

STRUCTURE, CONDUCT AND PERFORMANCE IN
THE BRITISH COLUMBIA WHOLESALE
PAPER MERCHANT TRADE:
A CASE STUDY

BY

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the requirement for the Degree of
Master of Business Administration
in the Department of
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ABSTRACT

This project is a case study of the wholesale fine paper merchant trade in the province of British Columbia. The fine paper trade was chosen on the basis of market domination within the province by five merchant firms. The entire fine paper trade, both merchant and mill, were the subject of prosecution by the Crown for restrictive trade practices in Canada for the years from 1933 to 1952. In this prosecution all conspirators were convicted and restraining orders were issued to prevent a re-occurrence of similar practices in the future. As the original prosecution was developed around the conduct of the fine paper merchants, we examined the B.C. trade using the structure, conduct and performance model of industrial organizations.

In order to obtain data, a questionnaire was mailed to all the printing houses in British Columbia. From the returns it was possible to derive concentration ratios, pricing policies and approximate dollar values and tonnage rates for the B.C. trade. Published merchant price lists and financial reports were utilized with Statistics Canada data to obtain figures for profit levels, import quantities and other indices of merchant and market performance. Further data from mills, merchants and printers were obtained via personal interviews.

It was found that the structure, conduct and performance of the fine paper trade in British Columbia is substantially the same as it was during the period of active collusion prosecuted

in 1952. The concentration of economic power within the fine paper merchants of B.C. results in total market domination by these firms. We are lead to the conclusion that current anti-combines legislation is not effective in dealing with problems such as market structure and the concentration of economic power. In conclusion, we have adapted the Kaysen-Turner model of policy to suggest directions for modifications of Canadian anti-combines statutes.

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(A) Introduction

In the course of doing preliminary work for a project on certain aspects of jobs related to employee turnover, the authors became aware that there were characteristics of the merchant trade that were oligopolistic in nature. For example, we noted that the fine paper market in B.C. is dominated by five merchant firms and one fine paper mill. The five merchant firms supply close to one hundred percent of the fine paper purchased by printers within the province, while Island Paper Mills supply approximately sixty percent of the fine paper sold by the merchant firms. In view of the nature of the industry as outlined above, we undertook this case study of the merchant firms using the structure/conduct/performance model of industrial organization.

It is a matter of record that the fine paper trade in Canada was the subject of investigation and prosecution by the Crown for restrictive trade practices. This action took place in the early 1950's and the Crown named twenty-nine conspirators directly in the charge. Of these twenty-nine, seven were manufacturing mills including Howard K. Smith; twenty-one were fine paper merchants and the last named was Ivan Moffitt, the secretary of the Canadian Paper Trades Association. This collusive association of merchants and mills was of significant duration and had effectively stifled competition in the Canadian fine paper trade from 1933 to 1952. Furthermore, the trial judge noted that the evidence indicated that the mills, in particular, had engaged in price fixing activitien for a considerable num-

ber of years before 1933. All conspirators were convicted and three appeals were denied. A restraining order was issued and all conspirators paid a fine. Our study of the B.C. merchant trade represents a follow-up of this original Howard K. Smith case investigation.

The original prosecution of the Howard K. Smith case was based upon the conduct of the firms involved, i.e. the price fixing and limitation of production, while other features of the industry were untouched. The restraining order issued by the court was directed toward the conduct of the firms in that they were restrained from engaging in similar activities in future.

The structure of the industry was not an issue, nor were indications given by the court that the structural characteristics were less than optimum from a competitive standpoint. In our study we begin with the industry structure because economic theory should allow us to predict the conduct of the member firms from an analysis of that structure.

In order to begin our analysis of industry structure, we prepared a questionnaire that was mailed to a sample of print shops in the B.C. market, from which we were able to ascertain from which merchant the individual print shop made its purchases. Utilizing the four firm concentration ratio as well as value added indices we were able to derive data regarding the oligopolistic features of the trade. Using economic theory, we noted that above a threshold level in concentration, the recognition

of mutual interdependence becomes evident in the industry.

We also examined the operational structure of the merchant firms and the methods of operation and we found the firms lack technical justification of size for either efficient plant operation or firm operation. In order to point out the areas in which current merchant operations were deficient, we made estimates of minimum optimal scale using principles of modern warehousing in a firm carrying a limited range of product.

The market structure of the printing houses was our next area of examination. To derive the size of the market and the dispersion and total number of shops, we utilized information available from Statistics Canada as well as the returns from the print shops in answer to our questionnaire. The market is basically atomistic and concepts such as the concentration of the industry are not too meaningful except to demonstrate that there are no elements of oligopsony in this market.

In examining the barriers to entry of new paper merchants into the market, we examined the major potential barriers to the entry of new firms. We noted that there is, in effect, only one real barrier to entry of new firms, namely the control over input supplies. The magnitude of this barrier is formidable to a new firm wishing to enter the market as it will be unable to obtain material for resale.

The merchant houses deal in a product that is homogenous

Prod. desc.
and has a variety of perfect substitutes. In order to clarify the nature of this product, we reviewed the major product types and grades so as to set out areas of comparison. This product description is further expanded in Appendix I with a comparison of prices charged by the various merchants for either the same product or a near perfect substitute.

The conduct of the fine paper merchants in the B.C. market is examined firstly from the pricing policy that is followed by all firms. Discounts, terms and prices were examined to ascertain the degree of interdependence that the merchant houses demonstrate in the setting of prices. With concentration being high in the trade, we would normally expect this to be reflected in a high degree of similarity of prices. The industry is characterized by the presence of a price leader, and we reviewed the various forms of price leadership to ascertain what model of price leadership fits most closely the B.C. merchant situation.

The advertising policy of the B.C. paper merchants was our next main area of consideration. We examined the type and scope of advertising as undertaken both by merchant houses themselves and by the manufacturing mills. Included in the section on advertising is our discussion on the use of promotional techniques such as "giveaways" and sampling programs.

In the section on predation and price cutting we found that there is little done unilaterally by a single merchant. The response to the questionnaire by the print shops indicates that

virtually all felt that the prices charged by merchants were the same. The trade association appears to be instrumental in the maintenance of pricing discipline.

Market performance of the fine paper merchants was examined in both the progressiveness and technical efficiency dimensions. From estimates of minimum optimal scale we take the best attainable performance and compare it to the present operation of the merchant firms in B.C.

The measured market performance of the merchants with respect to allocative efficiency was hampered by the fact that two firms are not public and thus required data were not available. Of the three firms that are public, two are vertically integrated into much larger forest products companies. However, we feel that the figures available for one of the merchant houses can be used as a pro forma statement for the entire trade. Therefore we calculated the excess return on sales and the excess return on equity that has been the case in this industry for a considerable number of years.

The impact of direct foreign investment and importation of fine paper is our next main area, and we made use of economic theory and historical data to examine the current effects of the whole foreign sector upon the B.C. trade.

Our final section deals with the implications for anti-combines policy that can be derived from the case study of the

trade. In conjunction, the historical situation as described in the Howard K. Smith case is included for comparison with the present state of the industry. The present anti-combines legislation is re-examined in relation to the case and the problems in applying this policy to the B.C. situation. Suggested revisions to anti-combines legislation are included to make the legislation capable of dealing with similar oligopolistic situations in other geographical areas of Canada and in other trades.

SECTION I - Industry Structure

(A) The Paper Trades Association and The Merchant Houses

In order to begin our discussion of the British Columbia wholesale paper merchant trade we would first define the industry which we intend to examine, the fine paper merchants. In order to outline what constitutes a fine paper merchant, we would abstract from a memorandum circulated by the British Columbia Fine Paper Merchants Association:

"... a fine paper merchant is defined as a corporation, firm or individual whose principal business is selling for processing or resale and carrying a general stock of the various grades as follows:

- Bond, Ledgers and Writing Papers;
- Book and Coated Papers;
- Cover, Blotting and Gummed Papers;
- Cardboard, Bristol and Blanks;
- and other papers in general use by Printers, Lithographers and Convertors;

from which general stock any quantity, large or small, can and will be sold."

Currently there are five fine paper merchants operating within the B.C. market, Coast Paper Limited, Canadian International Paper, Smith, Davidson and Lecky, Crown Zellerbach (Canada) Ltd., and Barber-Ellis of Canada.

In addition to their participation in the fine paper trade as merchant houses, these firms are also members of the British Columbia Fine Paper Merchants Association. The British Columbia association is a division of the Canadian Paper Trades Associa-

tion that was named in the proceedings of the Howard Smith et al, vs. Regina. We would further note that W. Ivan Moffitt remains installed as secretary of the national association, the same position that he held during the time that the association was directly involved in the price fixing activities. The present association has bylaws that state objectives for the B.C. chapter, and again, we would quote from the above mentioned memorandum:

"The objects of the Association shall be:

To promote and develop efficient and progressive methods and practices in the wholesale distribution of fine papers that a high standard of service may be rendered to the user engaged in processing or resale of these materials and to the fine paper manufacturer in the distribution of its products.

To develop and disseminate information relative to trends of the volume of demand for fine papers, in operating costs and employment conditions in the distributing trade, in changing requirements in the use of fine papers for the guidance of the merchant and through him of the paper manufacturer.

To provide for conference with respect to the solution of trade problems."

Therefore the fine paper merchant houses have a dual role in their participation in this trade. Firstly they function as a merchant house actively merchandising its product and secondly as a member of the trade association that binds the competitors together for the betterment of the merchant trade, per se.

(B) Merchant House Concentration Ratios and Industry Concentration

The five firms engaged in the fine paper trade have captured varying portions of the fine paper trade within the market area. In order to determine what market share each firm had captured, we sent a questionnaire to the printing trades that would ascertain what market share was held by each of the merchant houses. In Table I we give the market share by market segment for each of the five merchant firms operating within the province. These data have been checked against available data for merchant houses, and personal knowledge indicated that the Barber-Ellis share, for example, is within 0.1% of the actual figure.

From the figures given in Table I, we would take the market share of the four largest merchants as our index of the concentration within the fine paper merchant trade.

The four merchant firms and their share of the B.C. market are as follows:

1. Coast Paper Limited	41%
2. Barber-Ellis of Canada, Limited	29%
3. Canadian International Paper, Van Pac	14%
4. Crown Zellerbach (Canada) Ltd	<u>12%</u>
	96%

With the four merchant firms total percentage of sales in excess of 90% of the total industry sales, we can assume that

TABLE I: Market Share by Merchant Firm and Customer Size as Derived from the Printing Trades Questionnaire Returns

<u>Merchant</u>	<u>1-15 Emp</u>	<u>16-49 Emp</u>	<u>Over 50 Emp</u>	<u>:</u>	<u>Total Mkt</u>
Barber-Ellis	38	34	15	:	29
Can. Int. Paper	3	2	37	:	14
Coast Paper	44	44	35	:	41
Crown Zell.	7	12	17	:	12
S.D. & L.	2	10	1	:	4

the industry is oligopolistic. Scherer ⁽¹⁾ in Industrial Pricing Theory and Evidence states that when the four firm concentration ratio exceeds a threshold of 40% there is a recognition that the mutual interdependence characterizing oligopoly pricing is very apt to become an endemic feature of the industry. We will explore the ramifications of these oligopolistic tendencies of the industry in Section II A on Pricing Policy.

(C) The Merchant Houses and Vertical Integration Within the Industry

In our review of the history of the Canadian paper merchant trade we noted a parallel development in the industry to the overall tendency towards increase in concentration. In the early years of the industry from 1930 through 1940 there were at least 28 merchant houses that operated without an affiliation with a manufacturer of fine paper. During this same period only five merchant firms operated as the vertically inte-

grated sales outlet of a paper mill. At present, the tendency for manufacturers to acquire merchant houses as outlets for their product has resulted in the present state of the merchant trade, so that only eight merchant houses remain independent from any direct affiliation with mills. In the B.C. trade we find two representatives of the vertically integrated merchant house, C.I.P. Van Pac and Crown Zellerbach Canada Ltd. Informal relationships bind two of the other merchant houses to particular mills, Smith Davidson and Lecky for example have a connection with MacMillan Bloedel as Mr. Lecky is Mr. H.R. MacMillan's son-in-law. Coast Paper Limited was affiliated with E.B. Eddy mills at some level during the formative years of the company. We find that the tendencies, i.e. concentration and integration, are increasing within the industry.

The fine paper merchants of B.C. service a total market demand for 65,000 tons of paper per year or a total value in sales to the merchant firms in excess of \$25,000,000. In achieving this level of sales, the merchant firms utilize two distinct modes of sales; firstly the merchants drop ship directly from the mills to the printer for orders that total more than one ton of product. On the direct mill shipments, the merchants markup the product, on the average, 5% over the cost of the goods charged by the mill. On the material that is taken into the merchants' inventory and stored, the average markup by the merchant firm is 70% over the landed cost of the goods in Vancouver.

(D) History of the B.C. Merchants

At this point, we would outline some of the background of the merchant firms currently engaged in the wholesale paper merchant trade in the province of B.C. Two merchant houses, Coast Paper Limited and Smith, Davidson and Lecky are not public companies and therefore neither publish year end reports nor release financial data, and therefore the company history will be presented in an abbreviated form.

(1) Coast Paper Limited

The firm of Coast Paper Limited until very recently was the only fine paper merchant which dealt exclusively in the market area of B.C. In response to the printing trades questionnaire, we found that Coast Paper Limited also has the largest market share of all merchants operating within the market area. Returns from this mailing (Appendix II) indicate that Coast Paper currently services 41% of the demand for fine paper within the province of B.C.

Coast Paper Limited is also the most recent "new" entrant into the wholesale Paper Merchant trade. The firm was founded in Vancouver by Gilbert Garnett in 1941. Since its founding Coast Paper Limited has remained a closely held company by the original founder and currently Don Garnett, the founder's son, is the company's General Manager. Inasmuch as the company is not public, operating statements and profit data are not made

available to the general public. The best estimates of Coast Paper's sales revenue come from the questionnaire returns where a 41% market share would give the firm total revenue in the area of \$10,000,000 for fine paper sold in the B.C. market.

Recently Coast Paper Limited has begun to expand their services to include the province of Alberta and have established a new sales office and warehouse in Calgary. Coast Paper set up this new regional office as a wholly owned subsidiary under the name of the Alberta Paper Company Limited. It is estimated that the firm of Alberta Paper contributed an additional 1.5 million dollars of sales revenue to the parent company during the year of 1974. The total Alberta market is much smaller in total than the potential revenue out of B.C. and it is placed at approximately \$10,000,000 of fine paper sales for all merchant houses during the year of 1974. This level of total sales would give the Alberta Paper Company a 15% market share of the Alberta market. While not the same type of market domination that Coast Paper demonstrates, a 15% market share represents a more than adequate growth pattern for this branch that was only established in 1972.

It is interesting to note that Coast Paper Limited has a staff level of 65 employees and that it has successfully resisted all attempts by various unions to organize these employees into a collective bargaining unit. In this successful resistance of the pressures for unionization, Coast Paper Limited is unique among the paper merchants who operate within the pro-

vince. All other merchant houses are unionized throughout their warehouses or offices or both. Coast Paper appears to have resisted the attempts to unionize it through providing a higher level of salaries than the competitive union shops and at the same time offering a greater range of fringe benefits. For example, the Coast Paper "recreation room" complete with pool tables and dart boards has become a widely publicized feature of the industry. The responsiveness of Coast Paper management to the needs of their people has obviously paid back in the levels of revenue generated. As currently they generate \$184,000 of revenue per employee per year while Barber-Ellis, their closest competitor, generated only \$92,490 of revenue per employee per year.

(2) Barber-Ellis of Canada, Limited

The firm of Barber-Ellis of Canada, Ltd., was formed through a partnership between John Fitzallen Ellis and John R. Barber. Ellis contributed the functional expertise while Barber supplied the necessary capital to make the firm a viable enterprise. The firm was incorporated in Toronto in 1876, and entered the fine paper trade. Initially the firm functioned as a retail outlet for stationery, but shortly diversified into envelope manufacture and wholesale paper supply to the printing trades.

The Toronto fire of April 19, 1904 totally destroyed the facilities of the firm. The resources of John R. Barber were again called upon to rebuild the Toronto facility which was to

function as a wholesale paper merchant warehouse.

In 1909, the firm of Barber-Ellis began to expand geographically across Canada, and the first branch warehouse was opened in Winnipeg, Manitoba. The Winnipeg branch services the Manitoba fine paper market and has developed from the 1909 opening to the point that in 1973 the branch had obtained a 25.4% share for the province.

Barber-Ellis has not actively sought to broaden its original field of expertise and grow through mergers. In the one hundred year history of the firm, only three mergers have taken place. The firms that were acquired have all been in fields directly related to the fine paper trade.

In 1973, Barber-Ellis acquired a majority interest in W.J. Gage and Co. Ltd., of Toronto, W.J. Gage had been in operation in the Ontario Market continuously since 1844 and provided some degree of local competition for the Ontario branches of Barber-Ellis.

We would like to point out however, that the degree to which competition with Barber-Ellis was a factor in the merger was questionable since both were named as co-conspirators in the Regina vs. Howard Smith Paper Mills case. The case was settled in 1955 and the defendants were fined and a restraining order was to prevent the defendants from engaging in price-fixing activity in the future.

Prior to 1950, W.V. Dawson and Munn Envelopes Co. were acquired. These two firms were, and are today, local Ontario firms engaged in the manufacture of envelopes. While the envelope trade is directly related to fine paper, these firms do not sell fine paper to customers on a merchant basis. Rather, they sell envelopes and the attendant writing paper on a retail basis as well as wholesale to large store chains.

In 1912, Barber-Ellis opened their Vancouver warehouse. The market in B.C. has remained fragmented and in 1973 there was a total of 195 print shops in operation in the province. A portion of these shops are spread throughout the major population centers in the province but approximately 85% are located within the greater Vancouver area.

In the interval from 1912 to 1973, Barber-Ellis Vancouver grew from zero sales to sales of \$7,400,000, about 29% of the market share of the products sold to print shops. The majority of the revenue from the Vancouver operation comes from the small and moderately sized print shops. In 1973 the Vancouver sales were broken down to show that 34% of the revenue came from the smallest category of print shop, 42% from the intermediate size, and 24% from the largest category.

In 1915 the company opened a branch office in Calgary and in 1922 an office in Edmonton. In 1973 these branches had sales of \$3,400,000 for a market share of 44.4%. The next branch opened was in Montreal in 1923 and in 1973 had sales of \$2,778,000 for 3%

of the market share. The last branch opened under the direction of the founder, John Ellis, was the Regina branch which was established in 1928. It's sales in 1973 were in the area of \$267,000 for a 16% market share.

The latest openings of Barber-Ellis branch offices were in Hamilton, Ontario in 1955 and London, Ontario in 1960. These branches along with the home office in Toronto account for total sales in 1973 of \$11,700,000 for a market share of 5.68%.

(3) Crown Zellerbach Canada Limited

Crown Zellerbach is the second major firm to have vertically integrated into fine paper sales as part of its overall marketing program. Although the contribution to the overall revenue of the corporation would be rather small, for in 1974 the total corporation revenue exceeded \$342,000,000 and the fine paper sales are estimated at no more than \$3,000,00 in total. Therefore fine paper sales, per se, account for less than one percent of the overall corporate revenue.

Crown Zellerbach, as a whole, produced more than 518,000 tons of paper products in their mills located within the province, none of this paper is of the grades merchandized by the fine paper outlet. Insofar as the fine paper is concerned, Crown Zellerbach functions as does any other paper merchant within the market. Crownline Bond is produced by MacMillan

Bloedel's Island Paper mills and is identical to Pacific Copy and Island Bond. Crownline's colors in cut sheet sizes for bond are produced by Anglo-Canadian Pulp and Paper Mills' subsidiary Dryden Paper Co. Ltd. The American branches of Crown Zellerbach have division that produce fine paper and local industry estimates that one fine paper plant in California operated by Crown Zellerbach has capacity approximately equal to double the 33,000 tons per annum produced by MacMillan Bloedel's Island Paper Mill. We will further investigate this vertical integration into marketing in our section on direct foreign investment in the B.C. Wholesale Paper Merchant trade (Section IV-A).

