B	12.45	8.00	(435)
Title C	11.78	7.00	(339)
Title D	13.25	7.00	(261)
Title E	13.24	7.00	(199)
Total (all books)	13.19	8.00	(1,744)

TABLE 2.2

## DISTRIBUTION OF BOOKS PURCHASED DURING 3 MONTH REFERENCE PERIOD BY TYPOLOGY' TYPE OF COVER AND PURCHASE REASON

Characteristic	% Distribution 1	Base (n =)
Typology	%	(3,175)
Fiction	41	
Non-fiction	21	
Reference	8	
Scholarly/school	10	
Professional/technical	9	
Children's	7.	
Other	3	
Type of Cover		(3,110)
Hardcover	57	
Paperback	43	
Purchase Reason		(3,172)
Own reading	85	
Gift	15	

This represents the distribution of <u>books</u> purchased, as opposed to the number of people who purchased books.

#### **CONCLUSION I:**

Slightly less than half of the population surveyed had purchased at least one book during the 3 month reference period preceding the survey. About 44% had bought a book for their own reading purposes. During that period, the average number of books bought was about 6; the median number was about 4. Some 57% of the books bought were hard covered, 41% were fiction and another 21% non-fiction, and about 85% were for the purchasers' own use. Of the most recently purchased books reported by individuals, 83% were for their own use, about half were by American authors, and the average and median costs were \$13.19 and \$8.00.



#### III. FACTORS ASSOCIATED WITH NUMBER OF BOOKS PURCHASED

#### A. DESCRIPTIVE CHARACTERISTICS

At first glance, it seemed that there was a significant relationship between the number of books purchased during the 3 month period prior to the survey and the respondent's level of education and size of municipality from which s/he came (see Table 3.1). Further statistical analysis suggested that the number of books bought was related to level of education, language spoken in the household, age of the respondent, and household income (Table 3.2). When the average number of books purchased are compared for a number of socio-demographic characteristics we find further statistically significant differences. The different average numbers of books purchased by socio-demographic characteristics are summarized in Table 3.3. For instance, these results show that the average number of books bought by Anglophones was significantly different than that bought by Francophones, that the number was significantly different in households with four adults from those with fewer numbers of adults, that the average number bought by respondents aged 35 - 44 was significantly different from those bought by respondents in the age groups 18 - 24, 25 - 34 and 65 and over, that respondents with some post-graduate education bought a significantly higher average number of books than those with some university or less, that there was a significant difference between the average bought by employed compared to retired individuals, and that the average number bought by individuals in households with gross household income of \$10,000 or less was significantly different from other households except those in the \$60,001 -\$70,000 and over \$80,000 categories. In the size of municipality, no two groups were significantly different at the 5% level.



## TABLE 2.3

## DISTRIBUTION OF FIVE MOST RECENT BOOKS BY PURCHASE REASON AND NATIONALITY OF AUTHOR

Characteristic	%Distribution	Base $(n = )$
	· %	
Purchase Reason		(1,765)
Own Reading	83	
Gift	17	
Nationality of Author		(1,307)
Canadian	19	
American	49	
British	17	
French	8	
Other	8	

TABLE 3.1

## CORRELATION BETWEEN NUMBER OF BOOKS PURCHASED DURING 3 MONTH PERIOD AND SELECTED SOCIO DEMOGRAPHIC CHARACTERISTICS

Socio-Demographic	Pearson			
Characteristic	Correlation Coefficient	Base $(n = )$		
Number of Adults	0.034	(492)		
Number of Children	0.006	(441)		
Age	0.003	(506)		
Education	0.182 **	(510)		
Household Income	- 0.054	(419)		
Municipality Size	0.081 *	(497)		

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

ANALYSIS OF VARIANCE BETWEEN NUMBER OF BOOKS PURCHASED DURING
3 MONTH PERIOD AND SELECTED SOCIO DEMOGRAPHIC CHARATERISTICS

TABLE 3.2

Socio-Demographic	,	
Characteristic	F - Ratio	Base $(n = )$
Language	3.141 *	(510)
Number of Adults	1.542	(491)
Number of Children	0.000	(440)
Age	2.353 *	(505)
Education	4.662 **	(509)
Employment Status	1.770	(509)
Household Income	3.039 *	(418)
Municipality Size	0.840	(496)
Sex of Respondent	0.283	(510)

<sup>\*</sup> Significant at 5% level

<sup>\*\*</sup> Significant at 1% level

TABLE 3.3

## AVERAGE NUMBER OF BOOKS PURCHASED DURING 3 MONTH PERIOD BY SELECTED SOCIO DEMOGRAPHIC CHARACTERISTICS

## Average

Characteristic	Number of Books	Base $(n = )$
Language		()
English	6.8 * 1	(318)
French	5.2	(176)
Other	5.1	(15)
Number of Adults		
1	5.8 *	(93)
2	5.6 *	(264)
3	4.7 *	(77)
4	8.0 *	(37)
5	6.1	(10)
6	4.5	(7)
Age		
18 - 24	5.7 *	(128)
25 - 34	5.7 *	(175)
35 - 44	8.2 *	(98)
45 - 54	6.1	(41)
55 - 64	5.9	(37)
65 +	4.3 *	(23)
Education		
Primary School or less	4.3	(1)
Some High School	3.7 *	(64)
High School Graduate	5.7 *	(142)
Some College	5.5 *	(46)
College Graduate	5.6 *	(47)
Some University	5.6 *	(78)
·	9.7	(80)
University Degree	11.3 *	
Some Post-graduate		(11)
Post-graduate Degree	6.8	(37)

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TABLE 3.3 (Continued)

Average
---------

Characteristic	Number of Books	Base $(n = )$
Employment Status		
Employed	6.9 *	(292)
Unemployed	5.9	(37)
Homemaker	5.0	(50)
Student	5.7	(83)
Retired	4.6 *	(46)
Household Income		
\$10,000 or less	11.2 *	(37)
\$10,001 - 20,000	6.0 <b>*</b>	(91)
\$20,001 - 30,000	4.6 *	(90)
\$30,001 - 40,000	6.5 *	(57)
\$40,001 - 50,000	6.0 <b>*</b>	(65)
\$50,001 - 60,000	5.7 *	(30)
\$60,001 - 70,000	7.8	(21)
\$70,001 - 80,000	4.5 *	(10)
Over \$80,000	6.9	(13)

<sup>\*</sup> Using Duncan's multiple test of significant differences those between the highest average number of books and others with asterisks are significant at the 5% level.

<sup>1</sup> READS: English speaking respondents reported an average number of 6.8 books purchased.

#### **CONCLUSION 2:**

Analysis reveals that gross household income, education attainment, age and language of respondent are significantly related to the total number of books purchased during the three months prior to the survey. The highest average numbers of books bought during this period were reported by English speaking people, households in which there were four adults, people in the age group 35 - 44, those with some post-graduate education, employed people, and those reporting household income of \$10,000 or less.

## B. IMPORTANCE OF CANADIAN AUTHOR/CANADIAN PUBLISHER IN BOOK PURCHASE DECISION

### (i) Overall Ratings

When people decided to purchase a book, the most important factors which they took into consideration were the content of the book -98% thought this was important - followed by cost (73%), book reviews (51%), graphics/pictures (42%), Canadian author and cover (both 37%), and Canadian publisher (30%) (Table 3.4).

#### **CONCLUSION 3:**

Overall, the most important factors which were taken into consideration when buying a book were the content of the book (not surprisingly), cost of the book, and book reviews. The least important considerations were graphics/pictures, the cover, Canadian author and Canadian publisher.



TABLE 3.4

RATINGS OF FACTORS IN BOOK PURCHASE DICISION

Rating

Factor	Base (n =)	Very Important %	Fairly Importan %	•	Not at all Important %	Average
Cost	(511)	111	62	20	7	2.2
Graphics/pictures	(499)	16	26	28	30	2.7
Canadian Publisher	(506)	8	22	29	41	3.0
Cover	(512)	9	28	31	32	2.9
Book Reviews	(505)	15	36	23	25	2.6
Canadian Author	(506)	11	26	26	37	2.9
Content	(510)	92	6	-	2	1.1

NOTE: Average ratings are based on a four-point importance scale. Since "I" on the scale indicates "very important" and "4" means "not at all important", the lower the average number reported, the more important the factor is to book purchasesrs



<sup>1</sup> READS: 11% of respondents rated cost as a "very important" factor in the decision to buy a book.

### (ii) Relationship of Selected Purchase Criteria to Selected Book Purchase Characteristics

Recalling the four-point importance scale which suggests that the higher the average rating the less important are the selected purchase criteria, Table 3.5 shows that there is low importance attached to the criteria of Canadian publisher and Canadian author, particularly in the case of british-authored book purchases, i.e. average ratings of 3.2 and 3.1, respectively. The highest average ratings of these two purchase criteria were found among purchases of Canadian-authored books. While not outstandingly high, the average ratings of Canadian author (2.5) and Canadian publisher (2.7) were, nonetheless, greater than in the case of purchases of other categories of nationalities.

Not surprisingly, respondents who reported the highest average cost of book purchases (\$18.45) indicated that cost was a very important factor in the decision to purchase a book (Table 3.6).

