## STUDY OF THE VIABILITY

## OF THE

CANADIAN BOOK PUBLISHING INDUSTRY

## Background Study

## Etude de base

## STUDY OF THE VIABILITY <br> OF THE

GANADIAN BOOK PUBLISHING INDUSTRY


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PROGRAM EVALUATION SERIES

This is one of ten Background Studies on the Canadian book publishing industry that form part of the evaluation of the Book Publishing Development Program (BPDP).

The study was conducted by Evaluation and Strategic Management Associates Ltd. 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.

Certain passages have been severed under the Access to Information Act to protect third party confidentiality.

## Evaluation and Strategic Management Associates Ltd.

Title

STUDY OF THE VIABILITY OF THE CANADIAN BOOK PUBLISHING INDUSTRY.

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### 1.0 INTRODUCTION

### 1.1 The Purpose of this Study

The purpose of this study is, first, to analyse the economic viability of Canadian book publishers, relating such variables as the size of the firm and its market share to profitability; and, second, to examine various market scenarios under different assumptions of government subsidy, profitability of the industry, and market shares.

Specifically we set out to answer the following questions:
A) How many Canadian firms could exist without government support, assuming existing market shares between imports and domestic production;
B) How many Canadian firms could exist under different market share and segmentation assumptions; and
C) What would be the support cost to the Canadian government to expand the Canadian-owned seqment of the industry to various market shares: $30,35,40,50$ and $60 \%$.

### 1.2 Constraints on this Study

There were two main constraints on this study. The first is that it is a small study comprising approximately two man-months of effort. It is one of a number of sinall studies contributing to an overall evaluation of the Canadian Book Publishing Program of the Department of Communications. This study is not designed to be definitive but rather to be one input to a wider analysis.

The second constraint on the study is that it is based entirely on Statistics Canada data. This data is itself limited in scope, and somewhat variable from year to year according to the companies reporting that year. Most importantly the number of data points is very small, and at all times in this analysis one should keep in mind the instability of estimates from a small number of datapoints.

In addition it was found to be not possible within the period of the study to obtain from Statistics Canada the multivariate statistical analysis initially envisioned. Nevertheless, a preliminary multi-variate analysis of the factors which appear to have influenced the profitability of Canadian book publishers is presented in Appendix 2.

### 1.3 Main Findings

The main finding of the study is that sharply increasing grants to the Canadian-owned firms during 1978-1981 did not have the expected effects. Market shares, seqmentation, and "after arants" profitability were not siqnificantly affected. The actual effects were as follows:

1) "before arants" profitability anona arant recipients declined precipitously;
2) qrants as a percentaqe of revenues increased sharply for recipient publishers, especially amona French lanquaqe publishers; and
3) "after grants" profitability was qenerally stable.

Therefore, in summary, our conclusions are as follows: the overall viability of the industry was not siqnificantly affected for better or for worse by increasing grants. The firms receiving grants appear to have adjusted to the new cash flow in ways that did not reflect in their overall profitability or market share. As far as we know they could re-adjust to decreasing qrants to restore their previous operatinq position, but we have no direct evidence on this.

Since the qrants had little visible effect on profitability or market shares, they may have been absorbed in increased inventories (more titles or lonqer print runs), or perhaps in increased compensation (inostly salaries) to owners and staff. or in some other "current" operating cost item.

Given this result, we have no evidence that increasing qrants further would have any effect on market shares. Therefore we tentatively conclude that, at any scale resembling that of the qrants during the period 1978 to 1981, government support will not affect market shares siqnificantly.

### 2.0 THE CANADIAN DOMESTIC BOOK MARKET.

### 2.1 An overview of sales and market shares

From 1978 to 1981 the Canadian Domestic Book Market expanded from a total size of approximately six hundred million dollars to a total size of approximately one billion dollars. While inflation accounted for a good deal of this nominal growth, the market grew in real terms. The real rate in growth of the market was 4.5 percent in 1978, 4.1 percent in $1979,0.6$ percent in 1980 , and 0.1 percent in
1981. So, in real terms, the total market was approximately 10 percent larger in 1981 than it had been in 1978.

One quarter of this total demand for books was supplied by Canadian publishers, some of whom were Canadian controlled and some of whom were controlled by foreign owners. The remaining three quarters of the market demand was supplied by imports. These proportions have been very stable over the period from 1978 to 1981. As one can see from figure 1, Canadian publishers had 27.5\% of the market in 1978 , and $26.3 \%$ in 1981. There is a certain amount of instability in the Statistics Canada estimates of the total market so the very small difference between these figures does not provide any reason to believe that there has been any shift in overall market shares.

The other major suppliers to the market show the same stability of market share. Imports by publishers has been stable at about 22 or 23 percent; imports by exclusive agencies have been about 12 percent to 13 percent; and other imports about 37 percent to 38 percent. Overall, the year to year figures show great stability in the general market shares.

Figure 2 depicts in a cumulative way the main components of the domestic Canadian book market. Each band adds to the total value of the bands below. One can see that the size of each band or component has been stable during the period in question.

FIGURE 1: Shares of Imports and Canadian Publications the Canadian Domestic Book Market - 1978 and 1981.


FIGURE 2: Imports and Domestic Publication Shares in the Canadian Book Market 1978-1981.


If one looks at Canadian book sales from the point of view of the languaqe of publication, one can see that the great majority of books sold in Canada were English lanquage books in every year from 1978 to 1981. In 1978, 13 percent of domestic book sales were French books. This proportion increased substantially in 1979 but declined, relatively, in 1980 and 1981. Fiqure 3 shows this pattern. Nevertheless, in 1981 the percentage of books which were in the French lanquaqe was ló percent, somewhat higher than in 1978. When one examines the division of the imported books into English and French, the same pattern appears. As Figure 4 shows, most imported books are in the English lanquage, and in 1980 and 1981 the proportion of English lanquaqe books increased somewhat.