Crown Zellerbach's entry into the fine paper merchant trade is the most recent, however, this entry was not new insofar as Crown Zellerbach purchased the assets of the Columbia Paper Company. The Columbia Paper Company was originated by Mr. C. Kay who left the firm of Smith, Davidson and Lecky to form the new enterprise. In 1959, when Crown opted for entry into this market, they merely purchased outright the holdings of this already established merchant. However, the import of this decision to enter the fine paper market amounted to a horizontal integration on the part of a firm already established in the production and distribution of the coarser grades of paper, kraft pulp and linerboard. Therefore in the Crown Zellerbach situation we are dealing with a plural house as far as paper sales are concerned. A Crown Zellerbach order department can take orders for items such as the following:

- (1) Hand Cleaners, wiping materials, disinfectants

- (2) Paper towels and toilet tissue
- (3) Drinking cups, napkins, place mats
- (4) Tablets, pads and file folders
- (5) Kraft and Sulphite wrapping - rolls and sheets
- (6) Corrugated board and boxes
- (7) Tape, gummed and pressure sensitive

In comparison with firms such as Barber-Ellis and Coast Paper, it is obvious that Crown Zellerbach has broadened the original field of expertise to include all paper items that it is currently equipped to produce.

(4) Canadian International Paper - Van Pac Limited

Canadian International Paper is a relatively old line company on the Canadian paper manufacturing scene, as it was originally incorporated in 1916. Likewise the Van-Pac facility has been established for a considerable amount of time but up until 16 years ago it functioned primarily as a coarse paper supplier. Thus a parallel situation existed at C.I.P. Van Pac to the Crown Zellerbach situation where the mill first vertically integrated into the marketing of coarse paper and related product and then horizontally integrated to market a complete line of paper and paper products.

At present, C.I.P. Van Pac differs from the operation of Crown Zellerbach in at least one important aspect, namely that the fine paper operation at Van Pac is marketing paper produced by the mills that are part of the corporation. The Westline

Bond grades sold by C.I.P. are produced by Dryden Paper Mills which are a subsidiary of Anglo-American Paper Company Ltd. However, Anglo-American is a wholly owned subsidiary of Canadian International Paper. In the situation regarding the vertical integration into marketing by Crown Zellerbach, we noted that the potential for marketing their own product has remained latent, to date. Therefore we feel that the C.I.P. Van Pac has a vital link to sources of supply of fine paper that other merchant firms such as Barber-Ellis, Coast Paper Ltd. and other non-integrated firms may not possess. In addition to providing this guaranteed outlet for the corporate product, C.I.P. Van Pac functions like the other merchants in that it supplies MacMillan Bloedel paper, Domtar paper and the whole range of grades and sizes as do the other merchant houses in Vancouver.

In order to give some indication of the extent of the vertical integration of this firm we would outline the principal structure of the corporation:

INTERNATIONAL PAPER COMPANY (N.Y.)

(wholly owned)

American Central Corporation - has 30 subsidiaries
I.P. Petroleum Inc.
International Navigation Ltd.
Atlanta and Saint Andrews Bay Railway Co.
Consolidated Packaging Machinery Corporation
International Pulp Sales Company
Davol Inc.
Societa International Alvorazione Carta e Affini
Canadian International Paper Company

New Brunswick International Paper Co.
C.I.P. Research Ltd.
Commercial Alcohols Ltd.

International Paper Sales Company Ltd.
Anglo-American Paper Co. Ltd.
Canadian International Pulp Sales Ltd.
Monarch Papers Ltd.
Dominion Cellulose Ltd.
Facelle Company Ltd.
C.I.P. Paper Products Ltd.
C.I.P. Midwest Ltd.
C.I.P. Van Pac Ltd.

(Partial Ownership)
Tahsis Company Ltd.
Masonite Canada Ltd.
International-Stanley of Canada Ltd.

From this principal structure, it can be seen that the parent corporation of International Paper as well as Canadian International Paper are relatively diverse companies that to some extent have diversified away from the area of original expertise in paper manufacture. The policy of the corporation as derived from the structure would lead us to the conclusion that the corporation has not only vertically integrated throughout the paper manufacturing end, but has through partial ownership in Tahsis Company begun to diversify into a primarily lumber company at present.

(5) Smith, Davidson and Lecky Ltd.

Smith, Davidson and Lecky Ltd. is the oldest existing merchant house doing business in the B.C. market. The firm was established in 1907 and has expanded to have branches in Calgary, Edmonton and Winnipeg. During its entire history, S.D.&L. has remained a closely held private company and the data available and dispersed to the general public is minimal. From the returns

of the printing trades questionnaire we note that the market share for this firm is the smallest of all merchant houses within the province as far as fine paper is concerned. However, S.D. & L. is a plural house that carries products other than fine paper, estimates place the bulk of S.D. & L. sales in the area of school supplies, toilet tissue and hand towels. The main bulk of their fine paper sales within the province is confined to the coated grades of paper purchased from Simpson Lee Paper Company in California. S.D. & L. have captured the bulk of the label market in the B.C. area and have directed their marketing effort to remain in this sector. Currently they have only three salesmen who service the fine paper trade compared to Barber-Ellis with a sales staff of 12 outside plus one Sales Manager and 9 inside sales people, both with a comparable number of lines catalogued for sale.

Industry sources indicate that a buyer is currently being sought for this merchant house and we expect that within one or two years S.D.&L. will be integrated into the marketing chain of a mill. Suggestion has been made that MacMillan Bloedel will purchase the company owing to the fact that Lecky is the son-in-law of H.R. MacMillan. This is a reasonable assumption since MacMillan Bloedel do not have a marketing arm that sells fine paper to printers currently yet they have integrated into marketing outlets for paper boxes and bags. If past trends continue, it would appear that S.D. & L. will become part of the MacMillan Bloedel corporation within the foreseeable future.

(E) Technical Justification of Merchant House Physical Plant
Related to Drop Shipment Mode of Operation

The fine paper merchants of B.C. handle the product directly through their warehousing operations as one mode of operation. The second main type of service performed is that of drop shipments directly from the manufacturer to the printer. These two distinct methods of business operation have vastly different demands on the physical plant that the fine paper merchant must provide.

In those cases where the firm functions as a drop shipper, the fine paper produced by the mill is cut and wrapped and shipped directly to the printer by the use of common carriers. It is possible to predict a situation where a fine paper merchant who was functioning primarily as a drop shipper would have no warehouse space of its own. For example, Island Paper Mills have a policy whereby they will store paper for the merchant house and release shipments as directed. Under these circumstances, a merchant could feasibly drop ship to his customers where large amount of paper were required. Most mills will accept orders for a minimum of one ton of any category of paper and will make shipments as small as four cartons of any item within the product category. In the case of Island Paper Mills, a four carton shipment of Pacific Copy in cut sizes would be for 16,000 sheets. In one survey conducted of the movement of floor stock from the merchants it was found that 40% of all orders placed for Pacific Copy 8½x11-10M exceeded the 16,000 sheet minimum that Island Paper Mills would ship. In these cases it would appear that the paper

merchants who utilize their floor stock to meet such demands are failing to utilize their drop shipment arrangement to the fullest degree.

It should be realized that such a utilization of drop shipment potential on the part of a single merchant would constitute a predatory pricing tactic as the price differential would amount to a discount of 24% if the merchant used list pricing in making the transactions. Since such a move on the part of a particular merchant would result in the same course of action by all merchants, there has been great resistance on the part of mills to lower their drop shipments below a minimum of one ton or more, because this would result in high distribution costs to the mill.

Only a very small portion of the existing physical plant of the B.C. fine paper merchants would be required if the operation were run on a purely drop shipment basis. We would estimate that less than one percent of the current physical plant would be required to service drop or split shipments from various mills. This would include all departments required for sales, invoicing, customs and product handling that would occur.

(F) Technical Justification of Merchant House Physical Plant
Related to Warehouse Mode of Operation

In this discussion of the requirements on the physical plant for the warehousing mode of operation we will detail two distinct

types of firm marketing policy that could be adopted by a firm in the B.C. market. Firstly there is the possibility that a new merchant firm would enter the market and carry a complete range of product such as carried by the current merchant firms. This would amount to an inventory composed of 3500 items covering the complete range of product from many manufacturers. Secondly there is a possibility that a new merchant firm would specialize in the marketing of those product lines that account for the largest portion of the merchant sales. Therefore if a merchant house were to specialize in the handling of only MacMillan Bloedel paper and Domtar paper they would be able to service 70% to 75% of the demand from the printers within the market.

Regardless of the decision by the firm to limit its lines of stock carried, there are characteristics of the physical plant that are common to both modes of operation. In that the existing merchant firms are warehousing operations that receive in bulk from the various mills and ship out the orders to the various printers, they require some actual warehouse space. Paper product is a moderately heavy product but within the average warehouse floor loads do not exceed 250 lbs per square foot. The vast majority of warehouse buildings that have been recently constructed within the greater Vancouver area meet or exceed this 250 lb/sq.ft. floor loading requirement. For purposes of comparison, other industries put far greater demands on the floor loading, wholesale grocery operations and ceramic tile warehouses routinely load their floors to 600 lb/sq.ft. and generally require no more than ten feet of head room to reach this level. Therefore the floor loading re-

quirements of the wholesale paper merchant trade, even at the theoretical maximum, would not present limiting factors to the choice of warehouse sites of occupancy of presently constructed buildings throughout Vancouver.

In order to approximate the actual floor space requirements we can project space requirements to service a total industry demand in the area of 65 to 70,000 tons per year of fine paper. A larger merchant house such as Barber-Ellis or Coast Paper would have total sales of 20 to 25,000 tons per year. On this basis, we will further develop our dichotomous approach to fine paper marketing with a full service house compared to a merchant carrying only the MacMillan Bloedel-Domtar line. Over and above these two projections we will outline the space allocated to paper products by the existing paper merchants.

The inventory levels maintained by the paper merchants represent a turnover rate of approximately 8 to 9 times per year. We will use this for purposes of structuring our space requirements for a fine paper merchant house. As stated above, at a merchant size representing 30% of the market such as Barber-Ellis or Coast Paper there would be flow of 25,000 tons of paper per year through the merchant house. Assuming a fairly stable yearly demand, the merchant house would carry an inventory of approximately 3,000 tons of paper to realize the average industry turnover rate. From observation we find that a ton of bond paper occupies a skid 3'x4"x6' or a total of 72 cubic feet. At a total of 72 cubic foot, 3,000 tons of paper would require

216,000 cubic feet of storage space. In a warehouse with 24' of headroom, 216,000 cubic feet would require 9,000 square feet of floor space for storage.

In the situation of the merchant house that would stock only the MacMillan Bloedel and Domtar lines we would have to carry significantly less stock but would realize a greater average inventory turnover rate. The lead time on reorder for stock from MacMillan Bloedel is from 7 to 21 days, and while Domtar lead time is longer the percentage of this stock required is less. We would estimate that for a merchant house stocking only these two lines an inventory of a level of 750 tons of product would suffice. Thus with the assumption of a warehouse with 24 feet of headroom, a total of only 2,000 square feet of floor space would be required to store the product.

A full service house that offered the printers a relatively complete line of product would require an inventory level at or above the 3,000 ton level. The demand for some product lines is such that a simple division of the tonnage in stock would not permit for adequate stock levels to be maintained to service demand on specialty items. For example imported paper generally has lead times for reorder that can exceed a three to four month period. If a merchant opts to stock this paper then he must carry higher levels of stock to service potential demand than would be required if local suppliers' stock had been offered. Barber-Ellis stocks a line of coated paper manufactured in Japan, and to stimulate and maintain demand the company must stock at

least six months supply of paper. This means that the company is obliged to carry approximately 200 tons of paper while a similar Island Paper Mills grade would require only 5 to 6 tons of stock. With these considerations in mind we would suggest that the optimal stock level would be at a level of close to 4,000 tons. Such a stock level would require a floor space allocation of 11,000 sq. ft. to store the product in a warehouse with 24 ft. of headroom.

As an example of an existing merchant, Barber-Ellis utilizes 36,000 sq. ft. of storage space in their own building and an additional 12-14,000 sq. ft. for storage of paper they are not able to accept into their own building. Since this figure represents a total space allocation for product storage of 48-50,000 sq. ft. that includes racked area and aisle ways. Assuming that the aisle ways and racks occupy the same floor space, as in the case in a typical narrow aisle paper warehouse, then the firm would be utilizing 24 to 25,000 sq. ft. purely for paper storage. Obviously the travel time involved in working this warehouse would exceed markedly the time required to service either alternative as outlined above.

In addition to the actual space required to store the product, the warehouse requires space to service the racking. In general, a narrow aisle reach truck can work in a minimum aisle way of 8 ft. and more sophisticated equipment such as swing reach trucks can work from aisles slightly over 4 ft. wide. We will assume that our two alternatives utilize equip-

ment capable of working out of an 8 ft. aisle and would therefore double the space requirements for the paper storage. The space requirements for product handling in a warehouse specializing in the two major lines would be a total of 4,000 sq. ft. In the full service warehouse, operating at minimal optimal scale, the paper storage space was estimated to be 11,000 sq. ft. which would be doubled to a total of 22,000 sq. ft. to work the warehouse. As previously noted, Barber-Ellis as an example of the current situation, uses 50,000 sq. ft. of floor area to store and handle its product.

A paper warehouse requires more floor space than to store the product and retrieve it from storage. There are space requirements for order assembly and "breaking" the bulk of shipments in from the mills. In addition to this marshalling area, the local paper merchants use fleets of lease trucks to deliver their product and space is required both to load and park these trucks.

In our investigation, we measured the dock space utilized by the B.C. wholesale paper merchants and it would appear that 150 ft. of dock frontage is required to handle the inflow and outflow. We feel that the space allocation as currently exists is optimal for dock frontage based upon a lease truck fleet of six to eight trucks and space allocated permanently to receiving shipments. Adjacent to the dock frontage, the merchant requires a minimum of 4,000 sq. ft. so positioned with wrapping benches that the warehouse staff can prepare the shipments with

a minimum of congestion. Thus the addition of a marshalling area would raise the floor space requirements of the merchant house handling MacMillan Bloedel and Domtar only to a level of 8,000 sq. ft. total. The merchant house operating at minimal optimal scale but offering full service would require 26,000 sq. ft. of floor space. Adding the marshalling area to the current Barber-Ellis space puts a level of 54,000 sq. ft. on the total physical plant.

The merchant expects to grow, at least at the rate of the overall market and therefore we should use the historical growth rate of 4% to 6% in terms of the total number of tons of paper handled per year. Most short term leases cover a five year period and it would be reasonable to assume that the merchant would allow for at least a 25% growth in the space required for stock storage and aisle space. Therefore for the MacMillan Bloedel and Domtar warehouse an additional 500 to 1,000 sq. ft. would be required. In the full service warehouse operating at minimal optimal scale, an additional 4,000 sq. ft. would be required. Inasmuch as Barber-Ellis has outgrown its present building and stores 30% of its warehouse stock independantly, we cannot simply add a 25% factor to the existing space to arrive at the future space requirements. Furthermore the present situation at Barber-Ellis is further complicated by the fact that the warehouse has 12 ft. headroom warehouse. Therefore the total requirements including the growth area would be 31,000 sq. ft.

The overall technology of paper warehousing is relatively

simple, basically the merchant house receives large shipments from the various mills and functions in the breaking of bulk. All that is required at the most primitive level is some warehouse space, storage racks and manpower. The existing merchants use a labour intensive "hand picking" system to handle their product with only small innovations in the in-house transport of paper. In Section III-A we will review the operating efficiency of the existing merchants as well as exploring the technology of warehousing in greater detail.

(G) Technical Justification of Merchant Firm Size

In this discussion of firm size we will consider only two measures of firm size: the number of staff, and the total sales revenue generated by the firm. For purpose of comparison, we will use the firms of Barber-Ellis and Coast Paper as representing the extremes among the currently operating fine paper merchants. In our analysis, Coast Paper represents the most efficient firm operating within the B.C. market, and Barber-Ellis represents the least efficient firm operating within the B.C. market.

Coast Paper generates 12 million dollars of sales revenue with a total staff of 65 people, whereas Barber-Ellis generates 10 million dollars of sales revenue but must use 107 employees to reach this level. In terms of revenue per employee, Coast Paper generates \$184,000 of sales revenue per employee and Barber-Ellis generates \$95,000 per employee. Relative to this very simplistic measure of the efficiency of the firm, Coast

Paper is approximately twice as efficient as Barber-Ellis.

If we were to speculate on the minimum size for a firm in terms of total employment we would set a level of 34 employees. This would allow for a sales force of 8 people, warehouse staff of 14 and other administrative and typing staff. For a paper firm of this size the fixed expenses such as rent, heat, light and salaries would run at approximately \$400,000 per year with miscellaneous other expenses such as "freight in" we would expect a level of around \$600,000 in operating costs per annum. At current levels of markup the firm would break-even at a level of sales revenue of less than one million dollars. Therefore a firm that has captured a 3% market share would break-even and would begin to make a profit at levels of sales above this. We currently have no firm in operation in the B.C. market that approaches the minimum size that would be possible under advanced technology but we speculate that regardless of the variables such as firm scale of operation, the 34 staff level would be required by any merchant hoping to compete effectively in the market.

The nature of scale economies in the fine paper trade relates to the relationship between the merchant firm, the mill and the customers. A merchant firm that opted for the handling of Domtar and Island Paper would be in a position to service 70% to 75% of the demand for fine paper within the province and with the relatively short lead times the inventory that would have to be carried would be minimal. The current situation of mer-

chant houses carrying as many as five representative manufacturers' brands in each grade size and category would be eliminated. This present situation ties up capital and space to maintain an inventory for which there is relatively low demand.

The customers who purchase from the fine paper merchants represent a wide variety of size ranges and degrees of product utilization but if we consider some of the larger printing houses, the response to our questionnaire indicates a level of purchases that approach \$400,000 per year. With accounts of this size, a merchant house could feasibly work only with the larger customers, as we have calculated that 60 printing houses within the province account for 80% of the revenue generated by the fine paper merchants. The present merchant houses service all segments of the industry but overlook the opportunity to cut costs by servicing only a few of the larger accounts. If we were to assume that all the larger printers had purchases in the \$400,000 range a firm such as Barber-Ellis would require less than 20 customers to generate the same amount of yearly revenue that now requires the servicing to 200 fine paper customers. Thus the printer size represents a potential to the merchant for exploiting scale economies if this procedure were adopted, and only larger printers made up the customer mix.

Inasmuch as the merchant houses are the intermediary, then it behooves them to strive for a balance between the mills from whom they buy, the amount of inventory that they carry as opposed to the market they are attempting to service. By

a thorough consideration of these variables, the merchant firm would be in a position that would offer a strategic plan suitable to the achieving of a market position where scale economies over and above the level currently achieved could be realized.

Within the merchant trade, the economies of scale are directly related to the product mix and customer size, and the merchant houses who realize this will lower their overall cost of order handling. The parameters of firm operation such as warehouse space, tons of product inventory, or total revenue do not provide sufficient conditions in this industry for economies of scale. What is necessary is that the merchant revamp his market strategy to service that section of the market where the bulk of the product is sold. If a merchant were to embark upon a course of action such as this, economies of scale could be realized that would allow the merchant to realize a far greater return than is presently enjoyed.

(H) The Printers of B.C.: Absolute and Relative Sizes

In any discussion of the printing houses of B.C., we must keep in mind that although they are considered to be a manufacturer by Statistics Canada, they function as a retail outlet for all fine paper sold within the province. Furthermore from their position in the channel of distribution, the printing houses must necessarily form relationships both upwards and downwards along the channel. We will approach this description of the printing houses from the same dichotomous point of view,

firstly we will deal with their association with the consumer and secondly we will describe their association with the merchant houses.

