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Department of Regional Economic Expansion

Report on Options Facing the
Canadian Printing and Writing
Paper Industry

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EXECUTIVE SUMMARY AND CONCLUSIONS

BACKGROUND AND OBJECTIVES

This overview study of the printing and writing paper industry for the Department of Regional Economic Expansion was part of an overall examination of the strategic issues facing the Canadian pulp and paper industry. The study was aimed at identifying these issues and options through a broad analysis of the strengths and weaknesses of the industry (principally in the North American context).

MAJOR MARKETING CHARACTERISTICS

Demand and Operating Rates

Canadian demand for printing and writing paper has expanded at the fairly healthy rate of 5.8% per annum over the decade and stood at 770,000 tons in 1975 (based on a three-year average). Production operating rates trended negatively over the period to a low of 78% in 1973, followed by the disruptive market conditions of 1974 through 1976.

This latter period was characterised by extraordinary demand (above that actually required by end-users) and the attendant large accumulation of inventories. High inventories and a further weakening of demand in 1975 resulted in a serious collapse in demand (from the mills) of 23%. Operating rates were reduced to 59% of capacity mainly as a result of the weakness in demand (but also on account of industry-wide strikes).

Regional Balance

The poor operating rates experienced over the decade are actually significantly a function of foreign trade, especially exports. This is evident by the fact that the national regional balance (domestic demand over capacity) has remained below 70% and has also trended negatively over the decade. This indicates an increasing dependence upon exports to maintain operating rates - a critical factor in productivity and profitability. In 1975, Canadian demand amounted to less than 60% of the industry's capacity.

Product Segments

Writing and related papers are the largest segment of the industry's market, making up 57% of the total. Example grades include bonds, writing's, duplicator, index and tag paper.

Printing papers have three major classifications: coated paper, uncoated groundwood, and book papers. Historically, the two main categories of printing and writing papers have grown at about equal rates.

Importation Trends

The import share of the Canadian market remained between 6% to 8% of demand until the early 1970's when they began increasing at a rate of over 30% per annum through 1975. The period of rapid increase coincided with the 10% upward valuation of the Canadian dollar from 1970 to 1972. This, combined with the lagged effect of the (1969) reduction of import tariffs from 25% to 12.5%, provided the incentive for foreign producers to pursue the high Canadian prices. The higher Canadian prices became a more potent incentive between 1971-1974 when domestic prices increased by 52% compared to the United States' increases of 30% over the same period.

In 1975, when Canadian prices continued rising and the local industry took substantial strike-related downtime (operating rates were down to 59%) 28% or 186,000 tons of the local market was lost to imports.

Based on a three-year average, i.e. between 1974-1976, imports mainly from the United States accounted for 24% of printing and writing paper consumption, nearly all of which was in product segments other than groundwood uncoated.

Exportation Trends

The Canadian printing and writing paper industry is significantly dependent upon exports to maintain operating rates, particularly in printing paper. Exports, as a percentage of production, rose from 24% in 1965 to 37% a decade later.

Nearly 60% of exports are in uncoated groundwood papers; book papers account for a further 25% and the writing papers the balance. Three-quarters of these exports are to the United States (in 1975) and together with the United Kingdom, South Africa, and Australia, have made up over 20% of exports in the previous decade.

Canada has a good stronghold on 13% of the United States' uncoated groundwood market and could increase its share. The export potential of the other traditional target markets are not encouraging and Canada may have to look for new markets in developing regions.

The United States' Market Comparison

The United States' printing and writing paper market is more than 15 times the size of the Canadian market but has expanded at 1% or 2% below that of the latter over the 1965-1975 decade. The

difference in size of the market is, naturally, partly attributable to the higher population (i.e. ten times) but the remainder to the large magazine export industry that exists there.

Unlike the Canadian situation, the U.S. paper industry capacity matches demand (demand to capacity has historically been over 90%) and foreign trade does not have a significant influence on the health of the industry. Indeed, exports have constituted less than 1% of the operating rate.

The size of the segments of the market have assisted the industry in maintaining long production runs which have in turn contributed to the higher industry operating rates in the United States compared to Canada.

Note

Figures 1 through 3, immediately following this Executive Summary, broadly describe the trends in capacity, demand, imports, exports and balance of the Canadian and United States' printing and writing market.

THE CANADIAN PRODUCERS

The Canadian printing and writing paper industry is dominated by three producers - Domtar, Rolland, and Abitibi. Domtar is the market leader, having the greatest capacity and offering the widest range of products. The other producers - E.B. Eddy, Reed, and MacMillan-Bloedel - do not have a strong presence in the market (even though Eddy has an approximate 12% share of capacity).