The 1984 Statistics Canada publication on the Book Industry speculates that the heavy reliance on imports can be accounted for by the lower per unit cost of the foreign publishers, the relative ease with which they produce profits, and lower risk associated with the fact that the books have already been pre-tested in other markets and found to have won consumer acceptance in those markets. In contrast, the Statistics Canada report continues, the development of Canadian authored books involves a high level of capital investment and risk. and above all, the time laq between investment and returns is substantial.

FIGURE 3: Canadian Book Sales, English and French, 1978-1981.


FIGURE 4: Total Book Imports, English and French, 1978-1981.


We must disaqree. There is nothing in the statistics that supports these assertions about inherent differences between Canadian publishers and foreian. publishers. It is much more likely that the dominance of imports is a simple result of our open economy. There are at least three times as many publishers outside Canada publishing at least three times as many books, all with simple and direct access to the Canadian consumer, and therefore one would expect that overall book imports would have a large share of the Canadian domestic market for books. It is not necessary to postulate any inherent disadvantages of Canadian publishers in order to explain the pattern of market shares. The pattern seems a logical consequence of having Canadian published books in direct competition with foreign published books. Even if there are no differences between Canadian and foreian publishers, and even if the quality of Canadian published books were the same as foreign published books, one would expect the greater number of foreign published books and foreign publishers to show in the market shares. It seems to us incorrect to speculate that the dominance of imports demonstrates somehow an inherent disadvantage of Canadian publishers. It is more likely to reflect only the differences in total size of the Canadian publishing industry compared with the aggregate foreign publishers.

FIGURE 5: Shares of Domestic Production Canadian/Foreign Controlled Publishers, 1981


Finally, the Statistics Canada distinguishes between Canadian publishers who are controlled by Canadians, and Canadian publishers for whom the majority interest is controlled by non-Canadians. Figure 5 shows the shares of Canadian domestic production held by these different groups. Overall, English publishers controlled by Canadian owners have approximately 44 percent of the market, and English publishers controlled by non-Canadian owners have approximately the same amount, 43 percent of the market. French publishers controlled in Canada have about 10 percent of the market, and French publishers controlled by non-Canadians have approximately 3 percent of the market.

### 2.2 THE SUPPLY SIDE STRUCTURE OF THE CANADIAN BOOK MARKET

The Canadian Book Market is composed of at least two distinct markets - the English language market, and the French language market. The population of bilingual Canadians who buy and read books in both English and French is significant, but not large enough to do much more than blur this basic distinction between the two language markets.

The English language market is served mainly by publishers located in Ontario, and the French language market is dominated by publishers in Quebec. Approximately 70 percent of English language publishers are located in Ontario, 12 percent in British Columbia, 6 percent in Quebec, and the small remainder in other provinces. Similarly, 92 percent of French language publishers are located in Quebec, 8 percent in Ontario, and none elsewhere.

Fiaure 6 shows the prodortions of publishers in these various lncations. One can see that Dublishers located in Ontario are bv far the laraest part of the industry. So, qeoqraphically, it is a verv concentrated industry. Most Canadian publishers are located either in Toronto or Montreal.

Statistics Canada reports that the Canadian book industry is. relatively speakina, a hiahlv seamented industrv. In one sense this is true, and in another sense not. Althouah the industry contains a relatively larae number of firms compared with its total volune of business, a few larqe firms make most of the book sales. Of approximately one hundred and eighty book publishers revorted by Statistics Canada for 198i, the sixty larqest firms made 95 percent of total book sales, and the seventy smallest firms made onlv one percent of the total book sales. As Appendix 1 shows a large majority of Canadian-owned publishers have less than $1 \%$ of the market each. So it is more accurate to characterize the Canadian book publishing industry as one that is composed of a small number of large dominant firms, surrounded by a larger number of small firms doinq relatively little in terms of sales volume, and surrounded aqain by a larger number of very small firms doina very little business in terins of the volume of books sold. The industry has a small number of dominant players, so to speak, and a larqe number of marqinal participants.

FIGURE 6: Net Book sales by Canadian Publishers by location of Publisher, 1981.


One can see from Fiqure 7 that the larqe publishing firms in Canada are very dominant in terms of total book sales. Statistics Canada points out that, although small publishers made up over one third of the firms in the Canadian industry, their share of total net sales in 1981 combined with the net sales of medium publishers was under 5 percent in total. Both in terms of the sale of books published in Canada and books imported, the large firms' percentage of total book sales is approximately 95 percent.

On this basis, Statistics Canada comments that the existence of a large number of small firms in the industry indicates that entry into publishing at a small scale is relatively easy, a factor which in turn works against the profitability of numerous publishers. This speculation is not directly supported by the statistics. There is no direct evidence that the existence of many small firms has any effect on the profitability of the larger firms in the industry. In fact, for all we know, it could be quite the opposite. It might conceivably be that the existence of a constellation of small publishers does more to generate demand than it offsets on the supply side. We do not know. Therefore it is gratuitous to state that the existence of small firms somehow creates a problem for the industry.

FIGURE 7: Book sales by size of Canadian Publisher, 1981.