(1) The Printers and Their Customers

The commercial printing houses in B.C. represent the third largest manufacturing industry in B.C. From a geographical dispersion of plants, the printing trade falls third in line to sawmills and bakeries for the total numbers of plants in operation within the province. There were 358 sawmills, 246 bakeries and 205 commercial printing plants in operation in 1974 according to Statistics Canada (cat. 36-203). The sawmills represent a primary industry which would allow that the printing trades represent the second largest secondary manufacturing industry within B.C. in terms of number of establishments.

In order to survey the commercial printing houses, the writers prepared a questionnaire that was mailed to the printing houses of B.C. This questionnaire was structured to elicit responses that would allow for a separation of firms by size categories, value added to the printers' products and responses related to service levels provided by each of the five merchant houses. In addition, the questionnaire was structured so as to derive responses that would indicate if the printers detected price differences between the fine paper merchants and which merchants were considered to offer fine paper at the highest and lowest prices.

From the responses to our questionnaire, we were able to derive the structure of the commercial printers who deal with the fine paper merchants in B.C. In Table 2, the absolute size by categories as derived from the questionnaire is shown.

From these data, it is possible to see that the vast majority of print shops in the B.C. market belong to the category with fewest employees. In terms of sales revenue, these firms reported a tremendous variation in sales, and within this category the reported sales ranged from a low of \$10,000 to a high of \$500,000 per year. The technology associated with the smaller shops is generally structured around the "instant" print type and as a result there are no real barriers to entry to new firms. The instant print technology does not require type setters or other specialized trades and therefore allows for the mastery of the technology with only minimal training. The median number of employees for this group would be four. The market segment that they service comprises the smaller print jobs such as letter-heads on 8½ x 11 paper. The majority of small shops have presses that handle paper up to 11 x 17 and are therefore eliminated from most of the larger jobs such as catalogue printing.

TABLE 2: Commercial Printers of B.C. by Size Categories and Percentage of Market

<u>1-15 Employees</u>	<u>15-49 Employees</u>	<u>Over 50 Employees</u>	<u>Total</u>
156	38	12	205
24%	26%	50%	100%

The medium and large printers represent the largest dollar volume and potential sales for the fine paper merchants as these two groups account for over 75% of the potential market for fine paper within the province. Associated with the increase in employee numbers is a contiguous proliferation of printing trades technology. At the upper levels, the large printing houses are set up to do a complete publishing operation and have scale economies not possible within the smaller shops.

Discrete figures for value added by the printing houses of B.C. were not directly available from the questionnaire but amalgamation of the sales figures reported by the printing houses and sales figures from the fine paper merchants can be juxtaposed to arrive at a value added figure. Furthermore, figures are available for the total value added by printing houses in Canada for 1974. Statistics Canada (cat. 36-203) reports a total value of printing house shipments of \$860,466,000 where the cost of goods sold was \$329,560,000 or a value added of \$530,906,000 for 1974 shipments. The value added by the printing houses represents 160% of the cost of the raw material from the paper merchants. From the questionnaire figures, we would put a value on the B.C. fine paper trade for retail purposes at \$65,000,000 and since the paper merchant market had a value in 1973 of \$25,000,000 there would be value added in the amount of \$40,000,000.

Precise employment figures for the printing trades in B.C. were not immediately available from the printing trades questionnaire returned by the commercial printers. However we were able

to ascertain from direct questioning that some of the larger printers had far in excess of the 50 reported as a minimum on the questionnaire. The smallest size of printers have a median number of four people per shop, as derived by interview, which would tend to pull the overall total of employees down, but from the questionnaire we have projected that the average printing trades firm in B.C. would employ approximately 19 people. With such an estimate of number we would set an upper limit on the total employment in the commercial printing trades of 2500 people. To correlate the total employment with the categorical listing of print shops by size:

1-15 Employees	:	600 total employed
15-49 Employees	:	800 total employed
50+ Employees	:	1100 total employed

The commercial printing houses have a relatively small market that is characterized by a large number of shops in a very competitive market. Routine requests for quotations from a sample of shops showed variation as much as 30% from one printer to another. Furthermore the printing trade is characterized by an ease of entry, as the space requirements are not great, a small shop can occupy an area no larger than 500 sq. ft. and can conceivably operate in much less room. The capital requirements for setting up a print shop are quite small, a principal can set himself up in business for a total of \$15,000. This would include press, camera, light tables and plate burners required to go into operation. Likewise the equipment supply manufacturers offer fairly lenient credit policies further

lowering the barrier to new entrants. So in summary, the commercial printers are dealing in a market that is a textbook example of the competitive market. The market typically lacks observable oligopolistic practices as would be expected in a market as atomistic as the commercial printing trade.

(2) The Printers and the Paper Merchants

In our consideration of the printing houses that deal with the fine paper merchants we sought evidence that would demonstrate oligopsonistic tendencies within the market. There are parallel associations to the Canadian Paper Trades Association among the commercial printers, this association being the Printing House Guild. Although this association is a generally loose aggregate of printers, we expected to find some pressure would be brought to bear on the paper merchants through this vector.

In addition to the commercial printing houses, the B.C. market supports an additional 82 plants that are directly involved in the publishing trade. While the commercial printing houses form the major part of the fine paper market serviced by the merchant houses, the publishers may or may not deal with the merchants contingent upon the type of publishing the firm is involved in. For example, publishers such as Pacific Press, Southam Press and the Thompson chain are involved in the regular publishing of newspapers and purchase their supplies directly from the mills. The fine paper merchants do not deal in the coarse paper trade to any real degree, especially the larger

merchant houses such as Coast Paper and Barber-Ellis. The scale of materials handling required to service the demand from the newspaper publishing trade is far beyond the level that the fine paper trades are equipped to provide. In addition there is a segment of the publishing trade that function as convertors, in the printing of labels, etc. These firms purchase fine paper directly from the mills in roll form and again the usage precludes the paper merchant from participating in this section of the trade.

The smaller printers, 1-15 employees, (Table 2) form the most numerous shop size that the fine paper merchants service. From the questionnaire we found that there are 156 shops in the B.C. market that fall into this category. From the response to the questionnaire we would estimate that these firms account for 24% of the fine paper purchased from the paper merchants. Using the 1973 total market figure of \$25,700,000 for fine paper supplied by the paper merchants implies that this section of the market would represent a total potential of \$6,800,000 per year. We would expect that should this segment of the market form close associations in purchasing then there would be considerable pressure on the merchant sources to cut prices. However as previously stated, this group of printers is geographically scattered throughout the entire province. Possibly the single largest reason for these firms failing to take advantage of the oligopsonistic advantages available to them is the nature of the operation of the firms. The instant print type of technology is related directly to a versatility in servicing their customer

demand. Therefore they do not stock raw materials but order from the fine paper merchants as the particular customer order is placed. Under these circumstances, the printers utilize the stocking facilities and rapid delivery services provided by the merchant firms to service a variety of demand without the necessity of maintaining their own warehouse stock. Therefore we would expect that the price consideration is secondary to the levels of service that smallest segment of the market expects from the fine paper merchants.

The medium sized commercial printers (15-49 employees) represent a potential market of \$6,500,000 or 26% of provincial total to the fine paper merchants. The total dollar volume of this market segment is distributed among the 38 firms that make up this group. Again the geographical dispersion and technological diversification preclude the formation of oligopsonistic association of printers. The warehousing functions performed by the paper merchants also allow that an individual printer will not have to stock a complete range of products, which also gives the merchant considerable "clout" in preventing the formulation of coercive buying associations.

The large commercial printers and publishers who deal with the fine paper merchants potentially have considerable oligopsonistic power. From the data presented in Table 2, we find that 12 firms account for over 50% of the total sales of paper by the fine paper merchants. For example, one of Barber-Ellis' largest customers accounts for 15% of the total sales of the

firm for fine paper. However, this paper is generally supplied on a direct shipment basis from the mill as the customer routinely orders 10 to 20 tons of paper for each job. The demand from this sector is such that the merchant houses rely on the mills for shipments of bulk such as this directly to the various customers involved.

If we were to examine the frequency and nature of the orders placed by this section of the printing trade, we would find that the average large printer parallels the other sections of the trade in maintaining a minimum inventory. As their customers place their orders, the printers in turn place an order with the fine paper merchant. A large printer may place orders for a ton or more of stock daily and still have periods of several months before the same stock is ordered again. In many cases, were these printers to carry inventory at a level to service projected demand then they would be carrying as much or more inventory than the merchant firms that currently supply them.

As stated above, when a single larger printer such as Lawson Graphics or Evergreen Press deals relatively exclusively with a particular merchant house their purchase of fine paper normally exceeds \$1,000,000 per year. On this basis, within the structure of the firm a single printer can account for 15% of that particular merchant's sales, although in relation to the overall trade, purchases of fine paper at the \$1,000,000 per printer amounts to less than 3% of the total market available to the merchant houses. Therefore if we utilize the same

formula as for the merchant house concentration ratio, i.e. the market share held by the four firms with the greatest market share, we find that the four top firms would purchase approximately 10% of the total fine paper purchased from the B.C. merchant houses.

The response to the printing trades questionnaire shows that even among this group of printers no price differences were reported. If price shading were a feature of this industry we would expect that it would be revealed in the reports from this segment of the industry. In reviewing the returns from the upper segments of the printing trades we found that there were virtually no reports of price shading by the fine paper merchants. There exist two possible explanations for the lack of reports of price shading, either the merchants could be exchanging discount information or the printers could be editing the information supplied in response to the questionnaire. We would opt for the first possibility of an exchange of discount information either directly or by the printer. We base this assumption on the fact that the remaining responses on the questionnaire bear out reports received through the paper trades association newsletter and market share reports.

The fine paper merchants respond very rapidly to the changes in demand from their customers and it is in this area that the customers use whatever coercive pressure they can exert upon suppliers. For example merchant houses are "forced" to make more than one delivery per day to the large customers

regardless of the volume per drop, and salesmen covering these accounts call two to three times per week.

(I) Barriers to Entry of New Paper Merchant Firms into the B.C. Market

In order for an industry to maintain a cartel-like status there must be barriers to entry which prevent competition from entering the marketplace and destroying the status quo of the industry. In this section we will discuss areas that may be potential barriers to entry, why they may be barriers, and whether or not they can be considered as such within the fine paper industry.

There are many potential barriers to entry but we will discuss the following areas:

- (1) Demand conditions including product differentiation and price elasticity;
- (2) Control over input supplies;
- (3) Legal and institutional factors;
- (4) Large capital requirements;
- (5) Technological factors

(1) Demand Conditions

In order for demand conditions to become operational a high degree of product substitutability and interchangeability is required. Our initial discussion will then cover this area

of the products in the fine paper industry. The section on products covers the overall product mix in great detail so in this section the only statement that we shall make is that products such as Colonial (#4) Bond is exactly the same product, even in name, in all merchant's stocks. All of the products come from the same mills and are not only substitutable but in many cases absolutely identical.

What is product differentiation? The following is a definition which we feel will do the job for our case:

"A general class of product is differentiated if any significant basis exists for distinguishing the goods (or services) of one seller from those of another. Such a basis may be real or fancied so long as it is of any importance whatever to buyers, and leads to a preference for one variety of the product over another." (2)

These product differences can be perceived because of a carefully fostered image perpetuated by the producer such as the "Pepsi Generation" of Pepsi-Cola. There can be more tangible things to differentiate such as patents, trademarks, differences in the quality of the products, variations in design, style and color; conditions surrounding the sale such as convenience, courtesy, service, credit payments, methods of delivery and others.

How does this product differentiation act as a barrier? If for some reason the users of the product perceive a product to be different then there may be difficulties in breaking into the market because users do not see the new product to be the same as the existing one. If there are real differences such as patents involved then new entries into the market may indeed

not be the same or even close substitutes which effectively prevents any competition from entering the market.

A good example of the perceived notion of a product difference is the Pepsi-Cola example used earlier, and insofar as an example of real differences are concerned Polaroid Camera is an example of a firm that has, through innovation, patents and good research and development effectively eliminated the competition in a particular segment of the camera market.

What we now have to decide is whether there is any real product differentiation such as patents, etc., or are there any perceived differentiations by buyers and if so do they seem to be a significant enough to pose as a barrier to entry.

Firstly we will look to see if there are any differences in the products. As we indicated in the section on products, and also earlier in this section, the products in the fine paper industry are not only substitutable but identical even to the name, the grade, and the color. In Appendix I we show a sample of products from the rate books of the various merchants and these serve to show the comparability of the actual products.

If we consider the differences that the buyers may perceive about the merchant firms within the market, from the results of the questionnaire it appears that the buyers perceive the only difference between merchants to be service from the merchant and also from the salesman.

Can we then conclude that this difference would prove to be an effective barrier to entry? While it seems reasonable to assume that this might prove a barrier to entry to a relatively small firm, it would not prove to be a barrier to most firms, some of which already have an adequate sales and service organization. In particular some of the envelope companies not only have this type of organizational structure, but they have it set up for the same firms that deal with the fine paper merchants. This is therefore not considered a barrier to entry.

The next area we want to look at is price elasticity on demand. If there is perfect information available to the printers and there are no monopoly elements present the products should have high price elasticity. This means that as price goes down for one merchant demand should go up significantly for that merchant and the converse hold. While we have only isolated instances of price reductions these show that a long term customer will switch to a new merchant for even a small price cut. The printers and other customers have available to them a high level of information, and there is no doubt that a price reduction by one merchant would be brought immediately to their attention by the respective sales force, and the absolute substitutability of the various products should cause a large shift of customers to the lower price. This would mean that a new entrant would have an incentive to enter the market if he could shave prices by any reasonable amount and still retain a profit, so there is no barrier to entry in this area.

From conventional economic theory we note that if we have a demand then as long as there is still a profit to be made, new firms will continue to enter the market. As long as we have high product substitutability and relatively good information available to the users we can expect that new entrants into the marketplace will continue. Certainly in the fine paper industry there is a lack of new entrants but we feel that "demand conditions" are in no way responsible for this.

(2) Control Over Input Supplies

This is an obvious barrier to entry. If firms can in some way control the supplies which are required as raw materials so as to prevent potential competitors from obtaining these supplies, or at least making these supplies more costly to potential competitors, then this would seriously hamper entry into the industry.

The supplies to the fine paper industry in B.C. come from several mills in the Vancouver area. The fine paper production from these mills is a relatively small amount of the mills' production but it is a very profitable entity within that production. In order to produce fine paper a mill requires an expensive paper machine which in order to remain profitable must be run at 90% to 95% capacity.

The fine paper industry is a very stable industry with a 4% to 6% growth pattern over the last 20 years. With this pro-

jection of growth Vancouver would require only one new paper machine about every 10 years at best. This means that a mill could not expect to put in a paper machine now and expect to use it to capacity (which means at a profit) for quite some time unless the move has been planned and done with the cooperation and in conjunction with current merchants. For example if the other paper machines in use were approaching 100% usage and if merchants could be counted on to promote products from the new paper machine with all their facilities then the new machine might prove profitable in a very short period. This is why the merchants receive a great deal of loyalty from the mills; they keep the demand high so the machines are profitable, as a paper machine must be utilized at 90% and over to be profitable. If they attempted to supply other sources concentrated effort by present merchants could cause considerable problems for the profitability of the mill.

Despite all of the previous information we might want to be more specific and ask ourselves would this loyalty that the mills have to the merchant really be effective if in fact some other buyer did make an offer to purchase paper from the mills. What would really happen? To answer this question we have a letter which does in fact answer a specific request from another buyer.

Mr., General Manager,
Canada Envelope Company,
Post Office Box 380,
New Westminster, B.C.

Dear Mr.....,

Thank you for your letter of June 9, 1975 inquiring about the possibility of purchasing Classic Laid directly from the mill. I am sorry but we will have to decline to sell this product directly to you.

As I explained during our earlier phone conversation and in my May 22, 1975 letter to Mr..., all Classic Laid in the Vancouver trading area is sold through our two appointed distributors, Barber-Ellis of Canada, Ltd., and Smith, Davidson and Lecky, Ltd.

Kimberly-Clark strongly supports their appointed distributors. In turn these merchants actively represent, warehouse (at considerable expense to them) and sell specific Kimberly-Clark products and otherwise efficiently perform the selling, service, and distribution functions of their industry. Actually each appointed merchant is Kimberly-Clark's sales agent in that trading area. The exclusivity extended to these distributors is in support of their investment in stocking programs promotional sales and service costs, incurred in the marketing of specific Kimberly-Clark grades.

We appreciate your using Classic Laid and the nice things you said about this fine grade of writing paper. Thank you for your interest.

Very Sincerely,

.....

Western Sales Manager
Text and Writing Papers

When this type of cooperation exists between the suppliers and the current merchants it is not difficult to see why a new firm entering the market would run into problems obtaining supplies from the mills which are currently supplying the existing merchants and very satisfied with that association.

A mill has no reason to consider changing customers when it is currently able to sell its entire production at the price required for their expected level of profit. The slow and predictable growth pattern also explains why no new paper machines will suddenly appear on the scene to supply paper to competitors. This leaves only one source from which a prospective new merchant can obtain his paper and that is through importation.

In order to import fine paper from other areas in Canada a prospective merchant must look to the eastern provinces of Ontario and Quebec and while there is a little more competition there it is still a relatively closed shop with 14 merchants in Ontario and 11 in Quebec. Even if a merchant could import a sufficient range of products to compete he would have to pay transportation costs of 4% of landed costs. While this would still leave room for profit on the regular smaller orders it would leave little on direct mill shipments to large users, which have only a 5% markup and which are sent directly from mill to the user. There is also a problem with the greater time lag required for receipt of products from an eastern supplier. This leaves the possibility of imports from other countries specifically the United States. The reason we are using the United States only,

is that importation from any other country would entail even greater transportation costs and would be even less competitive.

In the fine paper industry any product which is imported has a 12½% of landed cost tariff imposed and there is also a 2% of landed cost brokerage fee and on top of this a 3% to 4% of landed cost charge for transportation. These costs, especially the 12½% tariff prevent many American competitors from entering into competition with the paper merchants in the B.C. area.

The above evidence indicates that any new firm entering the fine paper industry in the B.C. area would face a formidable barrier in obtaining his raw materials, if he could get them at all, at competitive prices.

(3) Legal and Institutional Factors

Legal and institutional factors can range anywhere from a nuisance to an insurmountable obstacle to entry into a particular marketplace. These range from small items such as minor tariffs which may only cause superficial annoyance, to legislation that creates a monopoly as is the case in utilities such as B.C. Telephone.

The merchant level of the fine paper industry is a relatively simple level not requiring special patents or processes but more of a warehouse type of operation. The only legislative area

that effects the merchant directly is that of tariff on imported paper as pointed out in the previous section this is a very important barrier as far as the current merchants are concerned.

The mill level is another matter. The raw supplies to the mill in the form of logs and pulp is very closely regulated by the Crown. This regulation is important to the merchant because it prohibits even extremely large operations which might otherwise be able to enter the market at the mill-merchant level combined. Legal and institutional factors play a significant part as a barrier, in that they impede paper manufacture.

(4) Scale Economies

In most industries there is substantial savings by utilizing larger quantities over smaller quantities. This may be in manufacturing, in purchasing or in selling. This becomes a barrier to a new entrant when these scale economies cannot be realized by the new firm to such an extent that they are able to compete pricewise with the established firms in the sale of the final product.

The fine paper merchant trade is a service industry which provides services for both the mills and the printers and some of the services they provide are; providing the printer with one source of supply, markets for the paper mill output; a trained sales force, a warehouse for the paper, extension of credit, effect economies in packing and transportation, promote

the sale of paper, they are experienced buyers, they break bulk, they deliver orders directly and promptly to the printer and they adjust complaints. Looking at each one of these functions what we will do is see if scale economies play a part and then we will assess the overall picture and see if these do in fact prove to be a barrier to new firms.