### **CONCLUSION 4:**

Overall, Canadian author and publisher are not important considerations in the decision to purchase a book. Only those people who buy Canadian books suggest that either Canadian author or publisher is somewhat important. As would be expected, cost is an important factor when deciding to buy a book, and for those whose average purchase costs are highest, cost is a very important consideration.



TABLE 3.5

## RELATIONSHIP OF AUTHOR'S NATIONALITY TO IMPORTANCE OF CANADIAN PUBLISHER AND OF CANADIAN AUTHOR IN PURCHASE DECISION

Purchase Criteria		Author's Nationality				
	Canadian	<u>American</u>	British	French	Other	Total
Importance of						
Canadian Publishe	<u>r</u>					
Average Rating Base (n =) Chi-square F - Ratio (ANOV	2.7 <sup>+</sup> (240) A)	3.0+ (629)	3.2+ (211)	2.8+ (102)	3.2 <sup>+</sup> (95)	3.0 <sup>1</sup> (1,279) 93.88** 11.59**
Importance of Canadian Author						
Average Rating Base (n =) Chi-square F - Ratio (ANOVA	2.5+ (243)	2.9 <sup>+</sup> (626)	3.1 <sup>+</sup> (217)	2.6 <sup>+</sup> (104)	2.9+ (100)	2.9+ (1,292) 93.35** 12.80**

READS: On the four-point importance scale, where "1" means "very important" and "4" is "not at all important", the average rating of Canadian publisher in the decision to buy a book is 3.0, which is low.



<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

<sup>+</sup> Using Duncan's multiple test of significant differences, those between British/Other and Canadian, American and French were significant at the 5% level.

<sup>+</sup> Using Duncan's multiple test of significant differences, those between British and the other nationalities were significant at the 5% level.

TABLE 3.6

## RELATIONSHIP BETWEEN COST OF BOOK PURCHASED AND IMPORTANCE OF COST IN PURCHASE DECISION

	Very Important	Fairly Important	Not Very Important	Not at all Important	Total
Average Cost of Book	18.45+1	12.76+	11.86+	13.08+	13.09
Base (n= )	(157)	(1,067)	(405)	(96)	(1,727)
Chi-square	,				105.64**
F - Ratio (ANOVA)					8.80**

READS: The average cost of book purchases for those who indicated that cost was an important factor in the decision to buy a book was \$18.45.

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

<sup>+</sup> Using Duncan's multiple test of significant differences, the difference between "very important" and other ratings of importance were significant at the 5% level.

### C. RELATIONSHIP OF SOCIO-DEMOGRAPHIC FACTORS TO IMPORTANCE OF CANADIAN AUTHOR AND PUBLISHER

(i) Initial statistical analysis indicated that the importance of the Canadian publisher in the purchase decision was significantly related to the number of adults in the household and the size of the municipality from which the respondent came (Table 3.7). More indepth statistical analysis revealed that the importance of Canadian publisher was associated with language spoken most often in the house hold, size of municipality, and the respondent's sex (Table 3.8). the various average levels of importance people attached to Canadian publisher by selected socio-demographic characteristics are shown in Table 3.9. The data reveal that Francophones, households where there were five adults, with three children, people in the age groups 45 -54 and 65 and older, those with some post-graduate education, households earning \$70,001 - \$80,000, and people in municipalities of between 25,001 - 50,000 placed more importance on Canadian publisher in the purchase decision than did others surveyed.

### **CONCLUSION 5:**

The importance of Canadian publisher as a factor in the decision to buy a book is significantly related to the size of the municipality from which people come, the number of adults in the household, language most often spoken at home. Among those who attached the greatest importance to Canadian publisher were French speaking people, households with five adults or three children, people between 45 - 54 and 65 and over, people with some postgraduate education, households with gross income of \$70,001 - \$80,000, and people who live in municipalities of 25,001 - 50,000 population.



TABLE 3.7

# CORRELATION BETWEEN IMPORTANCE OF CANADIAN PUBLISHER IN PURCHASE DECISION AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Socio-Demographic Characteristic	Pearson Correlation Coefficient	<u>Base (n =)</u>
Number of Adults	- 0.084 *	(487)
Number of Children	- 0.035	(436)
Age	- 0.044	(501)
Education	0.030	(505)
Household Income	0.017	(417)
Municipality Size	0.177 **	(492)

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

ANALYSIS OF VARIANCE BETWEEN IMPORTANCE OF CANADIAN PUBLISHER IN PURCHASE DECISION AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Socio-Domographic Characteristic	<u>F - Ratio</u>	Base (n =)	
Language	4.925 **	(505)	
Number of Adults	1.699	(487)	
Number of Children	0.000	(435)	
Age	1.878	(500)	
Education	1.604	(505)	
Employment Status	0.592	(505)	
Household Income	2,607	(416)	
Municipality Size	5.912 **	(491)	
Sex of Respondent	5.848 *	(505)	

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

IMPORTANCE OF CANADIAN PUBLISHER IN PURCHASE DECISION
BY SELECTED SOCIO-DOMOGRAPHIC CHARACTERISTICS

TABLE 3.9

Characteristic	Average Level of Importance	Base (n =)
Language		
English	3.1 *1	(319)
French	2.8	(170)
Other	3.3	(15)
Number of Adults		
1	3.1 *	(93)
2	3.0 *	(259)
3	2.8 *	(77)
4	2.9 *	(37)
5	2.2	(10)
6	3.3 *	(7)
Number of Children		
0 -	3.0	(294)
1	3.2 *	(62)
2	2.9	(48)
3	2.7	(29)
Age		
18 - 24	3.0	(128)
25 - 34	3.1	(178)
35 - 44	2.9 *	(97)
45 - 54	2.8 *	(41)
55 - 64	3.3 *	(34)
65 +	2.8	(21)

TABLE 3.9 (Continued)

Characteristic	Average Level of Importance	<u>Base (n =)</u>
Education		
Primary School or Less	2.6	(1)
Some High School	3.1	(67)
High School Graduate	3.0	(142)
Some College	2.8 *	(45)
College Graduate	3.2	(44)
Some University	2.9 *	(75)
University Degree	3.1	(79)
Some Post-graduate	2.5 *	(11)
Post-graduate Degree	3.3 *	(37)
Household Income		
\$10,000 or Less	3.0	(37)
\$10,001 - 20,000	3.2	(94)
\$20,001 - 30,000	2.9 *	(87)
\$30,001 - 40,000	2.8 *	(55)
\$40,001 - 50,000	2.9 *	(65)
\$50,001 - 60,000	3.4 *	(30)
\$60,001 - 70,000	3.2	(22)
\$70,001 - 80,000	2.3 *	(10)
Over \$80,000	3.4	(13)
Size of Municipality		
500,000 +	3.2	(223)
50,001 - 499,999	2.8	(209)
25,001 - 50,000	2.6 *	(28)
5,000 - 25,000	3.2 *	(21)
Less than 5,000	3.1	(8)

## TABLE 3.9 (Continued)

- \* Using Duncan's multiple test of significant differences those between the lowest average level of importance, i.e., values closer to "4", and others with asterixes are significant at the 5% level.
- READS: In the decision to buy a book, English speaking repondents attached less importance to Canadian publisher than did French speaking people.

### (ii) Canadian Author

Basic correlation analysis revealed that Canadian author, as an important factor in the purchase decision, was significantly related to the size of the municipality from which respondents came, the number of adults in the household, and the age of the respondent (Table 3.10). Analysis of variance indicated that the importance of Canadian author was related to sex of the respondent, language spoken most often at home, the number of adults in the household. age of the respondent, household income and municipality size (Table 3.11). Table 3.12 shows the various average levels of importance that people attributed to Canadian author by selected socio-demographic characteristics. Those who thought that Canadian author was more important than others were: non Anglo - and Francophones, households with five adults, those aged 45 - 54, people with some post-graduate education, households with gross income of \$70,001 -\$80,000, and people living in communities with 5,000 - 25,000 population.

#### **CONCLUSION 6:**

The importance of Canadian author in the decision to purchase a book is related to the size of municipality, the number of adults in the household, and age of the respondent. Ratings of the importance of Canadian author, were also associated with people speaking languages other than English and French in the household, households, with five adults, people in the age group 45 - 54, those with some post-graduate education, households with gross income between \$70,001 - \$80,000, and people in communities with populations between 5,000 - 25,000. As expected, there are striking similarities between the findings for importance of Canadian author and of Canadian publisher, size of municipality and age of respondent.