The reference by Statistics Canada to "low barriers to entry at verv small scale" also obscures the fact that small oublishers are often not at all the same kind of firm as larae dublishers. Fiaure 8 seems to indicate that larae dublishers tend to derive their business Solelv from book nublishina. while the small nublishers reonrtina consistentlv to Statistics Canada tend to derive both their business and their orofits from activities other than bnok nublishinn. This seems to indicate that small oublishina firms tend in a sianifirant. number of cases to be small duhlishino "side lines" to firms which are dominantelv roncerned with nther businesses such as oranhic. desion. imonrtina. nublishino of Derindicals and micrn formats. oroduction of audin visual products. other fulfillment. services. or activities such as nrintino services for others. book and derindical wholesalinc. and book retailina.

However. the Statistics Canada data ornbablv dnes not adeouatelv reflect the numbers of small bublishers whose main business is bonk dublishina. This is because small dublishers with no non-dublishina revenues mav tend to leave this question blank rather than enter a zero, and therebv not be counted in the analvsis of this variable. In 1981. onlv 65 firms answered this question while 125 did not respond. However, it would equallv be an error to assume that these 125 non-resDondents had zero non-dublishina revenue. That is unlikely. The size of the "missinq data" component is flore suqqestive of deliberate non-response rather than careless omission of "zeros".

Statistics Canada reports that revenue from integration represented 18 percent of the total industry revenue in 1981, and contributed almost 20 percent to the industry's total profit. An aggregation by size group shows that small and medium publishers in the data set depended to a large extent on revenue from integration for their survival and profitability. In contrast, large publishers were less dependent on revenue from integration which accounts for almost 14 percent of total revenue, but only 5 percent of profits.

Phrased this way, we are presented with a picture of small publishers driven to other activities "for their survival and profitability". A less emotional look at the industry may reveal a significant number of firms quite happy in their main business, with a small publishing side-line which may be profitable in itself or may not, and which, in some instances may be pursued for satisfactions other than direct profitability. Side-line publishing may in some instances have indirect benefits to the larger firm, such as marketing exposure or prestiqe.

For example, in the Enqlish sector, the small oublishers (12) which reoorted received 75 dercent of their total revenue from nonpublishinq "intearated" activities, and these activities contributed 98 percent to their total profits.

FIGURE 8: \% Contribution to profit of integrated activities, 1981.


This pattern of activity amonqst the small Canadian publishers explicitly reportina the level of other income confuses the policy issue somewhat. It is quite a different matter to lose money on a small publishing side-line, if the main business of the firm is profitable. Discussion of the viabilitv of the industrv must take this into account. Althouah thev are probablv over-redresented in the Statistics Canada data there are still a sianificant number of "sınall publishers" whose financial losses on book Dublishiña mav not reflect the viability of the whole firm, because of profits in other activities.

### 2.3 SECTORAL PROFILE.

### 2.3.1 Enqlish Lanquaqe Publishers

Enolish lanquaqe publishers accounted for aporoximatelv 90 dercent of total Canadian industrv net book sales in 1981. About half of their sales were made by foreion-controlled firms oublishina in Canada, and about half bv Canadian-controlled firms.

It is also the case that, on averaqe, the foreiun-controlled English language publishers in Canada tend to be somewhat larger than the Canadian-controlled firms. Statistics Canada points out that foreign-controlled Canadian firms account for about 77 percent of imports to this sector. It states that the few imports by Canadiancontrolled publishers are done mostly by large firms that, besides producing their own books, also act as exclusive agents for foreign producers. It goes on to state that medium and small Canadiancontrolled firms, " having no such access to distribution agencies
for foreign books" concentrate on taking Canadian books.
However is rather difficult to accept this picture of deprived Canadian-controlled publishers excluded from distribution channels, when one examines the exporting activity of the Canadian industry. Apparently Canadian-controlled firms are quite capable of gaining access to distribution channels when it comes to exporting. Virtually all of the book exports from Canada are by large Canadian controlled publishers. As one can see from Figure 9 , there were approximately one hundred million dollars in exports by these firms in 1981.

In the case of book imports, we can see from Figure 10 , most imports by Canadian publishers of English language books were made by foreign-controlled firms, with large Canadian-controlled publishers in a distant second place.

FIGURE 9: Exports by Cancan and Can-NonCan Publishers, 1981.


### 2.3.2 French Lanquaqe Publishers

For French lanauage oublishers the level of foreian control is low, althouah increasing. In 1978 foreian controlled French lanauage publishers accounted for just 6 percent of the net sales of French lanquage books. By 1981 this had doubled to 12 percent.

The pattern of exports by French lanquaqe Canadian publishers is very similar to that of the Enqlish lanquage sector. Again virtually all of the exports are made by larae Canadian-controlled firms, with medium sized Canadian-controlled firms in a distant second place, and with foreian controlled Canadian publishers exportina very little.

About one third of the French lanquaqe books sold in Canada by French lanquaqe publishers were imported in 1981. The other two thirds were locally produced books. which included oriqinal Canadian publications, foreian books reprinted in Canada and adaptations of foreian books.

## FIGURE 10: Imports by Cancan and Can-NonCan Publishers, 1981.



### 3.0 THE VIABILITY OF THE CANADIAN BOOK PUBLISHING INDUSTRY

### 3.1 Capacity Utilization

During the period 1978 to 1981, the Canadian publishing industry operated at full capacity. Capacity utilization in the industry during this period, Statistics Canada reports, was 95.9 percent annually. In many industries an 80 percent utilization rate is regarded as full capacity, and anything over 90 percent utilization, on average, might legitimately be regarded as a boom in danger of overheating.

Full time employment (in person years) was approximately fortysix hundred in 1981. Foreign-controlled English language publishers accounted for about 50 percent of this employment, although their share of net book sales was closer to 40 percent.