Providing the printer with one source of supply certainly requires that a relatively substantial stock is kept, but keeping the large stock does not provide anything in the way of monetary savings for the merchant. In fact it requires a larger capital outlay. A merchant must be prepared to retain a large inventory or he cannot properly fulfill one of his functions. The next item, providing assured markets for the paper mill output requires that he purchase in excess of his current needs at times to keep the mill's paper machine operating at a profitable level. This could certainly be considered a scale economy since there is no doubt that the mill price of this paper would rise substantially if this paper did not have a ready market from the paper merchants. Providing a trained sales force for a relatively large area requires some minimum sales volume and size level to even be feasible let alone profitable. It is also a very necessary area of operations in the fine paper industry because it would appear (from the results of the questionnaire Appendix II) that the service rendered by the salesman has a large part to play in the amount of business received by a customer. Economical production is necessary to the mill and a paper machine which requires 90% to 95% capacity usage in order

to be profitable. This also keeps the mill loyal to the current merchants. It is therefore necessary to have a relatively large operation to be able to absorb all the mill production even if the merchant is unable to dispose of this immediately. Warehousing of paper is a requirement to fulfill the first two.

The merchants extend credit and there is a certain aspect of scale economies in this area. The larger the amount of "selected" credit customers that the merchant has the more likely it is that he will obtain a reasonable selection and his bad debts will be kept to a minimum. It is also less likely that a sudden bankruptcy will be cause for a catastrophe to the merchant.

Both the packing and transportation aspects will be important in the area of scale economies because the merchant can have large deliveries made to their warehouse which is located in a central area. They can then break this down to a thousand or more orders which will be distributed to firms in the area and this allows these firms to purchase a small quantity without facing a high transportation charge from the mill. This same principle holds for breaking bulk. The merchant must be able to purchase large quantities from the mill not only because of the savings in cost but the mill would not sell anything smaller because it would be uneconomical to them. The other four items have very little to do with scale economies and we will not examine them in this section.

We can see that some aspects of the fine paper industry

involve scale economies, but are these barriers to entry? While there is no doubt that a relatively small entrepreneur would find some of these items a barrier to entry there is no reason to expect that a larger firm with substantial assets behind them would not be able to overcome each of these problems and put itself into a competing position with the current merchants.

(5) Large Capital Requirements

This can be a very real barrier to entry because of the difficulty and the cost involved in obtaining capital. If it requires a 50 to 60 million dollar outlay to start in a market then this would prevent all but the largest firms from entering into competition and even the firms that were able to enter would only do so if all other factors were extremely favorable. This would mean that demand would have to be high and the cost of capital low. Even then, unless the firm currently in the market were charging high prices so that return was very favorable, most would not risk this amount of capital on one venture where they had little knowledge.

Industries which have large capital requirements per plant (over 100 million dollars) are as follows: steel, automobiles, petroleum refining, tractors and cigarettes.⁽³⁾ Any entrepreneur who wants to enter into one of these markets requires a large amount of capital and he must also obtain capital at competitive rates and if this is not possible we have a barrier

to entry.

In the fine paper industry there is a need for a certain amount of capital expenditure. They cannot have warehouse space, surplus and varied stock at all times, extend credit and break bulk without the investment of some capital. But as we indicated earlier in the paper, \$50,000 worth of purchasing power can generate \$6,000,000 worth of sales. So this industry is not one requiring a large amount of cash expenditure. While an initial capital outlay is required this should not prove to be a barrier to entry to any but the smallest enterprise.

(6) Technological Factors

These can prove to be a barrier to entry in several ways. Where there is a rapidly changing technology such as in the electronics industry a new firm may find itself out of competition before it gets into production. In industries where patents play an important part a new entrant may not be able to obtain the use of a new patent and so not be able to compete. Where research and product improvement play a big part such as in the drug industry a new competitor may never really break in because he is unable to keep up to the established firms with their top research people.

The technological factors in the fine paper industry that could be a barrier to entry can be examined by going back again to Section 4 and looking at the functions of the merchant. To

provide the printer with one source of supply, to effect economies in packaging and transportation, to provide a warehouse and to break bulk, requires a centre which has warehouse space and cutting and packaging machinery. To provide assured markets for the mills output, to provide a trained sales force, to make economic production possible, to deliver orders promptly, to adjust complaints and to promote the sale of paper requires a distribution centre with trained salesmen and staff who are service and sales oriented. To extend credit requires a credit department and which must staff experienced buyers in order to make sure that purchases are as close as possible to future needs.

There is considerable more detail on the exact technology in the appropriate section but there is nothing in the technology required which would prove to be a barrier to entry. We have no problems in research and development. There has been very little in the way of innovation of the products and their distribution and there are no patents to contend with. This means that there is no factor which would prove to be a barrier to entry insofar as technology is concerned.

To summarize then, "Control over input supplies" is the barrier which blocks the new entrants into the fine paper industry. This agreement which the merchants have with the mills to limit new entrants into the merchant area by denying them supplies effectively stops any new potential merchant.

This agreement is currently a tacit agreement but at one

time was firm, and in writing and was of such a strong nature as to bring prosecution under the anti-combines act. The details of this case are given in the final section of the paper.

(J) Product Description

This section will give a brief description of the main products, an outline of the qualities of these products and a discussion of the relative homogeneity and interchangeability of these products between the various merchants.

Merchants' price lists and our Appendix I show the differences in paper quality by the use of such terms as Blotting, Bonds, Book, Coated, Bristols and Indexes, Covers, Duplicating, Text, Gummed and others. Each of these paper grade designations describe that these papers have specific qualities which make them suitable for particular uses.

Separating these groups of grades into their basic characteristics we get:

Blottings: Have to absorb ink, may take some printing, have good appearance and sufficient strength to stand up to handling.

Bonds: Have to print quickly, stand handling in businesss, take typing, writing and erasing. They must be able to pad, perforate, and fold. Bonds should be appealing in appearance, sight, sound and feel.

Book: Should print quickly and well, be easily read, stand up to handling by printers and users, fold and bind with the least spoilage, give the right thickness to the printed piece and finally have an appeal to sight and feel.

Bristols and Indexes: Have rigidity and snap, print well, stand handling, fold, perforate and die cut. In the case of Indexes, they should also include the qualities of bond papers for accepting writing, typing and erasing.

Coated: Must have the same qualities as Book Papers but in addition have a smooth glossy finish and a brighter appearance that will print black and coloured photographic copy as close to the original as possible.

Duplicating: Must be able to run and reproduce well on speedy duplicating equipment of many varieties and still retain as many of the qualities of bond papers as are compatible with its printing ability.

Text: Have the qualities to produce a printed piece that will give high appeal in finish, colour and feel and at the same time have many of the qualities of Book Papers.

Gummed: Have to be made so they will stick to various surfaces. They should print easily, well and avoid excessive curling before and after printing.

This has given a thumbnail sketch of the various grades of paper and now we will look at the various uses that are made by consumers of the various product groups.

Bond Papers: Bonds are for business forms, letterheads, scratch pads and insurance policies, telephone messages and permanent records. These are the most widely used of any groups of papers in a merchant's stock and make up the largest number of items.

Ledger Papers: Ledger papers were originally made for loose leaf or bound ledger books but this form of accounting has largely given way to systems where loose ledger "cards" are kept in vertical files. When a sale or payment is made the sheet will be removed, inserted in the accounting machine, the entry made with carbon or ribbon and replaced in the file. They are also used for visible index cards in bound books, loose leaf books, punched paper and ring binders. They are also used for other than accounting work such as for index pages for loose leaf books, deeds and other legal documents.

Thin Papers: These are a group of papers found in the merchant's stock that are used in businesses when more carbon copies, less filing and storage space and lower mailing costs are requested.

Uncoated Book and Offset: Book and offset papers are selected by a printer because they are trouble-free fast running papers to print. These papers are used for such things as school books,

novels, technical books, magazines, catalogues, calendars, football programmes, etc., etc.

Coated Papers: When printing on uncoated paper is not good enough to give the required results, coated paper comes into the picture. They are used by advertisers to sell goods or products because they give truer reproductions of the copy by adding sharpness, gloss and brightness to the printing. They are used to print labels that will attract, magazines with advertising and travel folders.

Text Papers: These are high grade uncoated offset papers with their appearance characteristics strongly emphasized. They are used for announcements, annual reports, folders and booklets, menus, short runs of greeting cards, and others where cost becomes secondary factor to the appearance of the printed message.

Cover Papers: Cover papers are to protect the inside pages and improve the appearance of the printed book, booklet, report, folder, pad, programme, price list, catalogue and other similar items.

Bristols: These are heavy, thick, dense, rigid papers with snap. They are used for things such as picture postcards, announcements, invitations which require the better Bristols. Cheaper Bristols are used for tickets, direct mail cards and folders, return postcards, to mount cheap jewellery, price tags, calendar

backs and other similar uses. There is also a Bristol called Index Bristol which is used to make index cards which must be fit into slots, stand up in boxes or trays, be thumbed through, taken out, replaced, etc.

Gummed: These papers are used where it is required that they stick on a surface. This applies to labels on cans, bottles, packages, windows, bumpers, telephones, plastics, chrome, wood, etc., etc. The type of gumming used depends on the use of the label and the length of time it is expected to last.

Tag: This product is used for filing folders, strong envelopes, dividers, index pages, price tickets, time cards, sample mounts and books, shop records, cheaper postcards and other uses where simple economical printing must be carried on a rugged paper.

Now we have an idea of the product and grade mix within the fine paper industry we will now look at the homogeneity and substitutability of some of the individual products sold by the various merchants involved. We will examine Appendix I which is a cross section of the various merchants (C.I.P. Van Pac is not shown separately because it uses the same price list as Barber-Ellis) and while this list is a price comparison for the purposes of this section we will ignore the price aspect and look only at the product.

The majority of the products (38 out of 44) have substitutes which are identical in all respects, including name in at least

four out of the five merchants involved. This means that products such as Byronic Text, Oriole Bristol, Machine Ledger Buff, Plainfield Offset, etc., etc., can be found in any of the price lists for the various companies under the identical name and specifications which means that these products are not just substitutable but identical.

In Appendix I we also have other products such as Pacific Copy and Classic Text Cover which have substitutes which are identical in specifications but have a different name in one of the companies such as Crownline Copy Bond and Gilcrest Laid Cover respectively. Again because of the relatively small difference here, i.e. name only, we can say that these products are totally substitutable, for Crownline Bond is produced by the manufacturers of Pacific Copy and only name branded for Crown Zellerbach.

There are a relatively small number of products where the specifications are slightly different and an example of this in Appendix I is newsprint and even here while the specifications are slightly different they are really only different for one firm, Barber-Ellis and while there may be some argument as to perfect substitutability we can see that these should be relatively substitutable at worst.

We think that we can conclude from this that the product mix in the fine paper industry is not only highly substitutable but that there has been little effort on the part of the mer-

chants themselves to instill some differentiation such as different names.

SECTION II - Conduct of the Merchant Firms

(A) Interdependency of Merchant Pricing

In previous sections of this project (Section I - A) we outlined the four firm concentration ratio for the B.C. fine paper merchant houses. In the analysis of the market shares by the four top merchant houses, we found that these four firms enjoyed a market share in excess of 90%. F.M. Sherer, in Industrial Pricing Theory and Evidence,⁽³⁾ points out that when the four firm concentration ratio exceeds a threshold of 40% then the recognition of mutual interdependence characterizing oligopoly pricing is apt to become significant. We feel that the degree to which the four firm concentration ratio exceeds the threshold would lead to conclusion that the recognition of the mutual interdependence of the pricing policies of the merchant firms has become a matter of fact. In Appendix I, we have outlined a comparative schedule of prices from the paper houses of B.C., and the observable result of this comparison is that the merchant houses publish virtual identical prices. We contacted the fifth merchant house, C.I.P. Van Pac in an effort to obtain a price list for use in this comparison and were told that this merchant basically used the Coast Paper or Barber-Ellis price lists in setting selling prices. In this case, the concentration ratio analysis that suggests mutual interdependence is borne out through the examination of the published price lists of the five merchant firms who deal within the B.C. fine paper market.

In connection with our analysis of the degree of mutual interdependence we talked with representatives of the merchant houses to ascertain if the realization of mutual interdependence was widespread. We were told by members of the various merchant firms that with the publication of a new price list the customers of that merchant house will compare prices published by the other merchants. This comparison is generally limited to those products that a particular printer will purchase regularly, and that customers regularly feedback any variations detected. We were told that variances as small as 1¢ per hundred weight in paper has been reported to the offending merchant house. This fact of reporting any price discrepancies appears to be only sporadic and contingent upon the publishing of new price lists by the merchant houses.

However the customers who deal regularly with the various merchant houses do not detect any difference in the prices charged by the B.C. fine paper merchants. In response to the survey mailed out to all printers in B.C. only two respondents reported any differences in prices charged by the merchant houses. It is possible that the respondents to the questionnaire withheld the fact they were receiving discounts from various merchant houses but this hypothesis can be disputed by the number of respondents who indicated that they felt that the merchant houses engaged in price fixing. If there were vastly different discounts offered by merchant houses to specific customers we would expect to pick up some indication from the questionnaire, but

there were only reports of the "same pricing from all merchant houses".

In reviewing the price schedules published by the fine paper merchants for the past five years we find that the present variances as shown in Appendix I are the greatest in the history of the merchant firms. Much of the current variations shown in Appendix I account from Barber-Ellis having a price difference in the magnitude of 25¢ per hundred weight for MacMillan Bloedel paper. Apparently Barber-Ellis opted not to pass on this special discount to their customers as have the other merchant firms. Therefore, the Barber-Ellis prices will show a unilaterally higher price for MacMillan Bloedel product than any other merchant house operating within the B.C. market. However, the historical price schedules prepared by Barber-Ellis do not show the variance compared to the other merchant houses and we assume that the additional discount given by MacMillan Bloedel was passed along by all merchant firms to the printer. We feel that the fine paper merchants' recognition of the mutual interdependence of their pricing follows ipso facto from the current and historical price schedules. This mutual interdependence is further keynoted by the responses by customers to the publishing of new price lists by the merchants as well as the "price fixing" notations on the questionnaire returns.

If we allow the fact that prices within the B.C. wholesale paper trade are identical and interdependent then does it follow

necessarily that the industry is cartelized? We feel that such a price structure could have evolved in an industry without the member firms being members of a cartel. However, the published price lists are only one aspect of the pricing policies of the B.C. fine paper merchants. All fine paper merchants that deal in the B.C. market are members of the B.C. chapter of the Canadian Paper Trades Association. We outlined the stated goals of the trade association in Section I-A, where the objectives of the association are directed towards a fostering of the merchant trade, per se. Koch⁽⁴⁾ defines a cartel as an organization of firms that are associated for the formation of agreements concerning the production process. The presence of the fine paper trade association and the membership of all merchant firms provide the basis for the judgement that this industry is cartelized in a traditional manner.

The prima facie case for the cartelization of the B.C. wholesale paper merchant trade, as presented above, does not allow us to make an a priori judgement of the legality of this association. However, the long history of price stability would provide a basis for a judgement that the pricing policy is not now, nor has ever been an arbitrary feature of the industry.

(B) Price Leadership in the B.C. Fine Paper Merchant Trade

In our review of the publishing of price lists by the member firms of B.C., we found that Barber-Ellis has consistently been first to publish new price lists covering its product.

Therefore we would next examine the industry so as to ascertain the nature of the price leadership that Barber-Ellis demonstrates. Koch⁽⁵⁾ outlines three main methods of price leadership characteristic of industrial organization pricing policy.

- (1) Dominant firm price leadership
- (2) Barometric firm price leadership
- (3) Collusive price leadership

(1) Barber-Ellis as the Dominant Firm Price Leader

As stated above, Barber-Ellis has tended to be the merchant which led the others with the first publishing of any new price lists and from the theory of price leadership we would expect that Barber-Ellis is the dominant firm in the industry. Under the condition of dominant firm price leadership, the other fine paper merchants would ordinarily follow Barber-Ellis' lead for fear that to deviate would start a price war.. If a price war was started within the industry and Barber-Ellis were truly the dominant firm, then there is the very real possibility that the smaller firms could be driven from the market. In reviewing this type of price leadership it is seen that the dominant firm also tends to be the one that exhibits the lowest overall cost of production. Strictly applied, this principle would allow that no other fine paper merchant operating within the B.C. market would have as low or lower overall costs of production than does Barber-Ellis.

In our discussion of the concentration ratios that the four

largest firms in the B.C. market exhibit, we indicated that the Barber-Ellis market share was 29% of the total available, whereas Coast Paper enjoys a market share of 41% of the fine paper market. Rather than market domination, Barber-Ellis runs a relatively distant second to the market share of their more successful competitor. Therefore, on the basis of market share alone, Barber-Ellis is disqualified from being the dominant firm in the fine paper trade. The second parameter, that of least cost of production does not allow that Barber-Ellis is the dominant firm price leader in the trade. Earlier we outlined that Coast Paper generated more revenue yearly than does Barber-Ellis and uses less people to do so. In terms of employed salaries only, Coast Paper operates at a cost level that is approximately 65% of the cost level maintained by Barber-Ellis.

We lack historical data on market shares for the years covered by the Howard K. Smith case and for the early years of Coast Paper's entry into the market. It is possible, and very probable, that Barber-Ellis was historically the dominant firm within the fine paper trade in B.C. However, new entries such as Coast Paper and C.I.P. Van Pac as well as the growth of the market have combined to reduce the historic market domination to the present level. In reviewing the market share data for Barber-Ellis in the years since 1967, we find that the market share has tended to decline steadily and therefore our supposition that although the industry does not currently demonstrate a dominant firm price leadership, historically the dominant firm leadership was undoubtedly vested in Barber-Ellis.

(2) Barber-Ellis as the Barometric Price Leader

Secondly, we will consider the thesis that Barber-Ellis represents the barometric price leader of the industry. If we examine barometric price leadership, we see that one of the central considerations revolves around the triggering of the price changes. The barometric price leader triggers the price changes for the industry and the other member firms follow their lead. In the fine paper trade in B.C. the price changes are not generated de novo by the merchant firm, but are the result of price changes initiated by the manufacturing mills.

(3) Collusive Price Leadership and Pricing Policy of the B.C. Merchants

We will show later that the fine paper merchants of B.C. are using a cost plus markup method of pricing for setting the current price list levels. With such a pricing approach, the initiator for price changes is exogenous to the merchant firm. In the fine paper merchant market the stimulus comes from price changes made by the producing mills. We have found, from mill sources, that the merchants have repeatedly attempted to coerce the mills into fewer publications of mill price lists and thereby introduce a greater degree of price stability into the industry. As can be expected from the presence of trade association in this industry, the merchants act in concert through the vehicle of the trade association to realize these ends. The paper trades association has apparently lost some of its "clout" with the mills

as the merchant houses of B.C. have been forced to publish quarterly revisions to their price lists since mid 1973 through 1974.

It follows from the above discussion that Barber-Ellis has only the appearance of being the barometric price leader for the B.C. fine paper merchant trade. Therefore we must examine the remaining price leadership style that is present in industry, namely collusive price leadership.

Koch points out that collusive price leadership tends to be a feature of those industries where the members themselves recognize the mutual interdependence of their pricing policies.⁽⁶⁾ If we consider the role of the trade association in the B.C. market, we can see that this organization of merchant firms is operational in attempts to impose price stability on the mills. The merchants, therefore have a history of acting, in concert, in an attempt to control costs and thereby directly control prices. The nature of the concert action presupposes the interdependency of the resulting price levels charged by the merchant houses. The implicit recognition of interdependency by the fine paper merchants supports the view that Barber-Ellis demonstrates collusive price leadership and the remainder of the merchant firms follow their lead.

Koch further suggests that collusive price leadership is a feature of industries where the product is highly substitutable, and we feel that this criterion applies to the industry where

Barber-Ellis performs the price leadership role.⁽⁷⁾ Earlier, in our description of the product (Section I-C) we discussed the substitutability of the fine paper merchants' product. We have shown that the five merchant firms carry a virtually identical stock by grade and size. For example, Pacific Copy 8½x11-10M is carried under this name by four of the five merchant houses that do business within the B.C. market. The fifth firm, Crown Zellerbach, markets a private brand paper Crownline Copy which is, in reality, Pacific Copy produced by MacMillan Bloedel and then packaged and labelled with the Crownline brand rather than the Pacific Copy brand. Therefore we feel that the paper products marketed by the fine paper merchants of B.C. are not only highly substitutable, but in many cases, as outlined above, the product is identical. Therefore the requirements that the product be highly substitutable is clearly exceeded by the product marketed by the B.C. fine paper merchants.