**TABLE 3.10** 

# CORRELATION BETWEEN IMPORTANCE OF CANADIAN AUTHOR IN PURCHASE DECISION AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Socio-Demographic	Pearson	•
Characteristic	Correlation Coefficient	Base $(n =)$
Number of Adults	- 0.118 *	(488)
Number of Children	- 0.068	(437)
Ag <b>e</b>	- 0.086 *	(501)
Education	0.045	(506)
Household Income	0.066	(416)
Municipality Size	0.139 **	(494)

<sup>\*</sup> Significant at 5% level

<sup>\*\*</sup> Significant at 1% level

**TABLE 3.11** 

# ANALYSIS OF VARIANCE BETWEEN IMPORTANCE OF CANADIAN AUTHOR IN PURCHASE DECISION AND SELECTED SOCIO-DOMOGRAPHIC CHARACTERISTICS

Socio-Demographic Characteristic	F - Ratio	Base (n = )
Language	3.831 *	(506)
Number of Adults	4.080 *	(487)
Number of Children	0.000	(436)
Age	2.699 *	(501)
Education	1.714	(505)
Employment Status	1.307	(505)
Household Income	2.420 *	(415)
Municipality Size	2.987 *	(493)
Sex of Respondent	18.945 **	(506)

<sup>\*</sup> Significant at 5% level

<sup>\*\*</sup> Significant at 1% level

**TABLE 3.12** 

# IMPORTANCE OF CANADIAN AUTHOR IN PURCHASE DECISION BY SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Characteristic	Average Level of Importance	<u>Base (n =)</u>
Language		
English	3.0 *1	(314)
French	2.7	(176)
Other	2.6	(15)
Number of Adults		
1	3.0 *	(92)
2	2.9 *	(262)
3	2.8 *	(76)
4	3.0 *	(37)
5	1.5	(10)
6	2.7 *	(7)
Age		
18 - 24	2.9 *	(128)
25 - 34	3.0 *	(178)
35 - 44	2.9 *	(97)
45 - 54	2.4	(40)
55 - 64	3.0 *	(32)
65 +	2.6	(23)
Education	_	
Primary School or less	2.6	(1)
Some High School	2.7	(67)
High School Graduate	2.9 *	(136)
Some College	2.9 *	(46)
College Graduate	2.6	(47)
Some University	2.9 *	(78)
University Degree	3.1 *	(79)
Some Post-graduate	2.1	(11)
Post-graduate Degree	3.1 *	(37)

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TABLE 3.12 (Continued)

Characteristic	Average Level of Importance	<u>Base (n =)</u>
Household Income		
\$10,000 or less	2.8	(36)
\$10,001 - 20,000	2.9 *	(94)
\$20,001 - 30,000	2.7	(85)
\$30,001 - 40,000	2.7	(57)
\$40,001 - 50,000	2.7	(65)
\$50,001 - 60,000	3.2 *	(30)
\$60,001 - 70,000	3.1 *	(22)
\$70,001 - 80,000	2.3	(10)
Over \$80,000	3.5 *	(13)
Size of Municipality		
500,000 +	3.0 *	(224)
50,001 - 499,999	2.8	(209)
25,001 - 50,000	2.7	(28)
5,000 - 25,000	2.4	(21)
Less than 5,000	3.0	(8)

<sup>\*</sup> Using Duncan's multiple test of significant differences those between the lowest average level of importance, i.e., values closer to "4", and others with asterixes are significant at the 5% level.

READS: In the decision to buy a book, English - speaking respondents attached less importance to Canadian author than did French - speaking people.

### IV. PRICE SENSITIVITY WITH RESPECT TO BOOKS

#### A. PRICE ELASTICITY OF DEMAND

Before discussing in detail the findings of this part of the report, there are some considerations which the reader should bear in mind. First, elasticity measures usually are calculated from actual price and quantity data, i.e., prices of books and quantities of books purchased, over time. We thus measure actual consumer behaviour. In this study (as can be seen from the questions asked - see Appendix III) hypothetical consumer behaviour has been used as the basis for deriving measures of price elasticity of demand with respect to books. The resulting elasticities relate to intentions, not actual behaviour, and likely tend to exaggerate reality. As the reader will observe later, however, in spite of this potential limitation the consistency of all the elasticity measures suggest that the demand for books is price elastic. This means that if the price of books were to increase by 1% the concomitant decrease in the quantity demanded would be greater than 1%. The end result is a decrease in total revenues despite a price increase.

The main factors affecting elasticity are the availability of good substitutes for books, the number of uses to which books can be put, and the price of books relative to consumers' incomes. The availability of good substitutes is the most important of these factors. The more good substitutes for books there are available, the more the demand for books would tend to be elastic. Also, the wider the range of uses for books, the more elastic could be the demand for them. If books take a relatively large amount of consumers' incomes, then demand will also have a tendency to be elastic.



### (i) All Books

As can be seen from Table 4.1, the demand curve for all books is virtually linear and is elastic. The calculated elasticity measures underscore this observation. Table 4.1 shows that elasticity is - 2.5, i.e., for every 1% increase in the price of books, there is a 2.5% decrease in the number of books which people would buy. It is likely that the price elasticity of books can be explained in large part by the availability of good substitutes, e.g., other types of reading materials, borrowing from libraries, used book stores, or friends, etc., and perhaps even watching television or listening to radio. By price range of books, the only noticeable difference in price elasticity from the total is for books in the \$15.00 - \$19.99 range (Table 4.1).

### (ii) Canadian Books

Price elasticity for Canadian books was - 1.9 (Table 4.1), which is noticeably lower than that for all books. Canadian books in the price range \$10.00 - \$14.99 were the most price sensitive, i.e., for every 1% increase in the price of Canadian books in this price category, there would be a decrease of 2.5% in the number purchased. The least price sensitive Canadian books were those costing less than \$5.00. Again, the availability of good substitutes likely helps to explain the price elastic nature of Canadian books.

### (iii) American Books

American books, with a price elasticity of - 2.6, were more price sensitive than their Canadian counterparts. The price elasticity of

The following section on "Bailout Values", which takes a marketing/sociological perspective, essentially confirms the findings of this part of the study.



American books costing less than \$5.00, i.e., - 2.9, was almost double that of the Canadian books in this price category (Table 4.1). American volumes costing \$20.00 and more were the least price sensitive (-1.8) of all American books, likely reflecting the demand for specialized texts, eg., for reference/school/professional/technical purposes.

#### **CONCLUSION 7:**

The demand for books is price elastic. Canadian books were noticeably less elastic than American books, and the least price sensitive Canadian books were those under \$5.00. Except for books costing \$20.00 and more, American books were more price elastic than Canadian volumes in every price range. Perhaps this reflects the demand for specialized American texts used for reference, school, professional or technical reasons.

### B. BAILOUT VALUES: THE MARKETING/SOCIOLOGICAL PERSPECTIVE

In the survey, respondents were asked to provide information on <u>up to the five most recent books</u> they had purchased, i.e., the reason for purchase (own reading, gift), price paid, price willing to pay, and nationality of author. Recalling the definition of bailout from the first chapter of this report, a bailout value was calculated for each of the up to five books reported by respondents. There was no significant difference in the results from book one to another book, i.e., the median percentage price increases all books after the bailout values were calculated were almost identical, ranging from 19.79% to 20.32%. In other words, there was a high degree of collinearity among prices of the five most recent books purchased.



TABLE 4.1

# PRICE ELASTICITY OF DEMAND BY PRICE RANGE FOR ALL, CANADIAN AND AMERICAN BOOKS

		Price	
Type of Bo	ook and Range	<b>Elasticity</b>	Base (n=)
		1	
All Books		-2.5 <sup>1</sup>	(1,742)
Less than	\$5.00	-2.7	(538)
	\$5.00-9.99	-2.2	(420)
	\$10.00-14.99	-2.8	(241)
	\$15.00-19.99	-3.0	(170)
	\$20 and more	-2.2	(373)
Canadian I	<u>Books</u>	-1.9	(301)
Less than	\$5.00	-1.5	(54)
	\$5.00-9.99	-1.7	(48)
	\$10.00-14.99	-2.5	(55)
	\$15.00-19.99	-1.7	(41)
	\$20 and more	-2.1	(103)
American	Books	-2.6	(675)
Less than	\$5.00	-2.9	(282)
	\$5.00-9.99	-2.3	(128)
	\$10.00-14.99	-2.8	(77)
	\$15.00-19.99	-1.9	(57)
	\$20 and more	-1.8	(125)

<sup>1</sup> READS: For every 1% increase in the price of books there would be a resulting decrease of 2.5% in the quantity demanded.

### (i) Bailout of First Book Mentioned

We decided to examine price sensitivity for the most recent book purchased by individuals, i.e., the purchase which, presumably, was freshest in their minds, as well as for the complete selection of books on which respondents were asked to provide information. The following analysis deals with the first book mentioned. The next section discusses the results for all books purchased.

### Overall Bailout Results

Respondents were asked if they would repurchase the first book they mentioned if the price were to increase by 10%, 20% and 30%. They were also asked how high the price would have to go before they would not buy the book. Tables 4.2 and 4.3 and Chart 4 show that, for all of the books first mentioned, 11% of those sampled would not repurchase the book even if the price were to remain unchanged or decrease. If the price of the book were to increase by 10%, then 73% of the respondents would have re-purchased it.<sup>2</sup> Less than one-half of respondents would have bought the book if its price were to increase by 20%. At a 30% increase in price, only 35% of those surveyed indicated that they would have bought the book. A small proportion of the book purchasers (8%) would have repurchased their book, even at a price increase of 100% or more.



<sup>1</sup> Compare this with the elasticity results earlier which suggested that for every 1% increase in the price of books there would be a 2.5% decrease in quantity demanded.