### 3.2 Profitability

Virtually all large Canadian English-language publishers were profitable in 1981, and their overall level of profitability on average was 15 percent. (Profitability as a percentage of net sales). However, as Figure 11 shows, about one third of medium sized firms were unprofitable, as were more than one third of small English-language publishing firms.

Although Canadian-controlled small English-lanquage pubiishers in aggreqate made a net profit of approximately 3 percent on book publishing and agency activities, twenty publishers (36 percent of the total: group) lost money on these activities in 1981. The average net loss was $\$ 18,700$ per publisher.

However, we should keep in mind that the allocation of such things as general overhead, and salaries to owners, can make superficial figures in the profitability of small businesses quite deceptive. In small businesses "profit" and "owners compensation including salary" tend to be interchangable.

However, as Statistics Canada points out, most of the losses incurred by small publishers appear to relate directly to slow moving and unsold inventories of their own publications. This is confirmed by the fact that there is a significant neqative correlation between "profitability" and "inventory as a fraction of annual net book sales." (See Appendix 2).

The losses reported would have been higher had it not been for Government grants which averaqed $\$ 106,000$ per publisher for the sixty-eiqht Canadian-controlled Enqlish lanquaqe recipients in the sample.

In the French lanquaqe sector, of the fourteen small Canadian controlled firms, eight report an averaqe net loss of $\$ 21,000$ per firm in 1981. The remaining six firms made an averaqe profit of $\$ 6,700$ per firm. Eleven of these firms received an average arant of $\$ 34,900$ per firm during the same year. Therefore, on the surface it would appear that few, if any, of the firms would have been profitable without grants, unless their behaviour changed in the absence of grants.

For medium size Canadian-controlled publishers in this sector about 20 percent lost money in book publishing and aqency activities in 1981. This compares with 43 percent for large French-language firms.

FIGURE 11: Number of Profitable and Unprofitable English language Publishers 1981.


### 3.3 Revenues

The publishing activities of the Canadian-controlled English language publishers were concentrated in trade books, although most of their foreigncontrolled counterparts focused on textbooks and general reference books. Textbook and general reference markets are generally the most lucfrative segments of the English language book market. However, we do not know whether this is because foreign-controlled publishers which are dominant in this sector are better managers, or whether these types of books are inherently more profitable.

The shares of Canadian-controlled and foreign-controlled publishers of English language textbooks, tradebooks, professional and technical books, and scholarly or reference books, are depicted by Figure 12. Canadian controlled English language publishers have about a 20 percent share of the total activity of Canadian publishers in textbooks, about a 40 percent share of the activity in trade books, about a 30 percent share in professional and technical books, and about a 10 percent share in scholarly and reference books.

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FIGURE 12: Net sales of English books - Can and Can-NonCan by category of book, 1981.


FIGURE 13: Net sales French books - Can and Can-NonCan, by category of book, 1981.


FIGURE 14: Average Profitability of French Cancan Publishers, by size of firm, 1981.


FIGURE 15: Source of revenues of small and large English language Publishers,
1981.


In the French-lanquaqe sector, the pattern is quite different. Canadian-controlled French lanauace Dublishers have about 60 percent of the activity in textbooks, about two thirds of the activity in tradebooks and virtually all the activity in professional and technical books, and scholarly or reference books.

The net sales of larqe Canadian-controlled French lanauaae publishers redresent adproximately 64 dercent of the sector's 1981 net sales. In contrast. small Canadian-controlled French lanauaqe publishers had less then 2 percent of the sector's net sales. About one third of the books sold in the sector were imported, and the other two thirds were locallv produced books nublished or reprinted in Quebec. As one can see from Fiaure 14. the averaqe profitabilitv of French Canadian-Controlled publishers in 1981 varied areatly by size of firm. Small firms tended to be undrofitable.

It is worth notinq aqain that the analysis in the following sections is based upon Statistics Canada data from a composite file of publishers who responded for each vear of the Statistics Canada Survey 19787 to 1981. There are one hundred and fifteen publishers in this file. and althouah they account for approximately 90 percent of the net sales reported in any aiven year, small publishers are probably more erratic in their reportinq to Statistics Canada and therefore may be somewhat under-represented in this data.

Of the one hundred and fifteen publishers, eiahty-four are Enqlish lanquaqe firms and thirty-one are French lanquaqe firms. Figure 15 depicts the sources of revenue of small and large English
language publishers in 1981. One can see the pattern of revenues is very different for the different sizes of firms. Large publishers get most of their revenue from this activity, while small publishers derive very little of the overall revenues of the firm from publishing activities.

It is remarkable that for small Canadian-controlled English languaqe publishers reporting to Statistics Canada, income from nonpublishing activities (integrated activities) rose from approximately 27 percent of total income in 1978 to almost 80 percent in 1981. At the same time, income from publishing their own books fell from almost 58 percent in 1978 to 14 percent in 1981. This extreme shift in the activities of small Enqlish-lanquaqe publishers is both difficult to explain, and suspect. Medium size publishers and larqe publishers do not show any comparable shifts of activity over the period 1978 to 1981. Statistics Canada fiqures also indicate that revenue from grants to small Enqlish lanquaqe publishers fell from 13 percent of total revenues in 1978 to 5.4 percent of total revenues in 1981.

We have seen in Section 2.2 that there adpears to be a problem in reqard to non-reporting (missing data) on the non-book-publishing revenues of small firms. In 1978,107 of 174 reportina dublishers did not answer this question. In 1980, 121 of 187 redortina publishers did not answer this question. Apparently by 1981 only publishers with very larae non-Dublishing revenues (almost $80 \%$ of their total revenues) were answerina this question.