In order to complete our consideration of the collusive price leadership demonstrated in the B.C. fine paper trade by Barber-Ellis we will digress from the supportive evidence at this point to outline the basic pricing policy employed by the merchant firms. In setting the prices as published in their price lists, the B.C. merchant houses have used a relatively simple cost plus markup pricing formula. In arriving at their price list figure for floor stock (i.e. material warehoused) the merchant will start with the price from the mill, using the appropriate discount bracket as the basic price from which their calculations are made. To this ex-mill cost, the merchant will then

add on freight costs, duty and brokerage where applicable, customs and sufferance charges to arrive at a landed cost in Vancouver. This landed cost to the merchant is then marked up by an average of 70% to arrive at the price list figure for material retained in inventory. In the situation where the merchant firm acts as a drop shipper, the landed cost is arrived at in a manner similar to the above outline, however the markup level is significantly less. Typically the direct mill shipments are marked up a total of 5% over the landed cost of the goods. In order to demonstrate the application of this formula, we will outline the price list derivation of four typical products chosen two from domestic mills and two from foreign mills.

(1) Island Duplicating Paper, 8½x11-9M (Mac Millan Bloedel)

(a) Mill Price List (E) Bracket	\$41.45 per Cwt
(b) Lightweight Upcharge	.75 per Cwt
(c) Small Size Upcharge	.65 per Cwt
(d) Merchant Allowance (Subtract)	.25 per Cwt
	<u>42.60</u> per Cwt
(e) 5% Discount	2.13 per Cwt
	<u>40.47</u> per Cwt
(f) Paper Merchant Markup @ 75%	30.35 per Cwt
	<u>70.82</u> per Cwt
(g) Rounded to nearest 25¢	70.75 per Cwt
(h) Paper weight per thousand sheets = 9 lbs or .09 Cwt and \$70.75 x .09 = \$6.36 per thousand sheets	
(i) Current merchant price list (Dec 1974) shows \$6.36 per M sheets	

(2) Island Offset Paper, 8½x11-11-3/4M (Mac Millan Bloedel)

(a) M&B Mill Price List (B) Bracket	\$37.87 per Cwt
(b) Small size upcharge	.65 per Cwt
	<u>38.52</u> per Cwt
(c) Paper Merchant Markup @ 75%	28.89 per Cwt
	<u>67.41</u> per Cwt
(d) Rounded to nearest 25¢	67.50 per Cwt
(e) Paper weight per thousand sheets = 11.75 lbs or .1175 Cwt and \$67.50 x .1175 = \$7.93 per M Sheets	
(f) Current merchant price list (Dec 1974) shows \$7.93 per M sheets	

(3) Classic Laid Bond, 17x22-40M (Kimberly Clark)

(a) K.C. Mill List Price	\$46.00 Cwt
(b) Zone freight upcharge	1.50 Cwt
	<u>47.50 Cwt</u>
(c) Duty at 12½%	5.93 Cwt
	<u>53.43 Cwt</u>
(d) Brokerage at 1%	.53 Cwt
(e) Freight (Seattle-Vancouver)	2.50 Cwt
(f) Sufferance	.50 Cwt
	<u>56.96 Cwt</u>
(g) Merchant House Markup @ 75%	42.72 Cwt
	<u>99.68 Cwt</u>
(h) Rounded to nearest 25¢	99.75 Cwt
(i) Paper weight per thousand sheets = 40 lbs or .40 Cwt and \$99.75 x .40 = \$39.90 per M Sheets	
(j) Current merchant price list (Dec 1974) shows \$39.90 per M Sheets	

(4) Skytone Text 25x38-120M (Georgia-Pacific)

(a) G.P. Mill List Price	\$36.30 Cwt
(b) Zone freight upcharge	1.50 Cwt
	<u>37.80 Cwt</u>
(c) Duty at 12½%	4.73 Cwt
(d) Brokerage at 1%	.38 Cwt
(e) Freight (Seattle-Vancouver)	2.50 Cwt
(f) Sufferance	.50 Cwt
	<u>45.91 Cwt</u>
(g) Merchant Markup @ 75%	34.43 Cwt
	<u>80.34 Cwt</u>
(h) Rounded to nearest 25¢	80.50 Cwt
(i) Paper weight per thousand sheets = 120 lbs or 1.2 Cwt and \$80.50 x 1.2 = \$96.60 per M Sheets	
(j) Current merchant price list (Dec 1974) shows \$96.60 per M sheets	

In the light of the above discussion on the pricing policy employed by the fine paper merchants of B.C., we find that there is a single price policy that covers all products. Markham noted that a feature of collusive price leadership was a product that was amenable to a single price policy. Such a condition exists in the B.C. fine paper merchant trade and the apparent dichotomy between floor stock and drop shipment prices is due only to the levels of markup extracted by the merchant house.

In reviewing the pricing policy, per se, we attempted to extract the implicit assumptions concerning the scale of production and volume standard that had been built into this price formula. We have been unable to extract any assumption other than the purely mechanistic application of a formula to mill prices to arrive at the level of prices shown in the price lists. If there were standard assumptions made, they do not appear to be features of the current pricing policy used by the present merchants. For example, we expected to find standard assumptions made on possible sales volume of new lines that would form a basis for pricing.

The collusive price leadership demonstrated by Barber-Ellis is not necessarily the result of a formal agreement among the merchants to "fix" prices. However, the fact that all merchants belong to the trade association that deals with the supplying mills in matters of policy and cost of product would tend to support a view that the price leadership represents a more formal approach to pricing than we would otherwise expect in "arms length" firms. We have no hard data to support the view that the fine paper merchants' association is as operant in control of the industry as was formerly the case during the years from 1933 to 1953. In this period the merchant house cartel reported all sales directly to the fine paper trades association who in turn dispersed information for the benefit of all merchant houses.

(C) Advertising Policy of B.C. Merchant Firms

Barber-Ellis is typical of the fine paper merchant firms operating in the province of B.C. In the trade related journals directed to the printing houses, there is a paucity of merchant house advertising. However, the trade journals do abound with a great deal of advertising related to the promotion of the manufacturer's brand of product, but little or no reference to merchant firms by name. The manufacturer selects the target audience and appeals directly to it. The regional paper merchant houses capitalize on this advertising by offering product that has been nationally advertised.

The fact that the paper merchant houses do not promote a specific brand name product as a general rule is reasonable when one considers that a single merchant house may carry as many as four competing brands of product. If a particular merchant house was to embark on a program of specific product promotion, they would tend to lose sales for substitute product lines that competing houses carry. Therefore the firms generally promote the various manufacturer in a rotation basis. Barber-Ellis uses a "sample of the week" program that brings the various product lines to the attention of potential customers.

In using media advertising, the merchant houses restrict themselves to the promotion of the concept of a "complete" line of products. The implication is that the particular firm carries a stock of product so that the customers can specify the parti-

cular brand name they require. The media generally used are such as yellow page listings and random insertions in trade publications. Merchant house budget for this type of advertising would be from \$3,000 to \$5,000 per annum.

The "complete" product line approach to promotion of product is reiterated in the preparation of customer price lists. Barber-Ellis lists from two to five manufacturers for each product line listed. The promotion of product and service through the preparation of the price lists represents one of the major expenditures for product promotion that the merchant houses undertake. The price lists are generally published on a quarterly basis and would represent approximately \$10,000 per publication or cumulatively through the year of from \$40,000 to \$50,000.

The most expensive promotion tool that the merchant houses make use of is the paper sampling program. Barber-Ellis supplies complete sets of sample books covering the entire range of product to their customers. At cost prices, these sample books would represent approximately \$4,000 per set or if a sample set was supplied to each potential customer approximately \$80,000 would be tied up in the paper samples alone.

Since the paper manufacturers are constantly continuing to modify product lines and therefore the sample books must be kept up to date and coupled with the "sample of the week" program, approximately two hours of each salesman's day is connected directly to the sample promotion program. Costs to the various

companies vary but estimates for Barber-Ellis put cost of the maintenance of the sample program at approximately \$50,000 to \$60,000 per year. At least one merchant house, Coast Paper, makes use of a full time sample department to meet the needs of customers who require "dummy" layouts and a wealth of printed sample material is made available from the manufacturers for distribution to the potential customers.

The merchant houses maintain an outside sales staff composed of from 10 to 15 individuals who call on customers on a weekly or bi-weekly schedule. Coast Paper, Smith Davidson and Lecky, and Barber-Ellis all maintain a full sales force and the estimated cost per annum of these individuals to each company is approximately \$300,000. In addition to the regular full time sales force, each company has a resident Sales Manager and Branch Manager. The Sales Managers spend the majority of their time on promotional activities and approximately 80% of the Branch Manager's time is spent on sales problems and promotion.

In addition to advertising in the media, the merchant houses utilize various promotional techniques for keeping their name before the buying public. Packaging material, labels, matches, blotters, and printers' aprons all blazoned with the company logo are distributed directly with shipments of products or passed out by the salesmen. The promotional "give-aways" are used relatively infrequently and a very rough approximate cost to the company would be from \$1,000 to \$3,000 per annum.

The whole philosophy of the advertising policy appears to be directed towards an espousal of customer service principals. The companies offer a wealth of data to these ends, but the application still appears to be centered around the "sales" approach. The marketing approach responds to sales requirements on the part of the companies rather than on the needs of the customers. The advertising policy appears to fall midrange between the extremes of the marketing approach. On one level the advertising stresses the levels of customer service yet much is presented purely to keep the respective company name ever present in the customer's eye.

(D) Predation and Price Cutting Within the Trade

The presence of a fairly fixed market share and the absence of price wars within the market would support the view that competition within this industry is on grounds other than the price that a particular merchant will charge for his stock. In the published price lists supplied by the paper merchants to their customers, some terms of discount are given. Basically there are two ways that a customer may obtain a discount from the suppliers' published price list.

Firstly, the customer can take advantage of a 2% discount for payment of his invoices within a specified cash discount period. Coast Paper Limited, Smith Davidson and Lecky, Crown Zellerbach Paper and Barber-Ellis all offer a 2% cash discount for invoices paid on or before the 20th day from the first of the

month following that in which the invoice was prepared. Therefore, the presence of this general discount would not constitute a predatory pricing tactic on the part of a particular merchant house, but it has become an integral part of the pricing structure in which the merchant firms must function.

The response to the printing trades questionnaire survey that covered the entire printing trade in the province of B.C., demonstrates that virtually all customers indicate that they detect no difference in prices charged by the paper merchants. If price shading is a feature of this industry, then it must occur on a basis that would give equal discounts to a particular customer from each of the major paper merchants or the customers don't admit it. The customers themselves appear to be instrumental in the maintenance of a steady discount level, if a customer can extract a discount from a particular merchant, then all other paper merchants are prepared to meet the proposed discount level, but they will generally not exceed it.

Over and above the supply of regular items from the stock carried by the paper merchants, there occurs a large number of customer orders that must have special merchant orders placed on the mill. Orders for over one ton of stock for a particular customer nearly always fall into this class as well as smaller orders where the merchant does not carry that particular product in stock. In these cases, the price book carries formulae for deriving the price that customers must pay for the product or actual mill pricing lists for material drop shipped

directly from the mill.

Within the association of merchant firms there have been instances of sporadic price cutting. In one such case, the merchant was importing a product that was produced within the market area. The other merchant firms became aware of the situation and through the action of the Paper Trades Association an explanation was sought for the lower priced product being imported. The merchant responsible for that importation explained that his reason for the importation was not directly a predatory tactic but rather he was merely attempting to supply a product that was unobtainable through normal channels. Therefore, where price cutting occurs, it appears to be discouraged through social pressure applied through the Paper Trades Association. The modern version of the Paper Trades Association incorporates all of the merchant houses who do business in B.C., and through regular meetings there is pressure put upon them to be "reasonable" in their individual pricing policies. In Section V, the role of the Trade Association in the maintenance of the fine paper cartel prosecuted by the Crown in the Howard Smith case was detailed. The Trade Association influence in the fine paper trade was a very real force in the maintenance of that cartel structure and its policies.

In the Howard Smith case, the pressure exerted on the members of the cartel was financially coercive, the trade association had the power to boycott suppliers who dealt with offending members, as well as deny entry of new members through denial of supplies. The current trade association has opted for a

relatively low keyed, social pressure mode of enforcing price discipline. Through the regular meeting of the Managers of the member firms a degree of accord on buying policies for the purchase of supplies, extension of credit to buyers, and other operational data was arrived at.

Predatory pricing is not a feature of the pricing policies of the B.C. Wholesale Paper merchants. Most firms are content to compete on a non-price grounds such as "service" (see Section I), and are content with 4% to 6% growth of the industry from year to year. Inasmuch as the market is finite, there has been some market share loss by some companies in order to allow for a greater rate of expansion for other merchant firms.

In the past 20 years of operation by the merchant firms in the B.C. market no merchant firms have ceased to exist entirely. Firms such as Columbia Paper were purchased by larger firms such as Crown Zellerbach, but this amounted to merely a name change. Over the history of the market there has been no merchant firm driven from the market due to predatory practices by other merchant firms.

Section III - Performance of B.C. Merchant Firms

(A) Technical Efficiency

The paper merchant houses of B.C. are strictly warehousing operations with some function as drop shippers. They place orders on the various paper mills and store this product for later distribution to their customers. In the case of large orders, the merchant house may place the order on the mill for direct shipment to the particular customer. These drop shipments are usually made only for orders where the stock required by the customer exceeds one ton. The merchant house, however, takes title to all material that it handles, whether it is drop shipped directly from the mill to the customer or whether it is brought into the merchant house as part of the regular inventory.

Generally, the merchant houses in B.C. turn the inventory that they carry as floor stock approximately 10 - 12 times per year. Therefore the capital that is represented by the inventory carried by a particular merchant is relatively small in relation to sales. For example, at industry norms, an inventory level of \$500,000 could easily sustain yearly sales in excess of \$6,000,000. In other warehousing operations, inventory turnover can be significantly lower than these levels, for example, the wholesale scientific supply trade works on an average inventory turnover rate of 3 - 4 times per year. An equivalent inventory level of \$500,000 would sustain sales from \$1,500,000 to \$2,000,000 per year.

Since the merchant houses do not manufacture the paper that they sell, their technical efficiency relates to the efficiency with which the product is handled and dispersed. In order to examine the efficiency of the system, one must consider the physical plant, manpower utilization, and cost per order processed.

The paper merchant houses of B.C. are using a materials handling technology that is both antiquated and inefficient. In the area of physical plant, the two largest paper merchants, Coast Paper and Barber-Ellis, occupy multi-story buildings that date from the early 1930 period. Buildings of this design occupy much of the downtown area of Vancouver where these firms are located. The general construction consists of 3 - 4 floors from 12-15,000 sq. ft.

These buildings generally are constructed to have a floor height of 12 ft. with a clear stacking height of approximately 10 ft. Generally these multi-story premises are serviced by only one freight elevator of vintage proportions and capacity. The Barber-Ellis building at 950 Homer Street typifies the problem, with warehousemen working on all floors, there are delays of up to one half hour for service from a particular floor. The problems concerned with the inflow and outflow of stock through the multi-story structure causes a great many logistic flow problems, as well as a great deal of frustration on the part of employees who must work within this environment.

In contrast to this antiquated physical plant, the established principles of modern warehousing would call for a single floor for stock storage. Within the single floor plan, the headroom has moved up considerably from the standard of these older paper merchant buildings. In modern warehouses, a clear ceiling height of 40 ft. is becoming standard. Most companies have converted their materials handling technology to work in facilities such as these larger warehouses. In The Hudson's Bay Company distribution center located in Lake City, Burnaby, material is stacked on racking that has its upper level 30 ft. from the floor, in a very high volume operation. A warehouse height with a minimum of 24 ft. of headroom has become a standard for surrounding Vancouver area, the recent 3 years of developments in Richmond are almost 100% based on buildings that have 24 ft. or over of headroom.

With the limited land available for development in the Vancouver area, these high ceilings become mandatory from another point of view. If we examine land cost, building costs as well as efficiency of operation, the modern high warehouse is vastly superior to the coast paper merchants operations from a cost per cubic foot of storage space, as well as efficiency of operation.

The aisle layout of the warehouse and the physical placement of the stock can do a great deal to enhance the efficiency of the operation and lower the overall cost per order of handling. In most warehousing operations, one finds that an examination

of the movement of stock shows that approximately 20% of the stock accounts for nearly 80% of the picks. The wholesale paper trade is no exception to this generality and one would expect that stock placement and aisle layout would follow this observed ratio. Rather, the merchant houses tend to use a "categorical" setup that reflects the listing of stock in the suppliers catalogue and price lists. Thus it is conceivable that a slowly moving item could be placed in a position serviced as easily as a rapidly moving item. In some warehouse layouts it is possible to see items picked only once per week occupying the floor level, while another item of that same group picked five times per day will be on a higher level that necessitates the use of a step ladder to complete the picking.

The paper merchant also uses a very outdated, labour intensive, hand picking to assemble the orders for shipment. Basically a warehouse receives an order from the office and travels the racks on various floors dragging a dolly behind. When the stock is located, the warehouseman fills the order and returns with the stock to the shipping department. Here he wraps the goods, addresses for the customer and distributes a waybill so that the driver can effect delivery and complete the order cycle. Utilizing this type of technology the paper houses now ship from 250 to 300 orders per day each, and a warehouseman under this type of system can pick from 10 to 15 orders per day. To contrast, in the same industry, an order picker relieved of the stock transportation and shippers functions can pick as many as 60 to 70 orders per day.

In line with modern materials handling technology, there are many varieties of mechanical assistance available to the modern warehouse. In the realm of order picking there are the electric reach trucks, order pickers, tuggers and swing reach trucks that significantly increase the capacity of warehousemen to fill orders. Using a man/machine combination a single order filler can pick from 120 to 150 orders per day.

To meet the customer service requirement of same day shipment of orders, the paper houses must staff their warehouses for peak demand of 300 to 350 orders per day. Due to the low level of technology expressed in this industry they must carry 25 to 30 people to meet the demands of the orders of the day. Barber-Ellis, as a case in point, carries a warehouse staff of 22 people on the payroll, to handle an average daily order load of from 250 to 300 orders. Using a nominal wage rate of \$5.50/hr and an overhead rate of 110% this would represent a cost per order of \$7.00. If the company had opted to use a more modern technology, of a man/machine combination, the company would pay approximately \$200 per day for the man and machine or a reduction in the cost of each order picked from \$7.00 to \$2.00. The reduction in cost would be in the area of from 72% to 75% of the current cost to the company for handling the daily orders. To express this in terms of possible savings per year, at \$10,000 per man per year, the savings to Barber-Ellis would be in the area of \$200,000 per year.

In addition to the physical plant problems, the merchant

houses have problems in the area of distribution to the end user. Most paper houses maintain a fleet of leased trucks that are driven by employees on the company payroll. Generally the companies utilize these lease vehicles for deliveries within the greater Vancouver area including New Westminster, Burnaby and Richmond. Common carriers are used to service the outlying areas of the province as well as inter-branch shipments and deliveries from suppliers.

The average driver can handle from 35 to 50 orders per day at a cost of about \$175.00 per day per combination of truck and driver. At this level, the average local delivery would cost the company slightly over \$3.00. At \$3.00 per delivery, the cost of distribution compares very favorably with a cost to do the same deliveries using a local cartage company.

The order flow within the paper merchants is varied upon the level of technology that the firm uses in processing the orders. Coast Papers uses computer technology to generate a set of shipping documents from orders taken on the telephone, other paper houses use some variety of a purely paper technology, in some cases such as the Barber-Ellis position each order is transcribed no less than three times before it passes to the warehouse for picking.

In an overview, some of the merchant firms are beginning to streamline and update some of their technology associated with their operation. Coast Paper and Crown Zellerbach appear to be

the most technologically advanced in the information system processing. All firms are about equally placed in the distribution system that they employ and this portion of the operation definitely approximates the least cost operation. Warehousing is the least efficient portion of the entire operation.