Overall, Table 4.3 indicates that the median bailout value for all books first mentioned was 20%. This means that if book prices were to increase by 20%, 50% of the sample would have still repurchased their books and 50% would not have repurchased. Table 4.3 also indicates that the mean bailout value for all books first mentioned was 49%. The difference between the mean value and the median of 20% clearly demonstrates the skew in the distribution of bailout values toward the higher percentage figures. In other words, the difference between the mean and median indicates that a relatively few book purchasers reported very high bailout values, i.e. they were less sensitive to book price increases.

### Book Price Sensitivity by Nationality of Author

A visual scan of the data in Tables 4.2 and 4.3 suggests that respondents were, on average, less sensitive to increases in the prices of Canadian books than they were for American or other foreign books. However, a battery of statistical tests reveal that these <u>differences are not significant</u>, i.e. the tests reveal that there is a reasonable chance that these differences have occurred because of sampling error.

This result is not surprising given respondents relatively low concern for the nationality of author when purchasing books. Other survey results reported earlier showed that when buying books, respondents attach much more importance to content and price, and much less importance to whether or not the author is a Canadian.



#### **CONCLUSION 8:**

Excluding those individuals at both extremes, i.e., those apparently not satisfied with their original purchase and those completely satisfied or those requiring the books for reference/professional reasons, book purchases are sensitive to price increases. For all books, even a 10% increase in their price would result in more than one-quarter of respondents deciding not to repurchase. The dividing line for the sample seems to be at the 20% increase level. If book prices were to increase by this amount, the survey suggests that 50% of individuals would not repurchase their books and remaining half would repurchase.

When the nationalities of the authors of books are considered, the study reveals that price sensitivities are consistent across Canadian, American and other foreign books. In other words, our sample was as sensitive to increases in the prices of American and other foreign books as it was for Canadian books.

### Multivariate Analysis of Bailout Values by Nationality of Author

Examination of bailout values by nationality of author - controlling for purchase reason, book price, and the number of recent books purchases - showed no significant relationship. In other words, after controlling for the influences or effects on price sensitivities of purchase reason, book prices and the number of books purchased, respondent sensitivities to increases in book prices still did not differ significantly by the nationality of the author.



#### **CONCLUSION 9:**

Multivariate analysis shows that the first book reported by respondents, sensitivity with respect to increases in the price of books was not significantly related to the author's nationality, even after controlling for the effects of the reason for purchase (own reading, gift), the original cost of the book, and the number of book purchases reported.

## Bailout of First Book Mentioned and Number of Books Reported

Table 4.4 shows that the average bailout value varies according to the number of books reported. Those surveyed were asked to indicate the five most recent books bought and not everyone reported the maximum number. In fact, respondents reported an average of about three books. People indicating two books had an average (mean) bailout value of 88%, which was significantly different than the average bailout values of those respondents reporting three, five, one, and four books respectively.

#### **CONCLUSION 10:**

Book purchasers reporting only two recent book purchases at the time of the survey, indicated that they were significantly less sensitive to price increases of books than were other purchasers.



TABLE 4.2

RELATIONSHIP OF PROBABILITY OF RE-PURCHASE AND

PERCENT PRICE INCREASE OF ALL BOOKS FIRST MENTIONED

	Probability of Repurchase			
% Price Increase	All Books (%)	Canadian Books	American	All Others Foreign
0	89.	92	90	89
10	73 <sup>1</sup>	84	71	75
15	67	70	64	71
20	47	64	45	44
25	42	56	41	35
30	35	34	33	31
50	24	21	25	20
75	15	13	18	12
100	8	4	10	4

<sup>1</sup> READS: If the price of books increased by 10%, then 73% of respondents would have repurchased the book. Interestingly, 11% of those surveyed would not have re-bought the book, even at the same price.

TABLE 4.3

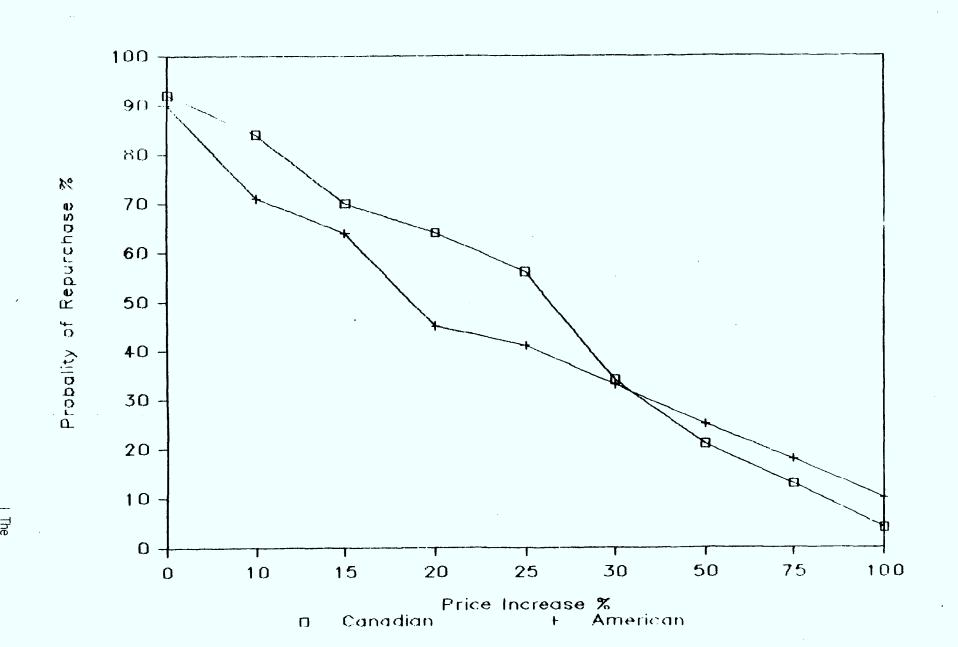
# MEDIAN AND MEAN BAILOUT VALUES FOR FIRST BOOK MENTIONED

	MEDIAN % INCREASE	MEAN % INCREASE	BASE (n=)
All books	20 1	49	(454)
Canadian books	30	46	(68)
American books	20	42	(137)
All other foreign books	20	36	(118)

<sup>1</sup> READS: The median bailout value for all books first mentioned is 20%. In other words, if book prices increased by 20%, 50% of the sample would not repurchase their book and 50% would repurchase their book.

**CHART 4** 

## RELATIONSHIP OF PROBABILITY OF REPURCHASE AND % PRICE INCREASE OF ALL BOOKS FIRST MENTIONED



### TABLE 4.4

## AVERAGE BAILOUT PRICE OF BOOKS BY NUMBER OF RECENT BOOK PURCHASES

NUMBER OF RECENT BOOKS PURCHASED PER RESPONDENT	AVERAGE BAILOU (%)	IT PRICE
1	35	*
2	88	<b>*</b> 1
3	47	*
4	26	
5	40	*



<sup>\*</sup> Using Duncan's multiple test of significant differences those between 2 and 3, 5, 1 and 4 are significant at the 5% level.

READS: Respondents reporting the purchase of two books had an average bailout value of 88%. Strictly speaking, this means that these people would accept any price increase up to 88%, but would not repurchase their books if the prices increased by 88% or more.

### Bailout of First Book Mentioned and Book Price

Statistical tests reveal that across the complete range of book prices, sensitivities of increases in prices were consistent (i.e. no significant differences in bailout values). However, when sensitivities are compared on a price category by category basis, we do find a statistically significant difference. Table 4.5, which summarizes the different average bailout values by price category of book, shows that respondents who purchased books costing \$20 or more indicated an average (mean) bailout value of 62%. This average bailout value was significantly different from any other price category.

#### CONCLUSION 11:

Price sensitivities do not consistently vary by the cost of books purchased. However, the survey does reveal that people who bought books costing \$20 or more were significantly less sensitive to price increases only with respect to individuals who bought books costing between \$15.00-19.99. While no other significant differences were found, the next highest average bailout values were for the lowest priced books.

### Bailout of First Book Mentioned and Purchase Reason

At the 5% level of significance (t-test), there was no difference in the average bailout price of books purchased as gifts or for the respondents' own reading purposes. This means that people who purchased books for gifts were as sensitive (or insensitive) to price increases as those who purchased books for their own reading.

### TABLE 4.5

# AVERAGE BAILOUT PRICE OF BOOKS BY CATEGORY OF BOOK

PRICE CATEGORY OF BOOK	AVERAGE BAILOUT PRICE (%)
Less than \$5.00	54
\$5.00 - 9.99	52
\$10.00 - 14.99	35
\$15.00 - 19.99	24 *
\$20.00+	62 <sup>1</sup>



<sup>\*</sup> Using Duncan's multiple test of significant difference that between books at \$20.00+ and those \$15.00-19.99 is significant at 5% level.

<sup>1</sup> READS: Respondents who purchased books in the price range of \$20.00+ had an average bailout price of 62% greater than the original price.

### (ii) Bailout of all Books

This section of the report describes the results for the combination of all books purchased by respondents as opposed to the first book mentioned in the preceding section.

### Overall Bailout Results

When all books reported by respondents as recent purchases are considered, Tables 4.6 and 4.7, and Chart 4.2 show that 14% of respondents would not repurchase their books even if prices were to remain the same or decline. Some 69% of respondents would have purchased their books in the face of a 10% increase. For price increases beyond 20%, the distribution of probability of repurchase is similar to that for book first mentioned (compare Table 4.6 to Table 4.2).