### 3.4 BUSINESS ACTIVITY RATIOS.

Activity ratios can give some important insights into the viability of an industry. In the case of book publishing, one of the most interesting ratios is that pertaining to "turnover" of books. Statistics Canada states that, as a result of low advance orders and heavy book returns, the publishinq industry qenerally maintains a very high inventorv of finished books by the standards of most industries. Low inventory turnover affects the qualitv of the current assets in the sense that needed working capital is tied up in merchandise. In 1981, inventories and accounts receivable were resoonsible for more than 80 dercent of the dublishina industrv's current assets. Inventories alone accounted for approximatelv 43 dercent of current assets. In 1978. inventories for the publishina industry turned over on average 1.9 times. $B v$ 1981. this turnover had increased sliahtlv to 2.1 times on average, indicatina a shorter time between investment in inventories and subsequent revenues (194 davs in 1978 compared with 176 days in 1981). The average lenath of time necessary to convert accounts receivable into cash was also shortened from 101 davs in 1978 to 89 davs in 1981.

However. these average inventorv turnover rates mask substantial differences amona firms. From 1978 to 1981. foreian-controlled Enqlish lanquaqe publishers improved their turnover ratio from 1.88 to 2.37. Durina the same Deriod. Canadian-Controlled Enalish lanquage dublishers showed a decline in turnover ratio on averaqe from 1.95: to 1.82 .

Statistics Canada points out that, while the current ratio for medium size. Canadian-Controlled Enalish firms fluctuated over the survev deriod. that of the corresoonding French publishing houses increased steadily from 1.96 in 1978 to 2.81 in 1981. Larae Canadian-owned firms. both Enalish and French. did not show similar strenath in short term liquiditv. Their current ratios. while risina. were belnw the industry averaqe throuqhout this deriod. In contrast, larae foreian-owned Enalish publishers maintained a very healthy short-run solvency, probablv due to efficient inventorv manaqement, and the fact that they carried a fast moving product-mix of textbooks and best selling imported trade books.

A further analysis of the current position of the Canadian-owned sector in 1981 indicates that most of the publishers with liquidity problems were heavily loaded with current debts, particularly loans and accounts payable. In the case of small French-1anquaqe publishers, current assets barely kept pace with the short-term debts, with little growth in working capital. Compared to their English counterparts, small French lanquaqe firms invested heavily in inventory, the least liquid asset in the current asset category. Statistics Canada reports that over 74 percent of their current resources were invested in inventory in 1981. This compares with 41 percent for the small English lanquaqe firms, and 42 percent for the book industry overall.

Although the current ratio for a typical large Canadiancontrolled English publisher was low by industry standards, and low in comparison to that of larqe foreign-controlled Enqlish lanquaqe publishers, the general working capital position showed areat improvement, increasing from $\$ 1.3$ million in 1978 to $\$ 2.5$ million in 1981. The growth in working capital for this group out-paced the growth in current liabilities by a ratio of almost four to one. This was due in part to the relatively high turnover of accounts receivable, as reflected by a shorter collection period.

As one can see from Figure 16, Canadian-controlled English language publishers did relatively worse than their foreigncontrolled compatriots in terms of inventory turnover ratios in 1981, while the Canadian-controlled French lanquage firms did substantially better than the foreign-controlled firms in that sector. This patter $n \quad X$ is repeated in the textbook sector, as shown in Figure 17, although the contrast in terms of inventory turnover by French Canadiancontrolled publishers and foreign-controlled publishers is less.

The greatest contrast in inventory turnover ratios is shown by English language trade book publishers. The Canadian controlled trade book publishers have a healthy but relatively low turnover ratio compared with the foreign-controlled trade book publishers, as depicted in Figure 18. Statistics Canada points out that investment in inventories in relation to the cost of goods sold was higher for many small and medium size publishers in both language groups. The highest investment in inventories was in the medium sized Canadian-


#### Abstract

controlled French language publishers. On average, their investment in inventories was 112 percent of the total cost of books sold, compared with only $50 \%$ for the industry as a whole. This indicates that they maintained excessive inventory in relation to their volume of sales. It took this group of publishers, in 1981, an average of four hundred and twelve days to dispose of a printed book. For the industry as a whole, the average time was one hundred and eight-five days.

Sinall English language publishers were also inefficient in inventory management, with an average inventory disposable time of three hundred and fifty-six days, and an inventory investment which was virtually equal to the cost of goods sold.


FIGURE 16: Inventory turnover ratio of English and French Publishers by Country of Controlling Interest, 1981.


In analyzing inventory turnover, Statistics Canada states that there is generally an inverse relationship between inventory turnover and profitability - that a high inventory turnover and a low aross profit rate frequently $q 0$ hand in hand. This confuses the concedts of a profit rate and the total profitability of the firm. In fact, there is no evidence that hiah inventorv turnover in book nublishina is in any way linked to either a low profit rate or to low overall profitability. Quite the oddosite. These statistics show that the more profitable firms also display hiaher inventory turnover rates. These hiqher turnover rates mav be dartly due to better or more efficient inventorv manacment, and Dartly due to the effects of a better or lower priced product. The fact that small Canadiancontrolled publishers have a very slow moving inventorv is most likely to be the result of either hiah prices or lack of consumer accedtance of the product.

In fact. we find that "inventory turnover ratio" is not as strona a predictor of profitabilitv as "inventorv as a dercentace of net book sales." (See Adpendix 2)

FIGURE 17: Inventory turnover ratio of English and French Textbook Publishers, by Country of Controlling Interest, 1981.


FIGURE 18: Inventory turnover ratio of English-Language Textbook and Tradebook Publishers, by Country of Controlling Interest, 1981.