There are many possibilities that one can speculate upon as the prime reason behind the singular cumbersome operation of these warehouses but the inertia in this area can be directly attributable to the fact that the firms are not under, nor have ever faced, a real cost squeeze. The absence of direct price competition has led to the sloppy operation and the duration of which exceeds the terms of employees and managers currently on staff. As was reported and prosecuted by the Crown in the Howard Smith case, the first cartel in the fine paper trade covered the period from 1933 to 1953, the result was that a structure and method of operation was built into the organization that has lasted to the present.

(B) Progressiveness: Research and Development

Within the fine paper trade there has been little in the way of research and development in any area other than the physical characteristics of new products. The paper manufacturers maintain a fairly steady flow of products insofar as colour and texture of finish are concerned, but the overall grades of paper such as offset, book, lithographic and bond are not altered to include new grades not previously marketed. In regard to

their representative products in the various grade ranges, manufacturers maintain a close scrutiny upon the demand for the various product ranges. For example, during the year of 1974, there was a shortage of paper of all types throughout the North American market, this was further aggravated by panic buying on the part of consumers and paper merchants. During these times, the paper merchants were notified of many lines and colours that were to be immediately discontinued so that manufacturers could produce more product that was to be fed into the printing trades rather than tied up as paper merchant inventory over-stocks. The larger production runs enabled the manufacturers to save on down time and obtain greater amounts of product from his individual paper machines. In the case where total industry demand falls and there approaches a situation of overcapacity in the market, manufacturers tend to proliferate their lines and introduce new colours and the like to stimulate the sagging demand for their product.

The overall product mix produced by a particular mill may span the entire range of grades of paper from the bonds through to the coated offset papers but typically the mill will not market two competitive papers within the same product category. In some cases a particular mill will produce two entrants into a single category but there are generally functional specializations that are associated with the decision. For example, MacMillan Bloedel's Island Paper Mill division market two "different" number seven bonds. The product called Island Bond is a number seven bond produced in full sheets 17"x22" or larger.

The second number seven bond is marketed under the name of Pacific Copy and in reality is merely Island Bond cut to 8½"x11" or 8½"x14" for use as machine paper with Xerox machines, etc. Thus Island Paper Mills have marketed the same product - at different prices - with the intended use quite different.

At the mill level, research and development are carried on in relation to the demand conditions of the industry and the main area of research has been in the development of variations of existing products. The technology of paper manufacturers is very widespread and few developments are to be expected in this area. The large capital expenses for machinery and the long term aspects of timber leases combine to further hamper the research and development on the part of the paper mills.

The fine paper merchants of B.C. have not offered any significant advances to the trade as far as new product development or the modification of existing operations. As discussed in Section III-A there are tremendous shortcomings in the daily operation of representative member firms. The use of an obsolete paper based technology for the processing of orders in Barber-Ellis is contrasted with an up-to-date management information system in use at Coast Paper Limited. The general level of overall technology expressed by the industry members is extremely low with the main direction of the industry being toward the sales/customer service of the operation rather than on attempts to streamline the operation of the warehousing end of the organization.

It is further noted that the national arm of the Fine Paper Trades Association has sponsored many studies of the operation of the member firms. Also there have been a series of seminars and training sessions directed towards the upgrading of the levels of operation of the member firms. In the recent history of the association, a week long seminar was offered on the operation of a modern paper warehouse and new industry standards as far as the quantity of orders per day that could be picked under various technological levels. The B.C. merchants appear to have overlooked this opportunity to avail themselves of this opportunity to obtain more relevant and up-to-date information on warehouse operations.

Inasmuch as the paper merchants have failed to modify their overall schemata of operation in the B.C. market, it follows that research into the market and product have been done only on a sporadic basis and development of new systems and procedures are minimal. Therefore we would conclude that research and development, per se, within the B.C. industry does not exist in any systematic strategic plans of the member firms. In discussion with the manager of one of the member firms the authors questioned a seemingly outmoded procedure, the manager replied that the firm was extremely cautious in procedure changes. Further this particular manager allowed that since the firm had been in operation for nearly 100 years that "it must be doing something right". This philosophy was reiterated in all of our contacts with industry members and we feel that the closed attitude toward change is an endemic trait of the B.C. fine paper trade.

(C) Allocative Efficiency

This is an efficiency dimension of the market performance of an industry that deals with the relationship of its long-run selling prices to its long-run marginal cost of production. This is measured by the ratio of its selling price to its long-run average cost, or by the ratio of long-run average industry profits to the value of owners' investment in the firms in the industry.⁽⁸⁾

It must be made clear that we are discussing profits in the economic sense and not in the strict accounting tradition. Economic profits mean excess profits or those over and above that which would normally be received on an investment, net of risk. In other words it is measured as percent return on owners' investment or equity calculated at the best net interest rate which could be earned elsewhere for comparable time periods.

In looking at this we will use three measurements over a year period to look at profits made by Barber-Ellis. The first of these measurements will be calculated by taking total revenue - total costs - depreciation - (expected return X owners' equity) all divided by total revenue. This will give an indication of the degree to which price exceeds average cost.⁽⁹⁾ The second measurement will be the same except that this one will be over the owners' equity and this gives the excess profits on owners'

investment. The third and final measurement shown is gross profit on owners' equity.

The table shows the following facts. Column I shows the revenue received by Barber-Ellis, ranging from a low of \$21,241,387 in 1955 to a high of \$69,058,000 in 1974. This represents total revenue in our previous formulae and will be designated R. Column 2 is the total costs for this same period and will be designated C. Total depreciation and amortization is Column 3 and this is called D. The fourth Column is the value of owners' equity V and the fifth column is a percentage of return on an almost risk free basis using the prime rate. Column 6 represents the excess profits in proportion to sales while Column 7 represents this profit in relation to equity. The eighth column shows the gross profit on equity or the strictly accounting version of profit.

The one thing that comes across quite clearly is that there are excess profits by all measurements. What does this excess profit mean in terms of the fine paper industry, specifically Barber-Ellis? Excess profits should result from one or more of the following causes:

- 1) Mis-estimation of future demand or cost, or lagging adjustment to changing demand or cost, resulting in positive "windfalls" to firms or industries.
- 2) The riskiness of business investment in various lines, resulting in the payment of "risk rewards" to successful risk takers.

- 3) The introduction of innovations (of lower-cost techniques or more popular products) by some firms, resulting in "reward to innovation". These rewards are earned so long as the innovators cannot be instantaneously and fully imitated by an adequate group of competitors and instead enjoy a period of competitive advantage before they are imitated.
- 4) Monopolistic or monopsonistic restriction of output and raising of selling prices in relation to costs by the industry, generally based on a restriction of interfirm competition plus some impediment to the entry of new competitors. (2)

These possibilities will be examined individually to see which are contributory to the excess profits in this case study. The fine paper industry has been a stable industry for the past 20 years. The changing demands and costs have been steady and predictable. It should also be noted that a "windfall" by definition should be in the short term only so the explanation is not the reason for excess profits here.

In an industry which has had a successful growth pattern for 20 years it is safe to say that the risks can be considered minimal. In the long run there is no such consideration as risk and this is why over the long term all firms should approach the risk free rate of return on capital. While this example does not go far enough to have reached that point it is evident from the data that the trend is toward excess profits in the past, present and

YEAR	(1) R TOTAL REV.	(2) C TOTAL COSTS	(3) D DEPRECIATION & AMORTIZATION	(4) V OWNERS' EQUITY	(5) i PRIME RATE	(6) $\frac{R-C-D-iv}{R}$	(7) $\frac{R-C-D-iv}{V}$	(8) PROFIT EQUITY
1974	69,058,300	61095,000	1,759,000	10,863,000	9.75	7.45	47.36	57.11%
1973	49,787,060	45,244,000	1,019,000	8,512,000	8.20	5.68	33.20	41.39%
1972	34,804,290	32,195,000	651,000	7,353,000	6.00	4.34	20.63	26.76%
1971	30,680,054	28,396,000	642,000	6,741,000	6.48	3.93	17.88	24.51%
1970	29,043,385	27,187,000	332,000	6,227,000	7.94	3.55	16.54	24.47%
1969	28,385,297	26,830,000	310,000	5,899,000	7.51	2.82	13.59	21.10%
1968	26,557,109	25,232,000	193,000	5,596,000	6.96	2.80	13.96	20.23%
1967	25,240,748	24,022,000	186,000	5,322,000	5.82	2.86	13.59	19.40%
1966	24,047,089	22,602,000	184,000	5,147,000	6.00	3.96	18.50	24.48%
1965	23,168,642	21,801,000	182,000	4,992,000	5.76	3.87	17.99	23.77%
1964	22,784,849	21,399,000	176,000	4,881,000	5.75	4.07	19.04	24.79%
1963	22,276,017	20,947,000	174,000	4,866,000	5.75	3.92	17.99	23.72%
1962	22,001,072	20,748,000	173,000	4,854,000	5.75	3.98	16.50	22.23%
1961	21,804,063	20,561,000	173,000	4,852,000	5.62	3.66	16.43	22.02%
1960	21,689,291	20,530,000	172,000	4,839,000	5.75	3.27	14.65	20.38%
1959	21,471,342	20,399,000	173,000	4,835,000	5.60	2.93	13.00	18.60%
1958	21,477,284	20,403,000	171,000	4,836,000	5.25	3.02	13.43	18.65%
1957	21,399,117	20,390,000	171,000	4,835,000	5.51	2.67	11.82	17.40%
1956	21,362,143	20,307,000	170,000	4,834,000	5.60	2.88	12.71	18.34%
1955	21,241,387	20,278,000	170,000	4,833,000	5.55	2.47	10.87	16.42%

future.

The introduction of innovations is covered in detail in Section III-A & C. Suffice to say here that there are none that would account for the excess profits.

The final possibility is the monopolistic or monopsonistic restriction of output, raising of selling prices, restriction of interfirm competition with impediments to the entry of new competitors. These areas have been adequately covered in Sections II-A on Pricing Policy and I-C Barriers to Entry which show that there is most certainly restriction of interfirm competition and barriers to entry into the industry. The conclusion is that it is the fourth alternative that is the viable alternative in our case.

What has been shown by this section and specifically by Table I is the balance sheet results from the operation of a cartel-like industry. The gross profits on equity show very high profits far in excess of what may reasonably be expected even for a somewhat risky venture.

Section IV - The Foreign Sector

(A) Imports

Figures estimated from the supplier levels put an upper limit in the B.C. fine paper market of from 60-65,000 tons of paper purchases by the aggregate fine paper merchants for resale. This total market figure is only an approximation, as there is considerable difficulty in separating the fine paper product from the balance of the paper sold in the market. For example, Gestetner and Xerox sell a considerable tonnage of bond paper for use with their copiers and duplicators, and although the fine paper merchants handle a substitute bond such as Pacific Copy, they do not really partake of this copier market segment. Therefore with reference to the importing of paper into the B.C. market, we will restrict our discussion to that product that is purchased by the fine paper merchants for resale to the printing houses of B.C.

The presence of the home industry at the manufacturing level has led to a tariff barrier being erected against fine paper that comes into the market from foreign suppliers. Prior to the Kennedy Round of tariff negotiation in the early 1960's the duty rate was 22.5% of the fair market value for imported paper. The Kennedy Round reduced the duty rate on most grades of imported paper to 17.5% of the fair market value. The impact on the whole Canadian fine paper market was that the merchant houses could then purchase American paper for resale at prices

competitive with the Canadian grades, especially on some of the grades such as label paper and coated paper.

In recent years, there has been a steady downward pressure on the tariff barrier brought about primarily through the reciprocity agreements covering the importation of pulp into the U.S.A. The current duty rate for paper that is imported for regular sale to printers has now been forced down to 12.5% of the fair market value. Given the scale economies of production in some of the major U.S. mills, the fine paper produced can be imported by the fine paper merchant and sold very competitively in price with Canadian product.

Currently, all fine paper merchants in the B.C. market import paper to service the demand of the market. In total the imports of fine paper amount to an estimated 15,000 tons per year, or approximately 25% of the total market.

For the market in B.C., the majority of imported paper comes from the United States, and generally from those mills that are situated on the west coast in Washington, Oregon and California. To some degree, there are products imported into the B.C. market from the eastern United States but these generally are confined to specialty products such as N.C.R. paper or stationery items. The total imports from the United States would account for 12-13,000 tons of the paper imported into the B.C. market.

The balance of the imports by the fine paper merchants of B.C. are from European sources in Holland, Sweden and Denmark.

Some small imports of 1-2,000 tons per year are imported from other pacific rim countries such as Japan. Basically however, the imported paper into the B.C. market comes primarily from the U.S.

In an overview of the effects and direction for change that imported paper will have in the future, most merchants and Canadian mills expect the current tariffs to be further lowered if not eliminated altogether. Many of the large Eastern paper mills are devising strategy directed to an eventual removal of the tariff barrier against foreign paper. To these ends, Domtar has purchased the firm of Buntin Reid, the largest fine paper merchant chain in Canada (in dollar sales). The vertical integration into the merchant trade assures the Canadian mills that its products will receive concentrated marketing effort regardless of the impact of a future lowering of the tariff barriers.

In B.C., the manufacturers offer other inducements to the paper merchants that tend to discount the impact of imports upon the market. Island Paper Mills, the fine paper division of MacMillan Bloedel, offer a service to the merchant whereby they will produce the required paper for a merchant order and maintain an inventory for immediate shipment to the merchant on a no-cost basis. Foreign mills produce and ship the total amount of an order on a single shipment basis. The merchant can carry a much smaller inventory of Island Paper than must be carried for a supplier located in California, with inventory carrying costs running at 25% per year. The advantage of the MacMillan

Bloedel strategy is clear.

Island Paper mills also offer shipment to the merchant houses on a prepaid basis, as do some of the other manufacturers in Canada. In terms of the B.C. market, prepaid freight can account for as much as 4-5% of the landed cost of the goods.

The total amount of imported paper sold by the fine paper merchants has been increasing with the lowering of the tariff barriers against the importation of foreign paper. In the years since 1971 the importation of paper and allied products has

shown a steady increase:	1971:	\$106,000,000
	1972:	\$128,000,000
	1973:	\$156,000,000
	1974:	\$210,000,000 (indicated)

(Source) Stat. Canada Cat 65-005

Although the figures as reported by Statistics Canada cover the total imports of paper into Canada, rather than being geographically confined to the B.C. market, the ratio of increase will hold within the B.C. market. It can be expected that the past trend of a lowering of tariff barrier against foreign paper will continue, and that the fine paper manufacturers will continue to adapt their marketing effort and strategies to these ends. The vertical integration into marketing as an adjunct to manufacturing of fine paper will become increasingly more widespread and now integrated merchant houses will have greater difficulty obtaining supplies.

(B) Direct Foreign Investment

Currently in the B.C. market there are two merchant firms that demonstrate a flow of U.S. direct investment. Those firms are Canadian International Paper - Van Pac and Crown Zellerbach Canada Ltd. In order to examine the situation we will consider each firm in turn and relate present theory of direct foreign investment to the activities and growth of those firms.

Canadian International Paper Company with head offices in Montreal, P.Q., operates the C.I.P. Van Pac division and a smaller C.I.P. Victoria Ltd. as fine paper merchant houses in the province of B.C. The parent company for the Canadian arm, International Paper Company with headquarters in New York, is both an operating and holding company.

The direct foreign investment undertaken by International Paper would appear to have been determined under the principals outlined by G. Raggazzi⁽¹⁰⁾ as the advantages of superior knowledge and economies of scale. Inasmuch as the technology of paper manufacturers is widespread and the competing companies produce a product that is homogeneous and perfectly substitutable therefore we can assume that the superior "knowledge" as outlined by Raggazzi is not based upon superior production technology or a knowledge of the product or factor markets. The basis for the involvement of superior knowledge on the part of International Paper lies in the areas of managerial skills and the knowledge of the pulp industry organization that the

basis for the involvement of superior knowledge on the part of International Paper lies in the areas of the managerial skills and the knowledge of the pulp industry organization that the parent company could provide to the Canadian arm. However, the expertise or knowledge of the organization of the pulp industry would not provide sufficient incentive for a manufacturing firm to set up a mill in Canada. The paper mills are especially capital intensive due to the relatively high cost of the paper machines and auxilliary equipment that must be installed. Raggazzi further points out that the firm could not export its superior knowledge, per se, as a direct foreign investment as this type of superior knowledge cannot be embodied in any form that would allow for licenses or franchises.

It would appear that the historical decision by International Paper to invest in the Canadian paper industry was made in an attempt to exploit economies of scale external to the firm. In 1913, when the original investment in the Canadian trade was begun, the parent firm operated pulp mills and converting operations in the U.S.A. Canadian International Paper Company became a vertically integrated firm with divisions operating in research, pulp sales, fine paper manufacture, coarse paper as well as the marketing chain to handle the marketing of the company's product. Raggazzi points out that direct foreign investment in a vertical integration mode, such as done by International Paper, is generally characteristic of firms producing and processing raw materials. The main advantage being in the fact that vertically integrated foreign investment is in the area of

reducing the costs and uncertainties that would exist had the company entered just the marketing aspect with the C.I.P. chain of paper houses.

The Canadian paper market, especially the fine paper section has a history of oligopolistic market tendencies and under these conditions Raggazzi notes that a firm will invest vertically in a foreign country with the main purpose of erecting barriers to entry of new firms. In Canada the lack of competition in the fine paper trade following the entry of Canadian International Paper would tend to support the view of stabilization of the industry. The presence of C.I.P. in the Canadian paper trade from the years of 1933 to 1953 when the industry actively forced out new entrants and colluded on pricing would tend to support the fact that vertical integration in foreign investments would predispose the market to one with oligopolistic tendencies and provide effective barriers to entry for new entrants.

As stated earlier, in Section IV - A on imports, the impact of the tariff barriers on imported paper, especially in the light of the historically high interest rates, there would be considerable incentive for a firm to invest in the Canadian paper market if it wished to sell within the Canadian market. The historical tariff rate of 22.5% against manufactured paper, whereas pulp could pass duty free, would offer incentives to a firm such as International Paper to establish paper mills within the Canadian market if they wished to capture a share of the market.

Within the B.C. market the C.I.P. Van Pac and C.I.P. Victoria divisions are expressions of the vertical integration of the parent firm. There is little doubt that the presence of this fine paper merchant has added a degree of stability to the B.C. market. In the section on barriers to entry (Section I-C) we have cited examples of the operation of the barriers that the present merchants provide that would support the view that direct foreign investment in a vertical integrated mode such as undertaken by International Paper Company will provide the market with effective barriers to entry.

The second major case of direct foreign investment in the B.C. fine paper market is through the firm of Crown Zellerbach of Canada Limited. Crown Zellerbach is a large vertically integrated firm having divisions operational in retail building material stores, paper mills, pulp mills, real estate branches, coarse paper (newsprint) in addition to the fine paper merchandizing division. It is further noted that Crown Zellerbach of Canada is wholly owned by Crown Zellerbach of San Francisco, the parent company which holds 100% of the common shares outstanding in the Canadian division. Crown Zellerbach fine paper division represents the newest entry into the B.C. fine paper market. Crown Zellerbach purchased Canadian Paper Company shortly after the prosecution of the Howard Smith case where Canadian Paper Company was named as a conspirator.

In the case of Crown Zellerbach Canada, we are dealing with a situation comparable to the overview of the International

Paper Company's direct foreign investment in the Canadian market. Crown Zellerbach has invested in the Canadian market with a vertically integrated firm. Crown Zellerbach apparently has invested in the Canadian market with a view to achieving economies of scale external to the firm. Therefore the company has attempted to reduce the uncertainty that would be inherent in a single level investment. The fine paper branch assures Crown of a marketing effort that could be directed toward the merchandizing of its own product that it could not be assured of under the current merchant house situation in B.C.