Overall, Table 4.7 shows that the median bailout value for all books reported was 20%, indicating that with this level of price increase, half the sample would not repurchase their book and the other half would. The differences between the median and mean values in Table 4.7 are similar to those observed in Table 4.3, and indicate that the distribution of bailout values is skewed toward the higher percentage increases.

#### **CONCLUSION 12:**

Again, excluding those cases at both extremes, book purchasers are sensitive to increases in the price of books. The dividing line, once again, appears to be at the 20% price increase level. At this point, half of those interviewed would not repurchase their book while the other half would.



TABLE 4.6

RELATIONSHIP OF PROBABILITY OF RE-PURCHASE AND PERCENT PRICE INCREASE OF ALL BOOKS

Probability of Repurchase All Others All Canadian % American Foreign Books **Books** Price Increase (%) 69 <sup>1</sup> ·9 

<sup>1</sup> READS: If the price of books increased by 10%, then 69% of respondents would have repurchased the books.

TABLE 4.7

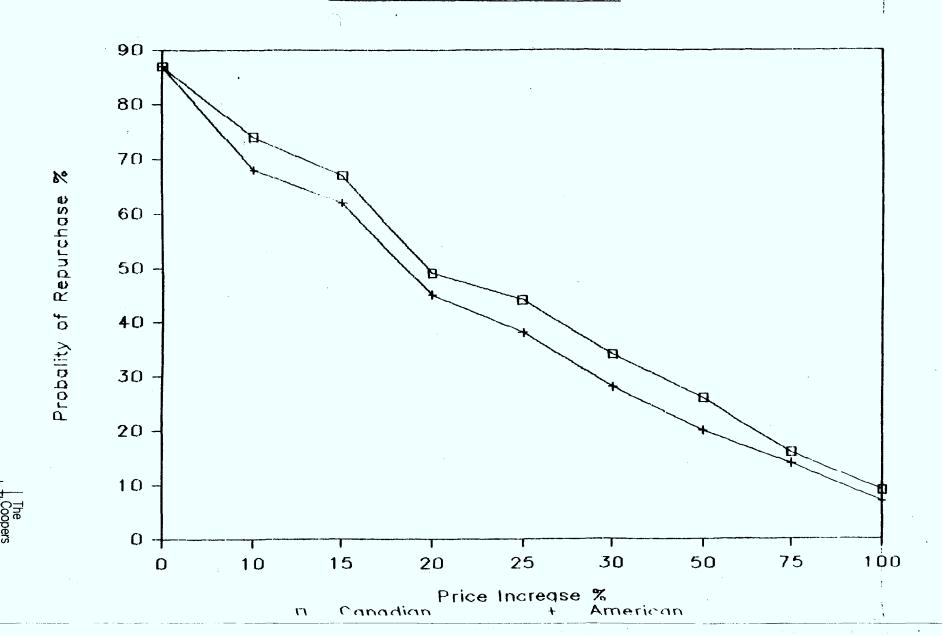
MEDIAN AND MEAN BAILOUT VALUES FOR

COMBINATION OF ALL BOOKS REPORTED

	MEDIAN % INCREASE	MEAN % INCREASE	BASE (n=)
All books	20 1	47	(1,516)
Canadian books	20	48	(216)
American books	20	40	(513)
All other foreign books	20	50	(396)

<sup>1</sup> READS: The median bailout value for all books reported was 20%. In other words, if book prices increased by 20%, 50% of the sample would not repurchase their book and 50% would repurchase their book.

RELATIONSHIP OF PROBABILITY OF REPURCHASE
AND % PRICE INCREASE OF ALL BOOKS



### Bailout by Nationality of Author

Sensitivities to price increases are similar across nationalities of authors, as Table 4.7 indicates. However, in contrast to the findings reported for the first book mentioned in Table 4.3, the differences in bailout values (in terms of means) observed for all books mentioned across nationalities of authors are statistically significant. In other words, the data suggest that respondents were slightly less sensitive to increases in the prices of Canadian authored books than they were for American and all other foreign books.

#### **CONCLUSION 13:**

When all recent book purchases are considered, the survey results indicate slight, but nevertheless statistically significant differences in consumer price sensitivities by nationality of author. Canadian and foreign (other than U.S.) authored books seem to be the least sensitive to price increases, while books authored by Americans are relatively more sensitive to increases in prices.

# Multivariate Analysis of Bailout Values by Nationality of Author

Through the use of analysis of covariance, we attempted to determine whether significant differences in price sensitivities across nationalities of authors would still exist after controlling for any possible effects due to purchase reason (gift vs personal reading), book prices and the number of books purchased. Results indicate that there were significant "main effects", after controlling for the three covariates above. In other words. price sensitivities continued differ significantly by nationality of author even when the influences of purchase reason, book prices and the number of books purchased were eliminated.



### Bailout of Books and Number of Books Reported

Table 4.8 indicates that average bailout values vary according to the number of recent book purchase reported. Respondents who reported two recent purchases had an average bailout price of 74%, which, as was the situation with book first mentioned, was significantly different than the average bailout prices of those people reporting five, three, one and four books, respectively. In addition, there was a significant difference between five- and four-book purchases.

#### **CONCLUSION 14:**

Regardless of whether one considers only first book mentioned or all reported most recent purchases, people buying only two books are significantly less price sensitive to increases in the cost of books than are other book purchasers.

### Bailout of Books and Book Price

The different average bailout values are shown by price range of book in Table 4.9. The least expense price range of books (less than \$5.00) had the highest average bailout value, 61%. This bailout value was significantly different from that of books in the price ranges \$15.00-19.99, \$10.00-14.99, and \$5.00-9.99. It was not different, statistically, from the most expensive category of books. There was a significant difference between this latter group of books and those in the price range \$15.00-19.99.



### TABLE 4.8

## AVERAGE BAILOUT PRICE OF BOOKS BY NUMBER OF RECENT BOOK PURCHASES

BER OF RECENT BOOKS ASED PER RESPONDENT	AVERAGE BAILO	OUT PRICE
		u
1	35	*
2	74	* 1
3	37	*
4	. 28	
5	49	* "



<sup>\*</sup> Using Duncan's multiple test of significant differences, those between 2 and 5, 3, 1 and 4 are significant at the 5% level.

READS: Respondents reporting the purchase of two books had an average bailout price of 74% greater than the original price.

### TABLE 4.9

## PRICE CATEGORY OF BOOKS BY

PRICE CATEGORY OF BOOK	AVERAGE BAILOUT PRICE
(\$)	(%)
15.00 - 19.99	27
10.00 - 14.99	32 *
5.00 - 9.99	44 *
20.00+	47 *
Less than 5.00	61 <sup>1</sup>

<sup>\*</sup> Using Duncan's multiple test of significant differences, that between books at less than \$5.00 and those at prices \$15.00 - 19.99, \$10.00 - 14.99, and \$5.00 -9.99 is significant at the 5% level.

READS: Respondents who bought books costing less than \$5.00 had an average bailout price of 61% greater than the original price.

#### CONCLUSION 15:

Purchasers of books costing less than \$5.00 were significantly less sensitive to price increases than those of other price ranges of books. The only exception was with respect to books costing more than \$20.00. The demand for specialized texts, e.g., reference/scholarly/professional, is likely reflected by books in this price range.

### Bailout of Books and Purchase Reason

The difference in the average bailout values for books purchased for the respondents' own reading purposes (49%) and that for gifts (40%) was significant at the 5% level (t-test = 1.96).

#### **CONCLUSION 16:**

When all recent purchases are considered, book purchasers are more sensitive to increases in the price of books purchased as gifts, as opposed to for their reading purposes.

### (iii) Factors Associated with Bailout of all Books

Basic correlation analysis indicated that there was a relationship between the bailout value and the number of children in the household, gross household income, and size of municipality from which the respondent came (Table 4.10). The latter two characteristics were significant at the 1% level. Further statistical analysis (analysis of variance), which examined the relationship between bailout value and selected socio-demographic



**TABLE 4.10** 

## CORRELATION BETWEEN BAILOUT VALUES AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Socio-Demographic	Pearson	
Characteristic	Correlation Coefficient	Base (n=)
A7 1 6 8 1 1.	0.0400	(1
Number of Adults	-0.0408	(1,430)
Number of Children	-0.0482 *	(1,263)
Age	-0.0111	(1,495)
Household Income	-0.0900 **	(1,266)
Education	0.0127	(1,515)
Municipality Size	0.0675 **	(1,481)

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

characteristics, i.e., language spoken most often at home, numbers of adults and children in the household, age of respondent, education, employment status, gross household income, size of municipality and sex of respondent, revealed that bailout value was related significantly to household income, size of municipality (both at the 1% level of significance), employment status and sex of the respondent (significant at the 5% level) (Table 4.11). Finally, differences within specific socio-demographic analysis of characteristics is shown in Table 4.12. Here it can be seen that households with one child were the least price sensitive group, i.e., their average bailout value was 64%. At the other extreme, households with three children were the most sensitive to increases in the price of books (bailout value of 21%). High school graduates were the least price sensitive; the difference between them and respondents with some college education was significant at the 5% Not surprisingly, retired people in the survey were more sensitive to increases in the price of books than were other employment groups; unexpected, however, is the high bailout value (58%) for unemployment respondents. With respect to household income, those households reporting an income of \$30,001 - \$40,000 were the least price sensitive while those reporting gross household income over \$80,000 were the most sensitive to price increases. People living in the smallest communities, i.e., less than 5,000 population, were least sensitive to increases in book prices, while respondents living in towns with a population of 5,000 -25,000 were the most price sensitive group.