### 3.5 RETURN ON OWNER'S EQUITY.

There are a number of different measures of profitability which are in general use. However, as Statistics Canada points out, the tendency is to look increasingly to the " return on owners' equity " as the final criterion of profitability, since one of the primary reasons for operating a business is to earn a profit for the owners. The return on owners' equity is calculated by dividing before tax income by the net worth of the company ( the sum of common stock or owners' constributions, retained earnings and any surplus reserve.)

In the three year period, 1978 to 1980, the Canadian book publishing industry recorded a return on owners' equity of almost 54 percent annually. Although this dropped to 44 percent in 1981, the return is very high. As Figure 19 shows, Canadian controlled English language publishers have been extraordinarily profitable, according to this criterion. This industry average was heavily influenced by the large Canadian-controlled English publishers' return, which averaged more than 200 percent of net worth annually during the period. This reflects a very large leverage gain from using debt capital. The foreign controlled English counterparts had an average return on owners' equity of 28 percent, reflecting a higher use of equity capital relative to debt financing. Equity capital accounted for roughly 50 percent of the total assets employed by foreign-controlled English language publishers, compared to an average of 23 percent for the large Canadian-controlled English language firms, and 28 percent for their French counterparts. As one can see from Table 20 the return on owners' equity to foreign-controlled English language publishers was relatively low and relatively stable during 1978-1981. By this measure, the Canadian-controlled firms were much more profitable.


### 4.0 THE EFFECTS OF GRANTS AND SUBSIDIES ON THE BOOK PUBLISHING INDUSTRY 1978 1981.

### 4.1 Pattern of Profitability and Unprofitability

As one can see from Table 1, grants as a percentage of revenue increased dramatically between 1977 and 1981, for small publishing firms in both the English language and French sectors. For English language Publishers, small firms earning less than $\$ 100,000.00$ per year in revenues saw "grants as a percentage of revenue" increased from 21 percent to 55 percent. English language Publishers with revenues between one hundred thousand dollars and one million dollars per year saw this ratio increase from 6 percent to 12 percent. Overall, grants as a percentage of revenue approximately doubled. For English language publishers with revenues greater than one million dollars grants as a percentage of revenue stayed at zero.

In the French language publishing sector this pattern was even more marked. Publishers earning less than one hundred thousand dollars per year saw grants as a percentage of revenue increase from 11 percent in 1977 to 57 percent in 1981. French language publishers whose revenues were between one hundred thousand dollars and one million dollars per year saw grants as a percentage of revenue increase from zero in 1977 to 10 percent in 1981.

One can see that, in 1981, small Canadian publishers received more than 50 percent of their total revenue as grants. Whether this made them "dependent" on grants for their viability is an open question. In a very short time they had adjusted to a large increase in cash flow from grants without substantially affecting their overall profitability or market share. The money from the grants must have gone into a balancing item on the cost side that is independent of either profitability or market share. Two possibilities for

## TABLE 1: Grants as a Percentage of Revenue 1977, 1981.

$1977 \quad 1979 \quad 1981$

## English

| $0-100 \mathrm{~K}$ | $21 \%$ | $47 \%$ | $55 \%$ |
| :--- | ---: | :--- | :--- |
| $100 \mathrm{~K}-1 \mathrm{M}$ | $6 \%$ | $16 \%$ | $12 \%$ |
| $1 M-3 M$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $3 M+$ | $0 \%$ | $0 \%$ | $0 \%$ |

French

| $0-100 \mathrm{~K}$ | $11 \%$ | $40 \%$ | $57 \%$ |
| :--- | ---: | :--- | ---: |
| $100 \mathrm{~K}-1 \mathrm{M}$ | $0 \%$ | $0 \%$ | $10 \%$ |
| $1 M-3 M$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $3 M+$ | $0 \%$ | $0 \%$ | $0 \%$ |

such a balancing cost item are inventories ( a large number of titles or longer press runs), and compensation (mostly salary) to owner and staff. Allocation of increased cash flow to either of these items would not necessarily affect overall profitability, or market share. Presumably, to the degree in which such allocation is reversable, these small publishers, if faced with declining grants, could re-adjust to a business situation resembling that in 1977. This study does not in fact examine whether the increased cash flow was allocated to these particular items, nor whether such allocation is easily reversable.

### 4.2 Profitability Before and After Grants

Table 2 depicts the percentage of the various kinds of publishers which were profitable before grants in 1976 and 1981, profitable after grants in those same years, and also depicts the "spread" or difference between the two profitability figures in 1976, and the spread in 1981. So, for an example, we see that in 197651 percent of Canadian-controlled English language publishers were profitable before grants and 64 percent profitable after grants, for a spread of 13 percent. In 1981, the same group of publishers showed a spread of 40 percent ( 18 percent profitable before grants and 58 percent profitable after grants). Therefore, in five years, the spread between the percentage of firms profitable before grants and the percentage of firms profitable after grants had increased from 13 percent to 40 percent.

It is interesting first to examine the pattern of "profitability after grants" which, after all, is the bottom line in terms of viable business operations. From 1976 to 1981 the different groups of publishers show some
small increases in overall profitability after grants, and some small decreases. However, the basic pattern appears to be one of relative stability. The variation is not so great as to be outside the range which one might expect as a matter of course from year to year. Small French language publishers appear to have improved their profitability somewhat, large French language publishers to have experienced a modest decline in profitability, and, in the English language sector, all groups appear to have increased their profitability modestly except for Canadian-owned English language publishers which suffered a small decline from 64 percent profitable after grants to 58 percent profitable after grants.