As we outlined previously, in Section I-D, the B.C. paper merchants can carry as many as four manufacturers' lines of product, under this type of marketing situation as particular manufacturers cannot be assured of optimum marketing effort for his product. Crown Zellerbach and C.I.P. have overcome the shortcomings of the present channels of distribution through vertically integrating into marketing itself and having its own travellers promote the use of the company product as a prime feature of the sales presentations.

Likewise the situation surrounding tariff barriers and the barriers to entry for new firms parallels the situation as outlined for Canadian International Paper we would note, however, that while C.I.P. has mills on the east coast and marketing divisions in the B.C. market, Crown Zellerbach has representatives of virtually every division of the vertically integrated Canadian company operating within the province of B.C.

Therefore the impact of foreign investment upon the fine paper market in B.C. has been to provide a stabilizing influence and erection of barriers to entry to new firms. Both instances of direct foreign investment are from vertically integrated firms whose marketing practices are related to the presence of the "house" salesman operating within the market. These firms has thus assured themselves of an active marketing effort for their product in the B.C. market.

Section V - Policy Implications

In this section we will examine the anti-combines legislation in Canada to decide its effectiveness or lack of effectiveness specifically with regard to the fine paper industry.

The fine paper industry is an appropriate example to look at since there has already been a history of prosecution in the Howard Smith Paper Mills Ltd. case. What we will do is look at the situation at that time, the findings of the court and the penalties imposed and then look at the current situation to see if there are any changes. From this we will deduce whether or not the current legislation is effective and if not what type of legislation would be effective against this form of collusion.

There were seven paper mills and twenty-one fine paper merchants (including Barber-Ellis) along with several individuals involved in the Howard Smith case. The charge was that the mills and merchants together did conspire to unduly prevent or lessen competition in both production and manufacture as well as purchase and sales. The findings of the court on these charges were as follows:

"In the course of its judgement the Court of Appeal affirmed the findings of the Judge that: "The mills as a group and the merchants as a group did conspire with one another to lessen or prevent competition in the fine paper industry in Canada; the

mills at the production level, the merchants at the wholesale level. Within that broad, overall, all embracing agreement each group had its part to play in accomplishing their common purpose.

The mills, pursuant to a common understanding between them and the merchants, co-operated with the merchants to prevent, if possible, any inroads by others into the wholesale field in which the merchants operated; and the merchants, in turn, pursuant to a common understanding between them and the mills, co-operated with the mills to prevent, if possible, any mill competition from the only source where it really existed, namely foreign manufacturers."

The actual charge made was "the conspiracy to unduly prevent or lessen competition in production, manufacture, etc."

"In my opinion, this is a finding that the mills and merchants together did conspire to unduly prevent or lessen competition in both production and manufacture as well as in purchase and sale. The object of the mills was to limit competition in production and manufacture to themselves as against outsiders and in this they were aided by the common agreement of the merchants. Even if the mill competition which was in my view from foreign manufacturers the findings expressly include this, namely, that there was a common understanding between the mill and the merchant "to prevent, if possible, any mill competition from the only source where it really existed, namely foreign manufacturers."

This was the specific wording of the court and broken down further the findings were:

- 1) That well before the year 1933 the mills entered into a firm agreement to control and fix prices.
- 2) The accused merchants controlled all of the wholesale trade in Ontario, Quebec and the remainder of Canada, and through the paper trade association engaged actively in agreeing amongst themselves as to the complete and absolute control of the wholesale paper trade in the Dominion on Canada.
- 3) That the mills and merchants were parties to agreements to lessen competition.

and on these facts the accused were found guilty as charged.

It was also found that although the mills involved were heavily protected by tariffs from foreign mills that they wanted to fortify their position still further and they needed the co-operation of the merchants.

On the other hand the merchants wanted protection from other merchants outside their group. This required co-operation from the mills in two respects:

- 1) The mills must refrain from selling any fine paper outside the merchants association, and

- 2) The mills grant the merchants within the association such favorable terms that any merchant relying strictly on imported paper would be unable to compete.

To achieve these goals the mills and the merchants entered into a mutual assistance pact.

It was the opinion of the court that there was overwhelming evidence that the two groups conspired with one another to prevent or lessen competition in Canada in the purchase and sale of fine papers.

The sum total of the penalties which were imposed on the defendants who were found guilty were fines which totalled about \$240,000 and a restraining order which restrained the defendants from entering into similar conspiracies again.

The mechanics of how the mills and merchants went about this conspiracy is the next area of discussion and this will be done on a comparison basis with today's methods.

The mills met regularly in meetings with the book and writing section of the Canadian Pulp and Paper Association and as a result of these meetings they agreed upon a common price schedule for common use among the mills. Those prices were embodied in what was known as the Book and Writing Schedule.

The merchants had an organization called the Canadian Paper Trades Association. Membership in that organization could not be obtained as a matter of course and indeed its bylaws were changed on one occasion to prevent a new firm from becoming a member. This association is still in existence today. At that time the C.P.T.A. had bylaws which were as follows:

Regulation Schedules:

That the regulation of the central section of the Canadian Paper Trade Association respecting sales and the price schedule thereto are hereby incorporated as part and parcel of the arrangements herein set forth.

This meant that the prices were fixed between the various merchants and that they actually signed agreements to this effect. The current method is done by means of price leadership and full details of this can be seen in Section II-A Pricing Policy. It can be seen from Appendix I which shows a comparison of prices in the various firms that the current method is not much less effective in fixing the prices. They also agreed in the bylaws of the C.P.T.A. that regardless of any other agreements made that any member would not act in any way that would influence sales contrary to the accepted regulation. Any deviation from these regulations had to be submitted to the association for its approval. The secretary of the association kept a check on the members and had complete authority to run an audit on the books of the members and take action in the event of any infraction. Today the association is much more informal and any action taken is a more subtle chastising of the member by other

merchants in the group.

Between the mills and merchants a loyalty discount system was created. The discount was paid only to merchants who did not import fine paper which competed with the mills. This loyalty discount went only to those merchants who were members of the C.P.T.A. There was also a volume discount agreed upon. The important aspect of this discount was that unless a member was entitled to a loyalty discount (hence a member of the C.P. T.A.) he was not eligible for the quantity discount.

Currently while there is no formal agreement the informal understandings are almost as effective. We have reproduced a letter from the Western Canadian General Manager of Barber-Ellis which shows the co-operation between the mills and the merchants that is indicative of the effectiveness of this informal association.

The Howard Smith case has succeeded in eliminating the formal agreement between the merchants and mills and between the merchants and merchants. Unfortunately what did evolve was an informal agreement which was almost as effective.

How effective is our anti-combines legislation? Even after having been found guilty of these obviously severe practices to limit competition, a fine (which was relatively small considering the number and size of the defendants) and a restraining order which was tantamount to a slap on the wrist, were the only penalties imposed.

As stated earlier an informal agreement still exists today. The letter in the section on "barriers to entry" shows how the mills are taking care of the merchants who are established as they did in the Howard Smith era. There is another letter from the General Manager of Western Canada for Barber-Ellis which gives us a good idea of how the reciprocity works and this goes as follows:

Gentlemen:

We all complain of spiralling prices which is having a detrimental effect on our economy. Even now our counterparts across the border can undersell us by virtue of lower costs and greater production.

The Canadian fine paper mills, suffering drastic reductions in profit, have taken a firm stand against what they consider to be unreasonable wage increases and fringe benefits.

The paper merchants across Canada, including Barber-Ellis, are going to support these mills in their fight to keep costs down. As a result, I am asking you, as a branch manager, to continue to place your orders with your regular Canadian mill supplier. They, in turn, will procure your order either from a Canadian source or an American mill with whom they have a working agreement. An example would be if you stock Plainfield Offset you would continue to order it through Domtar, and they would see that you received a grade of Offset labelled Plainfield. This applies to other grades with other mills.

Our support of the Canadian mills, naturally, is contingent on their being able to satisfy our requirements.

The next two or three weeks will be very critical as the Canadian mills will be going through a severe period of adjustment, so please be patient. This is not the time to bombard Lee Campbell with a lot of dealine enquiries until sufficient time has been allowed to sort things out.

In no way does this affect your present American mill connections; carry on ordering as you have in the past.

Each manager must discuss this new problem of buying with the person responsible, and grade by grade, determine how it can best be brought in. Some isolated lines, normally brought through a Canadian mill may well have to be brought in direct through an American mill.

Although some reliable sources claim the strikes could last for three or four months, make sure your branch doesn't bring in extra grades and get stuck with them. Some branches are still trying to job off paper brought in during the allotment period of 1974. This must not happen again.

I trust each branch is prepared to look after those printer customers who are ordering stock ahead in order that they, in turn, can protect their customers.

This is another crisis which requires careful planning and ordering by the branch manager and their purchasing personnel.

Yours very truly,

General Manager
Western Canada.

Here we have the merchants protecting the mills from any outside competition while the mills are in a strike situation.

The legislation currently in force is not a deterrent to oligopoly, it is less than a minor irritant. At the present time under the current legislation there are two problems. We will examine the text of the current legislation to see just where these problems lie.

Section 32 of the Anti-Combines Act reads as follows:

(1) Every one who conspires, combines, agrees or arranges with another person (a) to limit unduly the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any article. (b) to prevent, limit or lessen, unduly, the manufacture or production of an article, or to

lessen, unduly, competition in the production, manufacture, purchase, barter, sale, storage, rental, transportation, or supply of an article, or in the price of insurance upon persons or property, or (d) to restrain or injure trade or commerce in relation to any article is guilty of an indictable offence and is liable to imprisonment for two years."

The two problems with this current legislation are (1) the difficulty in interpretation of the words such as "unduly" and "unreasonably" so as to make them fit a particular situation and (2) that when they can be brought to bear as in the previous Howard Smith case the sanctions that are imposed are so slight as to have virtually no effect. The legislation has no teeth.

There is currently new proposed legislation in this area which if even enacted will help to solve the first of the above problems. It adds to the above section the following:

For greater certainty, in establishing that a conspiracy, combination, agreement or arrangement is in violation of subsection (1), it shall not be necessary to prove that the conspiracy, combination, agreement or arrangement, if carried into effect, would be likely to eliminate, completely or virtually, competition in that market.

This still leaves the second and most important area and that is the area of sanctions. The reason that this is the more serious of the two problems is that industry will be looking at this one when there is consideration of agreements (whether overt or covert) which result in oligopoly in the marketplace. It the worst that industry has to look forward to is the slap on the wrist form of legislation which is far less than the gains that may be made it seems reasonable that industry will opt for

the oligopoly situation when there is a choice.

This leads us to consider just what type of legislation we should have in order to discourage or eliminate entirely this type of practice. Kaysen and Turner suggest some very severe restrictions in the form of legislation to limit the oligopolistic and monopolistic power of big business. The four main goals which they advocate for anti-trust policy are "(1) Limitation of the power of big business; (2) Performance (efficiency and progressiveness); (3) "Fair dealing", and (4) Protection of competitive processes by limiting market power." (11) They also feel that current legislation has not been and cannot be construed to cover the mere non-rivalrous actions of members of a noncompetitive industry that is to say that parallel behavior in an oligopoly is not conspiracy. These comments are with regard to the American legislation, the Canadian legislation as we have seen previously is even less effective. (11)

Kaysen and Turner suggest that what we should be doing rather than attempting to fit the oligopolistic situations into narrow format of the legislation, is to have a direct attack on undue market power without regard to the presence or absence of conspiracy in the legal sense, and severely limit forms of conduct that contribute to or are likely to contribute to the creation of market power. They are saying "don't try to decide which firms have a conspiracy going, just legislate so that this situation cannot exist". (12)

They also suggest that this reduction of undue market power be done by dissolution, divorcement, or divestiture. They feel that this program should be made a permanent feature of existing anti-trust policy.

We can see that this type of legislation would certainly do the job required, but what of the practicalities? How do you legislate against market power? What is the definition and can we really fit any industry into it? Would we run into the same problem as we now have and that is one of definition and interpretation?

The way to get around this is to get down to specifics in our definitions. For example we can look at relative firm size. We can say for example if the top four firms have in excess of 50% of the market share then market power is presumed and the sanctions of dissolution, divorcement and divestiture can be brought to bear. There would be exceptions to the rule and the most obvious is scale economies. If for example it required an immense capital expenditure and this is the reason there are only 2 or 3 firms in an industry then this absolute rule would not apply.

The next area which should be looked at is the area of integration. Horizontal integration can be checked easily enough because it would eventually run into the market share legislation or into our next area which is on mergers. The most difficult integration to look at is vertical because a firm, even though it may not have market power (i.e. a high market share),

at one level it may, because it has direct access to raw supplies, be able to exert high pressure and force competition out of business. Where possible divestiture should be brought to bear in these areas. Where this is not possible injunctive decrees which can prevent raw suppliers from discriminating in favor of the parent company either price wise or supply wise.

The next area of restrictive legislation would concern mergers. History shows that mergers have been one of the major routes by which firms achieved dominance in particular markets.

Kayson and Turner's Recommendations with regard to mergers are as follows:

- 1) Vertical mergers. An acquisition of a relatively substantial customer or supplier by a firm with 20% or more of its primary market is prima facie illegal.
- 2) Horizontal mergers. (a) Any acquisition of a competitor by a firm with 20% or more of its market is prima facie illegal.
(b) Any merger of competitors who together constitute 20% or more of a market is prima facie illegal.
- 3) A merger which is prima facie illegal can be justified only by convincing proof that (a) the acquired company is in failing or obviously declining circumstances, or (b) the acquisition will yield substantial economies of scale or economies in resource utilization that cannot be effected

feasibly in any other way (e.g. internal expansion or the acquisition of assets from other than a competitor, customer or supplier). (12)

There is also a discussion of exclusive dealing arrangements and they feel that if competing producers cannot obtain other dealers with comparable access to the consuming market or can only do so at relatively great expense then this would constitute foreclosure.

How would legislation based on Kaysen and Turner's suggestion affect the fine paper industry in B.C.?

It would most assuredly solve the problem. The firms involved have a considerably higher market share than any reasonable person would allow and this form of legislation would be sufficient in itself to call for action against the merchant. This would probably not even have to be done if the mills involved could be forced to sell to other buyers which would allow competitors into the market.

The main thrust in their model is a reduction of market power which should be done by dissolution, divorcement or divestiture. If this were carried out in the fine paper industry, then the five firms which have an almost exclusive hold on the market would be forced to reduce their market power and to allow new entrants into the market.

Another area that Kaysen and Turner look at is vertical integration. This would prevent the type of operation that Crown Zellerbach has, where it controls some of the raw supplies and also moves into the distribution of these supplies at the wholesale level. In the current market this has little effect but if it should happen in one or two more instances there may be severe problems. This would leave a market of only five merchants and if three of them were vertically integrated with a mill the other two may ultimately find themselves in a non-competitive situation. This could lead to an even stronger and tighter oligopoly.

Injunctive decrees to prevent the mills from discriminating in favor of current buyers would be another of the tools which would break down the oligopoly. The conspiracy aspect which was so obvious in the Howard Smith case would never have to be looked at in the fine paper industry. If those other areas were carefully adhered to the merchants and mills would be put into a situation where conspiracy would not be feasible since there would be too many participants in the market.

The large advantage to using the Kaysen and Turner model for legislation is that as much as possible the guidelines are quantitative and clearly defined. This makes possible convictions with little effort on the part of the Crown. Another point is the penalties imposed are remedial and would correct the situation.

An argument against this model would be that initially we would virtually restructure the business community since there are a relatively large number of firms that would be at this moment in violation of this legislation.

Clearly we are faced with legislation which is inadequate. The revisions to the act are also inadequate. Therefore, if we are interested in facing the problem, and indications are that government is not, then we should be looking at legislation structured along the lines of Kaysen and Turner's model.

APPENDIX I

In the following listing a sampling of the various product grades has been assembled from the December 1974 paper merchant price lists. The only merchant house not specifically represented on the list is Canadian International Paper - Van Pac. Our requests for a price list from this merchant were not successful. We were told that there had been problems in printing their price list as "it was done back East". We were instructed that we should utilize the old price list to see if the material wanted was stocked by C.I.P., then utilize either the Coast Paper or Barber-Ellis price lists to obtain current prices.. Consequently we indicate that for all practical purposes, C.I.P. and Barber-Ellis prices are identical.

With the readers review of the listing only a vague feeling for the impact of the pricing can be gleaned. It would require much more knowledge to realize that on those products where the price is identical the greatest volume is realized. Also we note that some merchant houses carry a stock line unlike the other, i.e. an exclusive. However, the paper merchants have many so-called reciprocity stocking arrangements. One merchant will carry one line of low demand and should other merchants require this material, they will buy from the merchant who has the line at a lower discount than given the customer. In this manner, a merchant has a vast pool of specialty stock items held on the floor at other merchants that are at his disposal. As one can appreciate this procedure lowers significantly the amount of specialty

stock that any one merchant must carry.

In these lists are contained representatives of grade ranges that account for over 80% of all merchant sales within the province of B.C.

	<u>B-E</u>	<u>C. Z.</u>	<u>Coast</u>	<u>S.D. & L.</u>	
Hand Writing Manilla					
17x22-32M					
1 Carton	20.44	None	20.44	20.44	(1)
4 Carton	19.90	Comparable	19.90	19.91	
8 Carton	18.83		18.83	18.83	
Byronic Text					
26x40-153M					
1 Carton	145.71	145.71	145.71	145.35	(2)
4 Carton	141.88	141.87	141.87	141.54	
8 Carton	134.21	134.20	134.20	133.88	
White Tag					
22½x28½-148M					
1 Carton	82.14	82.14	82.14	82.14	(3)
4 Carton	75.97	75.97	75.97	75.97	
8 Carton	71.87	71.87	71.87	71.87	
Island Hilite Offset					
23x35-102M					
1 Carton	68.59	68.34	68.34	68.34	(4)
4 Carton	63.44	63.21	63.21	63.21	
8 Carton	60.01	59.79	59.79	59.79	
Oriole Bristol					
22½x28½-180M					
1 Carton	11.79	11.80	11.79	11.79	(5)
4 Carton	11.48	11.49	11.48	11.48	
8 Carton	10.86	10.87	10.86	10.86	
Genoa-Colonial Bond					
8½x11-8M					
4 Carton	7.37	7.33	7.33	7.33	(6)
12 Carton	7.17	7.14	7.14	7.14	
48 Carton	6.79	6.75	6.76	6.76	
Bellfast-Earnscliffe Bond					
8½x11-6½M					
1 Carton	9.04	9.01	9.00	9.02	(7)
4 Carton	8.80	8.77	8.76	8.78	
12 Carton	8.33	8.30	8.29	8.30	
Krypton Parchment					
8½x11-10M					
1 Carton	14.15	14.10	14.10	14.11	(8)
4 Carton	13.78	13.73	13.73	13.74	
12 Carton	13.03	12.99	12.99	12.99	
Pacific Copy (White)					
8½x11-8M					
4 Carton	4.51	4.50	4.51	4.51	(9)
12 Carton	4.27	4.26	4.27	4.27	
48 Carton	3.90	3.89	3.90	3.90	
Crownline Copy					

	<u>B-F</u>	<u>C.Z.</u>	<u>Coast</u>	<u>S.D. & L.</u>	
Colonial (#4)					
17x22-32M					
1 Carton	29.18	29.03	29.03	29.03	(10)
4 Carton	28.41	28.26	28.27	28.27	
8 Carton	26.88	26.74	26.74	26.74	
Bellfast & Earnscliffe (#2)					
17x22-32M					
1 Carton	34.87	35.72	35.72	35.72	(11)
4 Carton	34.92	34.78	34.78	34.78	
8 Carton	33.04	32.90	32.90	32.90	
Royal Record (#1)					
17x22-26M					
1 Carton	45.60	45.44	45.44	45.44	(12)
4 Carton	44.40	44.25	44.25	44.25	
8 Carton	42.00	41.86	41.86	41.86	
Krypton Parchment (#1)					
17x22-40M					
1 Carton	56.14	56.05	56.05	56.05	(13)
4 Carton	54.66	54.57	54.57	54.57	
8 Carton	51.71	51.62	51.62	51.62	
Progress Ledger (#5) Buff					
28½x34½-147M					
1 Carton	103.68	103.68	103.69	103.69	(14)
4 Carton	100.95	100.95	100.96	100.96	
8 Carton	95.49	95.49	95.51	95.51	
Machine Ledger Buff					
24½x36½-172M					
1 Carton	137.66	137.66	137.66	137.66	
4 Carton	134.04	134.04	134.04	134.04	
8 Carton	126.79	126.79	126.79	126.79	
NCR CB Safety Cheque					
22½x34½-108M					
1 Carton	162.84	162.84	162.86	None Comparable	(16)
4 Carton	149.64	149.64	149.64		
8 Carton	140.84	140.84	140.85		
NCR Precollated 2 Part					
17x22					
1 Carton	18.65	18.66	18.65	None Comparable	(17)
4 Carton	17.14	17.15	17.14		
8 Carton	16.13	16.14	16.13		
Island Offset White					
25x38-120M					
1 Carton	79.50	79.50	79.50	79.50	(18)
4 Carton	73.53	73.53	73.53	73.53	
8 Carton	69.56	69.56	69.56	69.56	