#### CONCLUSION 17:

According to the preceding analysis, the two most significant sociodemographic characteristics related to price sensitivity of books were gross household income and the size of the municipality in which the respondent lived. The groups most sensitive to increases in the price of books were



**TABLE 4.11** 

# ANALYSIS OF VARIANCE BETWEEN BAILOUT VALUES AND SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

## Socio-Demographic

Characteristic	F-Ratio	Base (n=)
Language	0.813	(1,515)
Number of Adults	0.974	(1,429)
Number of Children	2.139	(1,263)
Age	0.498	(1,495)
Education	1.334	(1,514)
Employment Status	2.586 *	(1,514)
Household Income	4.208 **	(1,265)
Size of Municipality	3.381 **	(1,481)
Sex of Respondent	6.122 *	(1,515)

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

**TABLE 4.12** 

# AVERAGE BAILOUT VALUE BY SELECTED SOCIO-DEMOGRAPHIC CHARACTERISTICS

Socio-Demographic Characteristic	Average <u>Bailout Va</u> - % -		Base (n=)
Number of Children			
0	48		(876)
· <b>1</b>	64	1	(150)
2	42	*	(160)
3	21	*	(72)
.4	. 45		(1)
Education		·	"
Primary school or less	26		(4)
Some high school	39		(166)
High school graduate	56		(403)
Some college	34	*	(138)
College graduate	40		(135)
Some university	43		(235)
University degree	50		(277)
Some post-graduate	27		(15)
Post-graduate degree	54		(137)
Employment Status			
Employed	51		(874)
Unemployed	58		(110)
Homemaker	37		(153)
Student	43		(250)
Retired	29	*	(126)

TABLE 4.12 (Continued)

Socio-Demographic Characteristic	Average <u>Bailout Value</u> - % -	Base (n=)
Household Income		
\$10,000 or less	56	(127)
10,001-20,000	58	(266)
20,001-30,000	34 *	(260)
30,001-40,000	66	(168)
40,001-50,000	31 *	(196)
50,001-60,000	33 *	(104)
60,001-70,000	42 <b>*</b>	(74)
70,001-80,000	39	(25)
Over \$80,000	22 *	(41)
Municipality Size		
500,000 or more	54	(688)
50,001-499,999	41 *	(626)
25,001-50,000	44	(67)
5,000-25,000	25 *	(75)
Less than 5,000	81	(23)

<sup>\*</sup> Using Duncan's mulitple test of significant differences those between the highest and those with asterisks are significant at the 5% level.

<sup>1</sup> READS: Respondents reporting one child in the household had an average bailout value of 64%. Strictly speaking, this means that the households with one child would accept a price increase up to 64%, but would not repurchase their books if prices increased by 64% or more.

households with three children, people with primary school or less, retired individuals, households reporting over \$80,000 gross income, and people living in communities with 5,000 - 25,000 population.

### C. BOOK VULNERABILITY

### (i) Books Dropped by Nationality of Author and Purchase Reason

As both the price elasticity and bailout value analyses show, books are price sensitive. While it appears from the elasticity analysis that there are differences in price sensitivities of books by nationality of author, the battery of statistical tests done in the bailout value analysis reveal that these differences are not significant. Respondents were asked what book(s) they would have given up if prices increased to the point where they had to give up one or more of the books they reported. These are referred to as "book dropped". In Table 4.13, the distribution of book dropped is compared with the distribution of all books originally purchased, by nationality of author and by reason for purchase. With respect to nationality of author, the differences in the two distributions were statistically significant after the first book dropped. The foreign authored books would be the first dropped as a result of a significant price increase.

## Importance of Canadian Publisher and Author in Purchase Decision to Canadian Books Dropped

Table 4.14 shows the relationship of Canadian publisher and author to Canadian books dropped. One might expect, a priori, that fewer Canadian books would be dropped among people giving high importance ratings to Canadian publisher and author in the decision to buy a book. As the data in Table 4.14 indicates, there was no significant difference between Canadian books purchased and dropped and the importance attached to either Canadian publisher or author.



**TABLE 4.13** 

# DISTRIBUTION OF BOOKS PURCHASED AND BOOKS DROPPED BY NATIONALITY OF AUTHOR AND REASON FOR PURCHASE

			Book Di	ropped			
Factor	Base (n=)	<u>lst</u>	Base (n=)	2nd	Base (n=	<u>3rd</u>	
		%		%		%	
Nationality of Author							
Canadian	(290)	20.5	(230)	19.7	(170)	20.4	
Foreign	(1,125)	79.5	(940)	80.3	(665)	79.6	
(t-test)	(2.80	(2.80)**		(0.09)		(1.25)	
Purchase Reason							
Own Reading	(1,460)	81.8	(1,195)	82.7	(840)	80.8	
Gift	(325)	18.2	(250)	17.3	(200)	19.2	
(t-test)	(0.0	0)	(2.95)	+ <del>*</del>	(0.5	52)	

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

RELATIONSHIP OF IMPORTANCE OF CANADIAN PUBLISHER AND
CANADIAN AUTHOR IN PURCHASE DECISION TO CANADIAN BOOKS DROPPED 1

**TABLE 4.14** 

	Canadian Books	Canad	lian Bo	oks D	ropped
Importance Factor	Purchased	<u>lst</u>	2nd	3rd	NOT
	-%-	-%-	-%-	-%-	-%-
Canadian Publisher					
Very Important	19	28	-	12	25
Fairly Important	39	34	15	67	33
Not Very Important	19	11	20	-	22
Not At All Important	23	27	65	21	19
(Chi-square)			(6.	84)	
Canadian Author					ıi.
Very Important	22	43	9	-	17
Fairly Important	35	24	15	67	48
Not Very Important	27	12	20	29	22
Not At All Important	16	22	56	4	13
(Chi-square)			(11.	.04)	

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

<sup>1</sup> READS: For those who attached some importance to Canadian publisher or author, Canadian books would be dropped in about the same proportion as they were bought.

#### **CONCLUSION 18:**

As a result of a significant price increase, foreign - authored books likely would be the first dropped. For respondents who attached some importance to Canadian publisher or author in their purchase decision, Canadian books would be dropped in roughly the same proportion as they were purchased.

### Books Dropped by Reason for Purchase

When reason for purchase was considered, there was a statistically significant difference in the distributions after the second book dropped. Proportionately more people would drop a book purchased for their own reading. Recall that this survey of book purchasers asked for information on their five most recent book purchases. Presumably they read them already. Perhaps after reading a particular book and then being asked if they still would have bought it after prices had risen significantly, respondents may have a tendency to give it more easily than if they had not yet read it. This would seem to be the situation especially if the respondent found the book either average, mediocre or poor. In the previous chapter we saw that all of the most recently bought books, those purchased as gifts were more price sensitive than those bought for the respondent's own reading. It was also shown that, for the first book mentioned, people who bought books for gifts were as sensitive to price increases as those who purchased books for their own reading.



#### **CONCLUSION 19:**

Overall, these results taken together suggest that there is no unequivocal evidence with respect to price sensitivity of books purchased for own reading purposes or as gifts.

### (ii) Books Dropped by Socio-Demographic Factors

The relationship between books dropped and socio-demographic characteristics is shown in Table 4.15. While it is clear that foreign books would be dropped first as a result of price increases, there are some households in which the likelihood of dropping a Canadian book <u>first</u> is greater than in others. If prices increased to the point where <u>one</u> book had to be dropped, the characteristics of the households which would be most likely to drop a Canadian volume first are related to language spoken most often at home, education, employment status, and household income.

### Language Spoken at Home

In households where French is most often spoken at home, more than one-third indicated that a Canadian book would be the first dropped (Table 4.15).

#### Education

Canadian books would be dropped first most likely in households where respondents have some college education (30%).