The pattern of profitability before grants, on the other hand, shows none of this stability. The percentage of publishers in various groups which were profitable before grants shows a very sharp decline from 1976 to 1981 . For example, 51 percent of English language Canadian-controlled publishers were profitable before grants in 1976 and only 18 percent were profitable before grants in 1981. Similarily, 42 percent of Canadian-controlled French language publishers were profitable before grants in 1976 and only 29 percent were profitable in before grants in 1981.

For Canadian-controlled publishers as a whole, the decline was equally precipitate. Small Canadian-controlled publishers, with revenues under one hundred thousand dollars saw the profitable percentage decline from 38 percent to 12 percent, small companies with revenues between one hundred thousand dollars and one million dollars per annum saw a decline from 48 percent to 19 percent, and medium size companies with revenues between one million dollars and three million dollars per annum saw a decline from 73 to 18 percent.

In the absence of any other evidence, one would deduce that the industry was in very bad trouble in 1981. However, when one examines those groups of publishers not receiving grants, one finds that their overall profitability has, if anything, improved between 1976 and 1981. For example, 81 percent of Foreign controlled English language publishers were profitable before grants in 1976 and 100 percent of them were profitable before grants in 1981. Similarily, 75 percent of Foreign-controlled Canadian publishers (both English and French language publishers) were profitable before grants in 1976 and 100 percent of them were profitable before grants in 1981. So their experience does not indicate that the market was in any serious difficulty. This is confirmed by our earlier examination of total revenue flows to the various publishing markets.

The explanation that appears to be most compatable with these facts is that the grants were appearing on the revenues side for recipient publishers, and were being absorbed on the cost side into items which do not affect overall profitability. For example, such items might include increased inventory (more titles or longer print runs), or increased compensation to owners or staff. These possibilities require further research.

### 4.3 SUMMARY OF FINDINGS.

The main finding of this study is that the Book Publishing Industry in Canada was very stable during the period of 1978 to 1981. Despite sharply increased grants mainly to smaller Canadian controlled publishers. The overall demand for books in Canada expanded in real terms by about 10 percent, and this increase was spread more or less evenly over the different publishing sectors. The market .shares of various groups of publishers remained relatively fixed, and overall profitability also remained stable.

Increasing grants appears to have brought large changes within certain publishers, rather than within the market as a whole. We have seen that, although overall profitability remained stable, the before-grant profitability of grant recipients declined precipitously. We are unable to explain this sharp decline by deteriorating conditions within the industry, because on all other financial conditions did not deteriorate but rather improved modestly. Therefore, we suggest that further research is necessary into the possibility that grant recipients absorbed those grants on the cost side largely into items which did not affect profitability or market share. The two main items which suggest themselves are, first, an increase in inventories, and second, an increase in compensation to owners or staff.

The theory that increasing grants were absorbed into increased inventories is attractive, because we observe that the inventories of grant recipients in 1981 were very large and that inventory turn-over ratios were relatively poor. However, we have not examined the number of titles printed nor the length of print runs, nor the actual size of inventories. Therefore we suggest this as a possibility for further research.

A second possibility is that untied grants were used to increase owner's compensation and/or staff salaries. Again we have not examined these factors directly, and therefore we suggest then for further research.

In summary, our conclusions are as follows: 1) The overall viability in the industry was not significantly affected for better or for worse by increasing grants. The firms receiving grants appear to have adjusted to the new cash flow in ways that did not reflect in their overall profitability or market share. As far as we know, they could re-adjust to decreasing grants in the same fashion, but we have no direct evidence of this.

Since the grants had little visible effect on the profitability or market shares, they may have been absorbed in increasing inventories (more titles or longer print runs), or perhaps increased compensation (mostly salaries) to owners and staff. 2) Given this result, we have no evidence that increasing grants further would have any effect on market shares. Therefore we tentatively conclude that, at any scale resembling that of the grants during the period of 1978 to 1981, government support will not affect market shares in the Canadian industry signficantly.

FIGURE 20: Return on owners Equity of English Language Publishers, by Country of Controlling Interest, 1981.


## Evaluation and Strategic Management Associates Ltd.

Title

STUDY OF THE VIABILITY OF THE CANADIAN BOOK PUBLISHING INDUSTRY.
APPENDIX 2 .

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Dr. Kenneth F. Watson

## APPENDIX TWO: REGRESSION ANALYSIS OF THE PROFITABILITY OF BOOK PUBLISHERS

As part of this study, we undertook a multiple reqression analysis of the profitability of book publishers, based upon the Statistics Canada data. The results of this analysis are presented in Table Three.

Preliminary analysis had indicated that there were complex, but important, interactions between grants and profitability during the years 1978 to 1981. Therefore, to explore the broadest definition of "profitability" we undertook this reqression analysis for four different types of "profitability". These were:

1. the profit from book and exclusive aqency activities as a percentaqe of "revenue minus qrants";
2. profit from book and exclusive aqency activities before grants as a percentaqe of total book and aqency revenue;
3. profit from all operations as a percentaqe of all revenues minus qrants; and.
4. profit from all operations minus arants as a percentaqe of all revenues.