	<u>B-E</u>	<u>C.Z.</u>	<u>Coast</u>	<u>S.D. & L.</u>	
Plainfield Offset (Pale Colour)					
25x38-160M					
1 Carton	112.00	112.00	112.00	112.00	(19)
4 Carton	103.60	103.60	103.60	103.60	
8 Carton	98.00	98.00	98.00	98.00	
Mayfair Antique Cover White					
20x26-130M					
1 Carton	9.10	9.11	None	9.11	(20)
4 Carton	8.86	8.87	Comparable	8.87	
8 Carton	8.38	8.39		8.39	
Island Coated Cover C.I.S.					
20x26-163M 10 Point					
1 Carton	9.57	None	9.58	9.58	(21)
4 Carton	8.85	Comparable	8.86	8.86	
8 Carton	8.37		8.38	8.38	
Stag Blanks					
22x28-6 Ply					
1 Carton	25.74	25.68	25.68	25.69	(22)
4 Carton	25.06	25.01	25.01	25.01	
8 Carton	23.71	23.66	23.66	23.66	
Oriole Bristol Colors					
22½x28½-180M					
1 Carton	12.31	12.31	12.31	12.31	(23)
4 Carton	11.98	11.98	11.98	11.98	
8 Carton	11.34	11.34	11.34	11.34	
Hawk Index Bristol White					
25½x30½-220M					
1 Carton	14.42	14.44	14.42	14.42	(24)
4 Carton	14.04	14.06	14.04	14.04	
8 Carton	13.28	13.30	13.28	13.28	
Island Tag White					
24x36-200M					
1 Carton	111.00	111.00	111.00	111.00	(25)
4 Carton	102.67	102.67	102.67	102.67	
8 Carton	97.12	97.12	97.12	97.21	
Davac Gum White					
20x25-59M					
1 Carton	104.31	104.31	104.31	104.31	(26)
4 Carton	101.57	101.56	101.57	101.56	
8 Carton	96.08	96.07	96.08	96.07	
Onionskin White					
17x22-16M					
1 Carton	13.19	13.11	13.13	13.13	(27)
4 Carton	12.84	12.76	12.79	12.78	
8 Carton	12.15	12.07	12.10	12.09	

	<u>B-E</u>	<u>C.Z.</u>	<u>Coast</u>	<u>S.D. & L.</u>	
Island Electra Copy White					
8½x11-10M					
4 Carton	6.05	6.16	6.17	6.17	(28)
12 Carton	5.73	5.82	5.84	5.84	
48 Carton	5.24	5.32	5.34	5.34	
NCR CB White					
22½x34½-62M					
1 Carton	81.39	83.11	81.39	None	(29)
4 Carton	74.79	76.37	74.79	Comparable	
8 Carton	70.39	71.88	70.39		
Island Mimeo					
17x22-36M					
1 Carton	23.51	22.82	23.51	22.83	(30)
4 Carton	22.89	22.22	22.89	22.23	
8 Carton	21.65	21.02	21.65	21.03	
Island Duplicating					
17x22-36M					
1 Carton	23.51	22.82	None	22.83	(31)
4 Carton	22.89	22.22	Comparable	22.23	
8 Carton	21.65	21.02		21.03	
Mayfair Antique					
20x26-100M					
1 Carton	7.00	7.01	7.20	7.01	(32)
4 Carton	6.81	6.83	7.01	6.83	
8 Carton	6.44	6.46	6.63	6.46	
Chipboard					
23x35					
10 Bundle	12.58	13.21	13.21	12.36	(33)
20 Bundle	11.92	12.51	12.51	11.71	
40 Bundle	11.26	11.82	11.82	11.06	
Plainfield Offset Britewhite					
25x38-120M					
1 Carton	80.70	None	80.70	84.00	(34)
4 Carton	74.64	Comparable	74.64	77.70	
8 Carton	70.61		70.61	73.50	
Byronic Cover					
26x40-260M					
1 Carton	26.39	25.18	25.07	25.14	(35)
4 Carton	25.07	24.52	24.41	24.48	
8 Carton	24.41	23.20	23.09	23.15	
Beaver Bristol					
22½x28½-180M					
1 Carton	11.28	11.28	11.78	11.29	(36)
4 Carton	10.98	10.98	11.48	10.99	
8 Carton	10.39	10.39	10.86	10.40	

	<u>B-E</u>	<u>C.Z.</u>	<u>Coast</u>	<u>S.D. & L.</u>	
Victory Bond	Rockland Bond				
8½x11-8M					
4 Carton	5.16	5.37	5.16	5.16	(37)
12 Carton	4.88	5.08	4.88	4.88	
48 Carton	4.46	4.64	4.46	4.46	
Bellfast Ledger #2					
17x28-71M					
1 Carton	78.24	None	None	77.91	(38)
4 Carton	76.18	Comparable	Comparable	75.86	
8 Carton	72.06			71.76	
Island Offset White					
8½x11-60 lb					
4 Carton	7.33	7.40	7.50	None	(39)
12 Carton	6.93	7.00	7.09	Comparable	
48 Carton	6.34	6.40	6.48		
Newsprint White					
24½x36½-62M		24x36-60M	24x36-60M	24x36-60M	
1 Carton	20.61	19.95	19.95	18.15	(40)
4 Carton	19.06	18.45	18.45	16.79	
8 Carton	18.03	17.45	17.46	15.88	
Georgian Offset Matte			Mountie Matte	KNP Matte	
25x38-140M					
1 Carton	99.40	96.60	92.61	89.60	(41)
4 Carton	91.95	89.35	85.66	82.88	
8 Carton	86.98	84.52	81.03	78.18	
Classic Text Cover			Gilcrest Laid		
23x35-201M			Cover		
1 Carton	17.99	None	19.24	18.99	(42)
4 Carton	16.64	Comparable	18.73	17.57	
8 Carton	15.74		17.72	16.62	
Railroad Board					
22x28-330M 4 Ply					
1 Carton	23.94	21.94	21.95	21.95	(43)
4 Carton	23.31	21.35	21.37	21.37	
8 Carton	22.05	20.21	20.22	20.22	
Genoa Ledger (#4)			Gilbert Ledger		
22½x34-115M					
1 Carton	102.41	None	116.61	102.15	(44)
4 Carton	99.72	Comparable	113.54	99.47	
8 Carton	94.33		107.41	94.09	

APPENDIX II

In doing the preliminary research for this study, the authors found that there was a scarcity of information concerning the printing houses who deal with the fine paper merchants. Inasmuch as the printing houses are geographically disperse, we opted for a mail survey technique that would elicit information from the majority of printing houses in B.C.

The mailing was conducted in May of 1975 and 160 forms were mailed out to printers in the province. The authors included a covering letter of explanation indicating that the information was required for a survey related to the levels of service supplied by the fine paper merchants. In order that respondents maintain the confidentiality of their business records we further asked the respondents mark the questionnaire only with responses and utilize the provided return envelope.

The completed returns were mailed back to the M.B.A. office at Simon Fraser University and the authors compiled the following analysis. For purposes of clarification we have reproduced the questionnaire as mailed out to the houses.

PRINTING TRADES QUESTIONNAIRE

1. What is the size of your firm?

- (a) 1 - 15 Employees
- (b) 15 - 59 Employees
- (c) 50 + Employees

2. Type of firm

- (a) Printer
- (b) Publisher
- (c) Other (specify) _____

3. Approximate Annual Sales for your firm.

- | | |
|-----------------|-------------------|
| (a) 0 - 10,000 | (i) 80 - 90,000 |
| (b) 10 - 20,000 | (j) 90 - 100,000 |
| (c) 20 - 30,000 | (k) 100 - 150,000 |
| (d) 30 - 40,000 | (l) 150 - 300,000 |
| (e) 40 - 50,000 | (m) 300 - 450,000 |
| (f) 50 - 60,000 | (n) 450 - 600,000 |
| (g) 60 - 70,000 | (o) 600,000 + |
| (h) 70 - 80,000 | |

4. What is the approximate value of your fine paper purchases from all merchants? _____

5. How do you obtain your paper supplies, and which suppliers do you deal with?

- | | |
|----------------------|---------|
| (a) Barber-Ellis | _____ % |
| (b) C.I.P. Van Pac | _____ % |
| (c) Coast Paper | _____ % |
| (d) Crown Zellerbach | _____ % |
| (e) Smith Davidson | _____ % |
| (f) Other: _____ | _____ % |

6. Do you find great variation in prices charged by your paper suppliers? _____ Yes _____ No

7. Which suppliers of paper are:

- (a) The most expensive _____
- (b) The least expensive _____

8. How do you find the level of service from your paper suppliers?

- | | | | |
|----------------------|------------|------------|---------------|
| (a) Barber Ellis | _____ Poor | _____ Good | _____ Excell. |
| (b) C.I.P. Van Pac | _____ Poor | _____ Good | _____ Excell |
| (c) Coast Paper | _____ Poor | _____ Good | _____ Excell |
| (d) Crown Zellerbach | _____ Poor | _____ Good | _____ Excell |
| (e) Smith Davidson | _____ Poor | _____ Good | _____ Excell |
| (f) Other _____ | _____ Poor | _____ Good | _____ Excell |

9. How often do you see the Salesman from your suppliers?

(eg. Weekly, Every two weeks, Monthly)

- (a) Barber-Ellis _____
- (b) C.I.P. Van Pac _____
- (c) Coast Paper _____
- (d) Crown Zellerbach _____
- (e) Smith Davidson _____
- (f) Other _____

10. How is the level of service from the Salesman?

- | | | | | | | |
|----------------------|-------|------|-------|------|-------|-----------|
| (a) Barber-Ellis | _____ | Poor | _____ | Good | _____ | Excellent |
| (b) C.I.P. Van Pac | _____ | Poor | _____ | Good | _____ | Excellent |
| (c) Coast Paper | _____ | Poor | _____ | Good | _____ | Excellent |
| (d) Crown Zellerbach | _____ | Poor | _____ | Good | _____ | Excellent |
| (e) Smith Davidson | _____ | Poor | _____ | Good | _____ | Excellent |
| (f) Other | _____ | Poor | _____ | Good | _____ | Excellent |

QUESTIONNAIRE RESULTS

1. Total mailed out - 160

2. Total number of returns - 78 or 48.7%

3. Returns by group: $\frac{1-15}{65}$ $\frac{15-49}{9}$ $\frac{50+}{4}$

4. Total purchases for Printing trades in B.C. \$25,000,000 for 1974.

5. Total sales by group:

$\frac{1-15}{6,742,000}$	$\frac{15-49}{4,800,000}$	$\frac{50+}{2,800,000}$
--------------------------	---------------------------	-------------------------

6. Average sales by group:

$\frac{1-15}{103,723}$	$\frac{15-49}{533,333}$	$\frac{50+}{700,000}$
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7. Market Share by group (reported):

	$\frac{1-15}{38}$	$\frac{15-49}{34}$	$\frac{50+}{15}$	<u>TOTAL %</u>
B.E.	38	34	15	29
C.I.P.	3	2	37	14
Coast	44	44	35	41
Crown	7	12	17	12
S.D.&L.	2	10	1	4
Other	1	0	0	.03

8. Price variation: Yes - 2 No - 76

9. Price variation by group:

	$\frac{1-15}{2}$	$\frac{15-49}{0}$	$\frac{50+}{0}$
Yes	2	0	0
No	57	9	4

10. Most expensive supplier:

Barber-Ellis	2
C.I.P. Van Pac	0
Coast Paper	2
Crown Zellerbach	2
Smith Davidson	2
Other	0

11. Supplier service total:

	<u>Poor</u>	<u>Good</u>	<u>Excellent</u>
B.E.	2	35	29
C.I.P.	3	10	3
Coast	0	14	50
Crown	8	21	5
S.D.&L.	7	7	8
Other	1	4	2

12. Supplier service by group:

	<u>1-15</u>			<u>15-49</u>			<u>50+</u>		
	<u>P</u>	<u>G</u>	<u>E</u>	<u>P</u>	<u>G</u>	<u>E</u>	<u>P</u>	<u>G</u>	<u>E</u>
B.E.	2	28	25	0	6	2	0	1	2
C.I.P.	1	8	1	1	2	0	1	0	2
Coast	0	12	38	0	2	7	0	0	3
Crown	7	15	3	0	5	1	1	1	1
S.D. & L.	5	5	6	2	2	1	0	0	1
Other	1	4	1	0	0	0	0	0	1

13. Salesman's visits total:

	<u>Weekly</u>	<u>Bi-Weekly</u>	<u>Monthly</u>	<u>Other</u>	<u>More</u>	<u>Less</u>
B.E.	36	12	8	14	0	6
C.I.P.	5	1	1	10	0	5
Coast	26	7	12	15	0	7
Crown	13	7	5	6	1	3
S.D.&L.	7	5	7	7	0	5
Other	0	1	3	2	0	0

14. Salesman's visits by group:

	<u>1-15</u>				<u>15-49</u>				<u>50+</u>			
	<u>W</u>	<u>B</u>	<u>M</u>	<u>O</u>	<u>W</u>	<u>B</u>	<u>M</u>	<u>O</u>	<u>W</u>	<u>B</u>	<u>M</u>	<u>O</u>
B.E.	29	10	8	12	6	2	0	0	1	0	0	2
C.I.P.	4	1	1	5	0	0	0	3	1	0	0	2
Coast	25	6	11	11	0	0	1	3	1	1	0	1
Crown	9	6	4	2	3	1	1	2	1	0	0	2
S.D.&L.	5	2	5	6	1	3	2	0	1	0	0	1
Other	0	1	3	1	0	0	0	0	0	0	0	1

15. Service from salesman total:

	<u>Poor</u>	<u>Good</u>	<u>Excellent</u>
B.E.	4	30	33
C.I.P.	3	6	6
Coast	2	21	42
Crown	7	14	10
S.D.&L.	7	8	5
Other	0	1	2

16. Service from salesman by group:

	<u>1-15</u>			<u>15-49</u>			<u>50+</u>		
	<u>P</u>	<u>G</u>	<u>E</u>	<u>P</u>	<u>G</u>	<u>E</u>	<u>P</u>	<u>G</u>	<u>E</u>
B.E.	1	27	26	3	2	5	0	1	2
C.I.P.	1	5	3	1	1	1	1	0	2
Coast	2	18	34	0	3	5	0	0	3
Crown	6	11	6	0	2	3	1	1	1
S.D.&L.	4	7	2	2	1	3	1	0	0
Other	0	1	1	0	0	0	0	0	1

LITERATURE CITED

1. SCHERER, F.M., Industrial Pricing: Theory and Evidence,
Rand McNally, Chicago, 1970 page 3
2. CHAMBERLIN, E.H., The Theory of Monopolistic Competition,
Wiley, New York, 1970, page 56
3. SCHERER, F.M., op. cit., page 3
4. KOCH, J.V., Industrial Organizations and Prices,
Prentice Hall, New Jersey, 1974, page 267
5. KOCH, J.V., op. cit., page 297
6. KOCH, J.V., op. cit., page 299
7. KOCH, J.V., op. cit., page 299
8. BAIN, J.S., Industrial Organization,
Wiley, New York, 1912, page 116
9. BAIN, J.S., op. cit., page 189
10. RAGAZZI, Direct Foreign Investment,
I.M.F. Papers
11. KAYSEN, C. and TURNER, D.F., Antitrust Policy, an Economic
and Legal Analysis, Harvard University Press, Cambridge,
1959, page 44
12. KAYSEN, C. and TURNER, D.F., op. cit., page 133

BIBLIOGRAPHY

- ARMENTANE, D.T., Ph. D., The Myths of Antitrust - Economic Theory and Legal Cases, Arlington House, New Rochelle, New York, 1972
- BARLOW, B., "Results and Observations of Cost Analysis of The Vancouver Branch", Unpublished Report, August 11, 1975
- COLLINGE, John, The Law Relating To The Control of Competition, Restrictive Trade Practices and Monopolies in New Zealand - An inquiry into the protection of public and private interests in the sphere of competitive trading, Sweet and Maxwell (N.Z.) Ltd., Wellington, 1969
- DIRLAM, Joel B. and KAHN, Alfred E., Fair Competition - The Law and Economics of Antitrust Policy, Cornell University Press, Ithaca, New York, 1954
- THE FINANCIAL POST: Survey of Industrials 1974, Volume I & II, MacLean Hunter, Toronto, 1974
- THE FINANCIAL POST: Survey of Industrials 1975, Volume I & II, MacLean Hunter, Toronto, 1975
- GOSSE, Richard, The Law on Competition in Canada, The Carswell Company Limited, Toronto, 1962
- GREY, H., Bill C-227: Proposal for a New Competition Policy For Canada, Information Canada, 1973
- HALL, Ford P., Government and Business, McGraw-Hill Book Company, Inc., 1959
- HAMILTON, B.M., Survey of Markets 1974/75, The Financial Post, MacLean Hunter, Toronto, 1974
- KAYSEN, Carl and TURNER, Donald F., Antitrust Policy - an economic and legal analysis, Harvard University Press, Cambridge, 1959
- KILGOUR, David G., Cases and Materials on Unfair and Restrictive Trade Practices, University of Toronto Press, 1962
- LAFONTAINE, G.H., Dictionary of Terms Used in the Paper, Printing and Graphic Industries, Howard Smith Paper Mills 1948
- NELSON, R.C., "Touring Through The Time Tunnel" - address given by Vice-President, Crown Zellerbach, delivered at Fine Paper Mills and Merchants Meeting, Monday, September 16, 1974, mimeographed, available from Canadian Paper Trades Association.

- ROWLEY, Charles K., Antitrust and Economic Efficiency, Macmillan 1973
- SHEPHERD, William G., Market Power and Economic Welfare - an introduction, Random House, New York, 1970
- SICHEL, Werner, Antitrust Policy and Economic Welfare, Lectures given at Western Michigan University under the Sponsorship of the Department of Economics, Winter Semester, 1970, a publication of the Bureau of Business Research, Graduate School of Business Administration, The University of Michigan, Ann Arbor, Mich., 1970
- SINGER, Eugene M., Antitrust Economics - Selected Legal Cases and Economic Models, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1968
- SKEOCH, L.A., Restrictive Trade Practices in Canada - Selected Readings, McClelland & Stewart Limited, Toronto/Montreal 1966
- STELZER, Irwin M., Ph.D., Selected Antitrust Cases - Landmark Decisions, Richard D. Irwin, Inc., Homewood, Ill., 1966
- STOCKING, George W. and WATKINS, Myron W., Cartels or Competition - The Economics of International Controls by Business and Government, The Twentieth Century Fund, New York, 1958
- STOCKING, George W., Workable Competition and Antitrust Policy, Vanderbilt University Press, Nashville, 1966
- SUMMERS, S., North Jersey Graphic Communications Group Proceedings 1973, Printing Impressions, Philadelphia, 1973
- THORELLI, Hans B., The Federal Antitrust Policy, The Johns Hopkins Press, Baltimore, 1955
- WALENIUS, R., Coast Paper uses Mini-computer for fast, vital Business Data, Canadian Printer and Publisher, McGraw-Hill, August 1975