**TABLE 4.15** 

# RELATIONSHIP OF SOCIO-DEMOGRAPHIC FACTORS AND DISTRIBUTION OF BOOKS DROPPED BY NATIONALITY OF AUTHOR

				Во	ook Dr	opped			
		lst	<u> </u>	·	2nc	<u> </u>		3rc	<u> </u>
Socio-Demographic	Base			Base		•	Base		
Factor	<u>(n=)</u>	Cdn	Foreign	<u>(n=)</u>	Cdn	Foreign	<u>(n=)</u>	Cdn	Foreign
Number of Adults									
1	(42)	14	86	(38)	8	92	(27)	11	89
2	(138)	17	83	(114)	13	87	(82)	16	84
3 or more	(61)	26	74	(51)	25	75	(38)	21	79
(Chi-square)		(4.5	3)		(11.8	7)*	•	(8.5	5)
Number of Children									
None	(141)	18	82	(131)	13	87	(91)	13	87
1	(33)	18	82	(24)	21	79	(18)	11.	89
2	(26)	35	65	(18)	28	72	(12)	42	58
3 or more	(13)	31	69	(7)	17	83	(6)	-	100
(Chi-square)		(10.8	32)		(26.53	()**		(23.99	))**
Language									
English	(160)	10	90	(136)	10	90	(105)	11	89
French	(90)	34	66	(78)	26	74	(50)	22	78
Other	(1)	-	100	(1)	-	100	(1)	-	100
(Chi-square)		(22.67	')**		(11.11)	7)*		(3.7	4)
Age			<b>.</b>						
18-24	(71)	23	77	(66)	47	53	(58)	24	76
25-34	(83)	16	84	(71)	6	94	(54)	6	94
35-44	(51)	20	80	(40)	13	87	(25)	16	84
45-54	(15)	27	73	(14)	21	79	(6)	33	67
55-64	(17)	6	94	(17)	-	100	(12)	-	100
65+	(13)	23	77	(9)	-	100	(2)	-	100
(Chi-square)		(9.8	7)		(26.75	5)**		(18.4	5)*

TABLE 4.15 (Continued)

				Во	ok Dr	opped			
		lst			2nc			· 3rc	<u> </u>
Socio-Demographic	Base			Base			Base		
Factor	<u>(n=)</u>	<u>Cdn</u>	Foreign	<u>(n=)</u>	<u>Cdn</u>	<u>Foreign</u>	<u>(n=)</u>	<u>Cdn</u>	Foreign
Education									
Primary school or less	-	-	-	-	-	-	-	-	-
Some high school	(16)	6	94	(8)	13	87	(3)	33	67
High school graduate	(64)	13	87	(57)	9	91	(38)	11	89
Some college	(20)	30	70	(18)	33	67	(1 <i>5</i> )	7	93
College graduate	(37)	27	73	(29)	10	90	(10)	40	60
Some university	(43)	23	77	(41)	15	85	(40)	13	87
University degree	(54)	20	80	(45)	22	78	(35)	20	80
Some post Graduate	(4)	-	100	(3)	-	100	(2)	· _	100
Post-graduate degree	(13)	8	92	(15)	13	87	(13)	15	85
(Chi-square)		(48.87	)**		(51.69	)* <i>*</i>		(61.97	*)**
Employment Status									
Employed	(139)	12	88	(122)	7	93	(93)	6	94
Unemployed	(15)	20	80	(13)	-	100	(7)	-	100
Homemaker	(26)	31	69	(15)	7	93	(9)	22	78
Student	(49)	33	67	(44)	45	55	(36)	33	67
Retired	(22)	14	86	(21)	14	86	(11)	27	73
(Chi-square)		(51.19	)* <i>*</i>		(24.27	)* <i>*</i>		(38.77	)* <i>*</i>

TABLE 4.15 (Continued)

Boo	k D	rop	ped

		İst			2nc			3rc	
Socio-Demographic	Base			Base			Base		
Factor	<u>(n=)</u>	<u>Cdn</u>	Foreign	<u>(n=)</u>	<u>Cdn</u>	Foreign	<u>(n=)</u>	Cdn	Foreign
Household Income				٠					
\$10,000 or less	(19)	42	58	(16)	44	56	(14)	36	64
\$10,001-20,000	(34)	6	94	(29)	10	90	(19)	5	95
\$20,001-30,000	(54)	2	98	(47)	4	96	(24)	4	96
\$30,001-40,000	(22)	14	86	(23)	13	87	(17)	18	82
\$40,001-50,000	(39)	26	74	(29)	17	83	(21)	38	62
\$50,001-60,000	(19)	11	89	(18)	-	100	(17)	-	100
\$60,001-70,000	(13)	15	85	(13)	8	92	(13)	8	92
\$70,001-80,000	(5)	60	40	(5)	20	80	(1)	-	100
Over \$80,000	(8)	50	50	(8)	50	50	(6)	-	100
(Chi-square)		(65.26	)**		(36.33	)**		(37.95	i)**

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

### **Employment Status**

Students who bought books, purchased them in the ratio of 26% Canadian and 74% foreign. Of the books first dropped, 45% indicated that Canadian books would be the first dropped.

### Household Income

The highest proportion of Canadian books dropped would be in households with incomes of \$70,001 - \$80,000, followed by households with over \$80,000 and by those with less than \$10,000.

#### **CONCLUSION 20:**

Canadian books would be the first to be dropped by households in which French is most often spoken at home, where respondents had some college education, by students, and by households with the lowest and highest gross incomes.

### (iii) Books Dropped and Price Sensitivity

Table 4.16 shows the distribution of the times at which books would be dropped as a result of price increases. Some 27% of books would have been the first dropped, another 21% would have been the second dropped, and a further 15% would have been the third dropped. About 37% of books would not have been dropped at all. Analysis of variance revealed that there was a statistically significant relationship between the bailout value and the time the book would be dropped (F - ratio = 3.661, significant at the 5% level). Further statistical analysis indicated that, as expected, respondents who did not drop a book as a result of price increases had the highest average bailout values, i.e., 62% (Table 4.17).



**TABLE 4.16** 

## DISTRIBUTION OF THE TIMES AT WHICH BOOKS WOULD BE DROPPED DUE TO PRICE INCREASES

Time Book Dropped	Distribution %	<u>Base (n = )</u>		
lst	27 1	(358)		
2nd	21	(277)		
3rd	15	(201)		
Not	37	(495)		

READS: If prices increased to the point where one book had to be dropped, about 27% of books would be the first dropped.

TABILE 4.17

## AVERAGE BAILOUT VALUE BY TIMES AT WHICH BOOKS WOULD BE DROPPED

Time Book Dropped	Average <u>Bailout Value</u> %	<u>Base (n =)</u>		
lst	49	(315)		
2nd	37 *	(239)		
3rd	44 *	(173)		
Not	62 1	(436)		



<sup>\*</sup> Using Duncan's multiple test of significant differences those between not dropping a book and the second and third books to be dropped are significant at the 5% level.

READS: People who did not drop a book as a result of price increases had the highest average bailout value, i.e., were least sensitive to book price increases.

**TABLE 4.18** 

# RELATIONSHIP OF TIMES AT WHICH BOOKS DROPPED TO NATIONALITY OF AUTHOR 1

Time Book	Nationality of Author			
Dropped	Canadian %	American %	Other %	Base (n =)
lst	19	48	33	(261)
2nd	16	47	37	(211)
3rd	14	48	38	(156)
Not	24	40	36	(367)

Chi-Square = 25.61

1 READS: The distribution of books purchased by nationality of author is compared to the distribution of the time the books were dropped, and no statistically significant difference was found.

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

#### **CONCLUSION 21:**

Not surprisingly, if prices increased to the point where some books purchased had to be dropped, respondents who were the least sensitive to increases in the price of books were likely to hold onto books longer than others.

## Multivariate Analysis of Bailout Values by Time at Which Book Would be Dropped

Using analysis of covariance, there was an attempt to determine whether significant price sensitivity differences exist across times when books would be dropped, after controlling for any possible effects arising from the price of books and number of books purchased. Results of the ANOCOVA show that there were significant "main effects", after controlling for the above-noted two variables. Thus, even when the influences of book prices and the number of books purchased were eliminated, price sensitivities continued to differ significantly by the time at which the book would be dropped.

## Time at Which Book Dropped by Nationality of Author

Overall, the distribution of books dropped by nationality of author was not significantly different from the distribution of books purchased by nationality of author (Chi-square = 25.61, not significant) (Table 4.18).



### Time at Which Book Dropped by Reason for Purchase

As Table 4.19 indicates, there was no statistically significant difference in the distributions of books purchased and the time they were dropped, when reason for purchase was taken into consideration (Chi-square = 1.89, not significant) (Table 4.19).

#### CONCLUSION 21:

When prices increased to the level where books would be dropped, neither the nationality of the author nor the reason for purchasing the book were significantly related to when the book would be dropped.

## Relationship of Time Canadian Books Would be Dropped and Bailout Values

There was a significant relationship between respondents' price sensitivities and when they would drop a Canadian book (F-ratio = 3.433, significant at the 5% level). Table 4.20 indicates that people with the most price sensitivity would have dropped a Canadian book first, i.e., average bailout value was 19%. At the extreme, people who would not drop their Canadian books were significantly less sensitive to price increases (bailout value was 76%).

## Relationship of Time Foreign Books Would be Dropped and Bailout Values

Analysis of variance between bailout value (i.e., price sensitivity) and the time a foreign book would be dropped indicated that the two variables were not significantly related (F - ratio = 1.504). As can be seen in Table 4.21, there was a



**TABLE 4.19** 

## RELATIONSHIP OF TIMES AT WHICH BOOKS DROPPED TO REASON FOR PURCHASE 1

Time Book	Reason for		
Dropped	Own Reading	Gift	Base $(n =)$
	%	%	
lst	83	17	(342)
2nd	83	17	(271)
3rd	84	16	(195)
Not	85	15	(479)

Chi-square = 1.89

READS The distribution of books purchased by reason for purchases is compared to the distribution of the time the books were dropped, and no statistically significant difference was found.