One can see from Table Three that the amount of variation in profitability that we were able to explain through the reqression analysis was reasonably high but significantly different in the four cases. However, one can also see that the important explanatory variables are very consistent across all of the regression equations. We ran twelve regression equations. Four definitions of profitability for all cases, for English publishers, and for French publishers. Therefore, the consistency of explanatory variables gives us some confidence that the regression analysis is identifying some important

Table 3: Influences on Profitability

|  | 1) Profit Book \& Agency /Revenue minus grants |  |  | 2) Profit before Grants /Book $\&$ Agency Revenue |  |  | 3) Profit all ops./ All Rev. Minus Grants |  |  | 4) Profit from all ops Minus Grants/All Revenues |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Al1 | Eng. | Fr. | Al1 | Eng. | Fr. | Al1 | Eng. | Fr. | Al1 | Eng. | Fr. |
| 2. Total Book Sales |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. \% Own Sales |  |  | . 2 |  |  |  | . 1 |  | . 24 | . 06 |  | . 16 |
| 4. X Eng. Lang. Sales |  |  |  | . 04 |  |  | . 04 |  |  | . 04 |  |  |
| 6. Main type of Publication |  |  |  |  |  |  |  |  |  |  |  |  |
| A. Textbook |  |  |  |  |  | -. 04 |  |  |  |  |  |  |
| B. Tradebook | . 034 |  |  | 0.04 |  |  |  |  |  |  |  |  |
| C. Other | . 21 | . 24 |  | 0.24 | . 22 | . 09 | . 17 | . 2 |  | . 17 | . 16 | . 1 |
| D. Unknown |  |  | . 36 |  | . 12 |  | . 27 |  | . 33 | . 23 | . 20 | . 4 |
| 7. \% conc. in maintype |  |  | -0.4 |  | -. 16 |  | -. 3 |  | -. 4 | -. 28 | -. 24 | -. 47 |
| 8. X Market share in main type | . 35 |  |  | 0.35 |  |  | . 25 |  | 2.33 | . 31 | . 37 | 1.83 |
| 9. Market segment- |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.Related revenue |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.Net sales per own titles |  |  |  |  |  |  |  |  |  |  |  |  |
| 12.Net sales per agency title |  |  |  |  |  |  |  |  |  |  |  |  |
| 13. Inventory turnover ratio |  |  | -0.02 |  |  |  |  |  |  |  |  |  |
| 14. Grant recipient? $1=\text { yes } 2=n 0$ |  |  |  | 0.04 |  |  |  |  |  | . 03 |  |  |
| 15. Net booksales per employee |  |  |  |  |  |  |  |  |  |  |  |  |
| 16. Interest coverage ratio |  |  |  |  |  |  |  |  |  |  |  |  |
| 17. Inventory/net book sales | -. 13 | -. 12 | -0.36 | -. 13 | -. 15 | -. 22 | -. 15 | -. 15 | -. 36 | -. 15 | -. 16 | -. 24 |
| 18. Acct. receivable/net book sales |  |  | -0.1 |  |  |  |  | . 06 | -. 19 |  |  | -. 16 |
| 19. Tot. assets/net book sales |  |  |  |  |  |  | . 03 |  |  |  |  |  |
| 20. Grants/net book sales | . 03 | . 04 | -0.4 | -. 14 | -. 12 | -. 49 |  |  | -. 35 | -. 14 | -. 14 | -. 48 |
| 21. Tot. Liabilities/ net book sales |  |  | 0.22 |  |  | . 14 | -. 04 |  | . 22 | -. 04 | -. 03 | . 19 |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| R | . 21 | . 27 | . 53 | . 44 | . 54 | . 56 | . 27 | . 27 | . 48 | . 47 | . 57 | . 55 |

and stable relationships.
First, let us consider those variables which did not exert a significant influence on profitability. Perhaps the most surprising is " total book sales". In no case did this variable enter the regression equation. So we must conclude that the percentage profitability is not significantly related to total book sales.

A second variable that did not enter the equation was "market segmentation: main type of book. This variable measured the degree of market segmentation or fragmentation in the main type of book market (textbook, trade book, and other) for that publisher.

A third area that does not have any significant influence is "net sales of own titles" and "net sales of agency titles". This appears to go against the accepted wisdom in the industry, which is that selling as an exclusive agent is more profitable than publishing one's own titles. This is only an indication, of course. If we had had a variable which was explicitly the percentage of net sales which were own publications, we would have had a more direct indication. It is worth emphasizing that, at this point, the regression work which we have undertaken is exploratory, and is by no means a final model to explain the profitability of Canadian book publishers.

Another variable which one may have expected to be significant is "net book sales per employee". However, in our preliminary equations, this variable is not a significant explainer of variation in profitability.

In contrast, there are several variables which do display strong consistent influences on profitability. These include:

1. the main type of publication of the publisher;
2. the percentaqe concentration of the publisher's activity in that main type of publication;
3. the percentage market share of the publisher in the market subsegment of his main type of publication;
4. total inventory as a fraction of total net book sales; and
5. total grants as a percentage of total net book sales.

There appears to be a significant, positive relationship between profitabilitv and a concentration in publications other than textbooks or trade books. One miaht qather from this an indication that specialty book markets other than academic textbooks are especially profitable. Again, of course, this preliminary analysis is only an indication to be explored further.

We find that there is a neqative influence of the percentage concentration in the main type of publication. That is, publishers who are highly concentrated in one type of publication tend to be less profitable than more diversified companies.

There is a very strong, consistent, positive influence on profitability exerted by "percentaqe market share in the main type of publication". That is, if a publisher has a hiqh share of the market in his main type of publication, he is likely to be more profitable.

There is an equally strong and consistent neqative influence exerted by "inventorv as a percentaqe of net book sales". Publishers which carry a larae inventory relative to their total net book sales are likelv to be much less profitable than otherwise. It is interesting that this is a much stronaer influence on profitability than the influence of "inventory turnover ratio".

Finallv. arants as a percent of net book sales is qenerally negatively related to profitability. That is, less profitable companies have a high proportion of grants to net book sales. We saw in an earlier analysis that the relationship of grants to profitability changed greatly between 1978 and 1981. This change over time is not captured in the regression analysis, and should be explored further. However, the first indications are that if grants are a higher proportion of net book sales, one would expect profitability to be lower.



[^0]:    Some passages severed under the Access to Information Act.