<sup>\*\*</sup> Significant at 1% level

<sup>\*</sup> Significant at 5% level

**TABLE 4.20** 

## AVERAGE BAILOUT VALUE BY TIME CANADIAN BOOKS WOULD BE DROPPED

Average Bailout Value %	Base (n =	
19	(45)	
49	(28)	
37	(20)	
76 <sup>1</sup>	(80)	
	Bailout Value % 19 49 37	



<sup>\*</sup> Using Duncan's multiple test of significant differences that between those not dropping and the first to be dropped is significant at the 5% level.

<sup>1</sup> READS: Those respondents not dropping a Canadian book as a result of significant price increases, were the least sensitive to increases in the price of books.

**TABLE 4.21** 

## AVERAGE BAILOUT VALUE BY TIME FOREIGN BOOKS WOULD BE DROPPED

Time	Average	
Book Dropped	Bailout Value	Base $(n = )$
	%	
lst	52 1	(188)
2nd	32 *	(163)
3rd	45	(121)
Not	47	(245)



<sup>\*</sup> Using Duncan's multiple test of significant differences, that between the first and second dropped is significant at the 5% level.

READS: Those respondents dropping a foreign book first as a result of significant price increases, were the least sinsitive to increases in the price of books.

significant difference (at the 5% level) between foreign books dropped first and second. One might have expected to see books with the lowest bailout value, i.e. highest price sensitivity, being the first to be dropped.

### **CONCLUSION 23:**

Canadian books with the lowest bailout value were the first to be dropped. That is, Canadian books which were most sensitive to price would have been the first to go. On the other hand, foreign books with the highest bailout value were the first to be dropped.

COMMUNITIES IN TELEPHONE SURVEY OF BOOK PURCHASERS

## COMMUNITIES IN TELEPHONE SURVEY OF BOOK PURCHASERS

Gander

Halifax

Quebec

Montreal

Sherbrooke

Ottawa

Toronto

Thunder Bay

Brandon

Red Deer

Calagary

Kelowna

Vancouver

SAMPLE DISPOSITION FOR DOC BOOKS TELEPHONE SURVEY

### **APPENDIX II**

## SAMPLE DISPOSITION FOR DOC BOOKS TELEPHONE SURVEY

TOTAL CALLS ATTEMPTED	3,232	
Call Backs	939	
Not in Service	414	
Business Number	136	
Language Problem	69	
Duplicate Number	7	
Respondent Refusal	591	
Does Not Qualify	547	
Termination	15	
Completed Interviews	514	

## **QUESTIONNAIRES**

The Conners to Labourd Consulting Conners	ron or	TELOF LIST ON V
The Coopers & Lybrand Consulting Group		FICE USE ONLY
99 Bank Street, Suite 727	Card No.:	1 1
Ottawa, Ontario	Resp. No.:	
K1P 6B9	Project No.:	
		9999 12-15
BOOK PURCHASER TELEPHONE SURVE	<u>EY</u>	
INTRODUCTION		
Good :norning/afternoon/evening. My name is	from The Coop	ers &
Lybrand Consulting Group. We're conducting a national survey for	_	1
department to find out about people's book purchasing habits. May I spea	_	1
household whose birthday falls closest to today's date please? This pers	·	1
Years of Age. RE-INTRODUCE YOURSELF IF NECESSARY. I assure your		<b>}</b>
you give is confidential and will be used for statistical purposes only.	od that the intoth	lation
you give is confidential and will be used for statistical purposes only.		
SECTION A: SCREENING		
1. During the past 3 Months, about how many books have you purchase	ed?	
	", THANK AND MINATE	
Can't recall 88 — SKII	P TO Q.5	16-17
2. About how many of these books were for your own reading as oppos	ed to a gift?	
Number		
Can't Recall 88	,	13-19
SECTION B: INFORMATION RELATED TO BOOKS	5	
3. Of all the books you bought in the last 3 months, about how man opposed to paperback?	y were hard cove	red as
Number		
Don't know 88		20-21

		Number	Don't Know		
	Fiction	<del></del>	88	-	22
	Non-fiction		88		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	Reference	<del></del>	88		
	Scholarly/School Books		88		26
	Professional/technical		88		28
	Children's	<del></del>	88		30
			,		32
	Other		88		34
	c) if the price had been 30% higher, that is, \$? RECORREPEAT 7a) to 7c) FOR ALL TITLES LISTED.				DDICE SDOW & C
	How high would the price have to rise before you would not bu RECORD AMOUNT BESIDE Q.\$ BELOW. REPEAT FOR ALL TITE	y (READ FIRS) .ES.	TITLE) that nov	v costs (READ	PRICE FROM Q.6
	IF ONLY ONE BOOK PURCHASED, SKIP TO Q.10.				
	a) Suppose that prices increased to the point where you now have <u>not</u> bought? RECORD BESIDE QUESTION 9a) BELOW.	had to give up	one of the books y	you purchased, w	which <u>one</u> would yo
	have <u>not</u> bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.				
	have not bought? RECORD BESIDE QUESTION 9a) BELOW.				
	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.	that be? RECO	RD BESIDE QUES	STION %) BELO	<b>▼</b> .
	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.  c) And, if you had to give up a third one? Which one would you	that be? RECO	RD BESIDE QUES	OUESTION %)	♥. BELO♥.
	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.	that be? RECO	RD BESIDE QUES	OUESTION %)	♥. BELO♥.
).	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.  c) And, if you had to give up a third one? Which one would you I know it may be difficult, but do you know the nationality of the 10 BELOW. REPEAT FOR ALL TITLES.	that be? RECO	RD BESIDE QUES	OUESTION %)	♥. BELO♥.
).	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.  c) And, if you had to give up a third one? Which one would you I know it may be difficult, but do you know the nationality of the	that be? RECO	RD BESIDE QUES	OUESTION %)	♥. BELO♥.
o.	have not bought? RECORD BESIDE QUESTION 9a) BELOW.  IF ONLY TWO BOOKS PURCHASED, SKIP TO Q.10.  b) What if you had to give up a second book? Which one would IF ONLY THREE BOOKS PURCHASED, SKIP TO Q.10.  c) And, if you had to give up a third one? Which one would you I know it may be difficult, but do you know the nationality of the 10 BELOW. REPEAT FOR ALL TITLES.  STION 5:	that be? RECO	RD BESIDE QUES RECORD BESIDE EAD FIRST TITLE	OUESTION %)  AND RECORD	♥. BELO♥.

### QUESTION 7:

a)	10%					
	Yes	ı	1	i	ı	i
	No	2	2	2	2	2
	Don't know	8	8	8	8	8
b)	20%					
	Yes	i	1	1	1	1
	No	2	2	2	2	2
	Don't know	8	8	8	8	8
c)	30%					
	Yes	i	i	I	. 1	1
	No	2	2	2	2	2
	Don't know	8	8	8	8	8
QUESTIO	N 8:	\$	\$	\$	\$	\$
QUESTIO	<u>n 9</u>					
a)	1st book not purchased	ı	2	3	4	5
b)	2nd book not purchased	1	2	3	4	5
c)	3rd book <u>not</u> purchased	1	2	3	4	5
QUESTIC	<u>01 NO</u>					
Nat	tionality					
	Canadian	1	ı	l	1	l
	American	2	2	2	2	2
	British	3	3	3	3	3
	French	4	4	4	4	4
	Other	5	5	5	5	5
	Don't know	8	8	8	8	8

11. How would you rate the following factors in your decision to buy a book? READ ITEM, THEN SCALE. REPEAT FOR EACH ITEM.

Content

	Very Important	Fairly Important	Not Very Important	Not At All Important	Don't Know	
Cost	1	2	3	4	8	36
Graphics/Pictures	1	2	3	4	8	37
Canadian Publisher	1	2	3	4	8	_ 38
Cover	1	2	3	4	8	_ 39
Book Reviews	1	2	3	4	8	_ 40
Canadian Author	1	2	3	4	8	_ 41

# DISTRIBUTION OF SAMPLE OF BOOK PURCHASES BY COMMUNITY UNWEIGHTED AND WEIGHTED

## DISTRIBUTION OF SAMPLE OF BOOK PURCHASES BY COMMUNITY UNWEIGHTED AND WEIGHTED

COMMUNITY		DISTRIBUTION				
		Unweighted		Weighted		
	No.	<u>%</u>	No.	<u>%</u>		
Montreal	50	9.7	145	28.2		
Quebec	53	10.3	30	5.8		
Ottawa	54	10.5	38	7.5		
Sherbrooke	26	5.1	6	1.2		
Calgary	50	9.7	30	5.9		
Thunder Bay	23	4.5	6	1.2		
Red Deer	26	5.1	6	1.2		
Toronto	49	9.5	161	31.3		
Halifax	60	11.7	14	2.8		
Vancouver	50	9.7	68	13.2		
Kelowna	24	4.7	5	0.9		
Gander	25	4.9	2	0.4		
Brandon	24	4.7	3	0.5		
TOTAL	514	100.0	514	100.0		

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ANGUS, DOUGLAS E.
--Consumer sensitivity to increases in book prices

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