The industry is highly concentrated with Domtar, Rolland, and Abitibi controlling approximately 55% of capacity. Rolland is the only non-integrated producer in Eastern Canada, although Domtar, Abitibi and Eddy also operate non-integrated mills. MacMillan-Bloedel is non-integrated. All companies have a domestic market orientation. Domtar is the only significant exporter of printing and writing papers.

PRICE AND OTHER
COMPETITIVE FACTORS

Since the major portion of Canadian foreign trade in printing and writing paper is with the United States, Canada's price competitiveness is, therefore, an important factor determining that trade (although is by no means the only factor).

Price Comparisons

Direct price comparisons between Canada and the United States are not possible due to the lack of data. However (currency equivalent) value of unit shipments as a proxy for price do help explain the direction of trade between the two countries.

United States' unit values of uncoated groundwoods have tended to be higher than in Canada. In the years of Canadian export growth in this segment, i.e. between 1969 and 1971, unit values were about 8% higher there. Canadian book paper unit values here tended to be about 18% higher than the United States historically, while United States' writing paper unit values have exceeded Canadian values by about the same proportion. When the situation reversed in 1975 for writing papers, the United States made a rapid 20% inroad into the Canadian segment.

Analysis of price indexes shows that Canadian prices escalated at the much higher rate of 10.5% per annum between 1970-75, compared to the U.S. rate of 6.7% per annum.

Confidential ITC cost studies have apparently shown that Canadian fine paper production cost is significantly higher than in the United States.

Combined Tariffs, Currency Exchange
and Price Difference Effects

Our analysis of the combined effect of import duties, currency exchange rate and price differentials between Canada and the United States showed that the price differences (measured in local currency) was the single most potent factor influencing foreign trade in uncoated groundwoods and book papers.

By 1977, the three variables afforded Canadian groundwood paper producers a substantial (40%) advantage over American producers in the United States' market, while affording as much home protection for the Canadian producer. It is, therefore, not surprising that it is within this segment that Canada has made the most gains in the U.S. market.

In book papers, Canadian producers face a great disadvantage in the United States' book paper market mainly because of the lower U.S. prices. U.S. producers have capitalized on the slight advantage they have in the Canadian market.

The printing and writing papers' segment is most sensitive to tariff and exchange rates since price differences in local currencies have not been that much different between Canada and the United States. The 15% tariff and 10% currency disadvantage to U.S. importers provides most of the protection for the industry. On the other hand, Canada now has a more favoured position towards the U.S. market given the lower Canadian dollar and duty of only 7.5%.

THE INDUSTRY'S KEY
STRENGTHS AND WEAKNESSES

Strengths
and Opportunities

The major strength of the industry lies in its domestic market which is:

- growing at a reasonable rate
- protected, in the less competitive grades, by import tariffs (and lately by a favourable exchange rate).

Historically, the industry has experienced success in the export market, particularly in the United States groundwood segment.

With the lower Canadian dollar, we see the added protection affording the industry time to organize for greater penetration of its home market. The industry could attempt to regain some of the 25% share of the home market lost to imports. This may require some sacrifices in short-term return but could reap benefits from cost reductions obtained from longer production runs.

There may also be scope for rationalization either through a natural process, or by government assistance to assist in this process.

Canada also faces the distinct opportunity of further penetrating the United States groundwood paper market. It is clear, from the historic performance of the industry, in that 13% of the segment is already held by Canada, that further inroads may be possible. This is particularly so in view of the lack of forecasted expansion in the United States in a market growing at about 3.3% per annum.

Export losses in some of the other traditional markets - the United Kingdom, South Africa and Australia - may be made up by exports to other developing nations. The printing and writing industry is often the last to be considered by these nations so that in the current and medium term, it could offer potential. (This aspect was not specifically researched as part of this study however.)

Weaknesses and Threats

Significant weaknesses of the industry include:

- A low regional/national balance and therefore heavy reliance on exports to maintain operating rates.
- Poor industry operating rate historically and projected.
- Apparently higher cost through short runs (higher downtime), labour, material, taxes, and environmental control, compared to the United States.
- Increased price competition from imports from the United States despite the considerable protection afforded by import duties and the lower Canadian dollar.

The major threat facing the industry appears to be in foreign trade. In exports, Canada could lose ground in the writing and related segment of the United States where there appears to be a continuing excess capacity situation. However, since this is the smaller portion of exports it may not be that serious.

However, much of Canada's exports losses in other areas, particularly South Africa and the United Kingdom in the early to mid-70's, may not be regained.

On the import side, Canada is faced with the possibility of a reduction in tariffs on book and writing papers. Such reduction could tip the competitive scales more in favour of importers, possibly accelerating imports. This would apply most to book papers but is also dependent upon the other uncontrollable - the exchange rate.

The other threat to the industry is the reportedly higher cost of production; this is obviously a prime factor in determining competitiveness. A continuing poor cost competitiveness situation would seriously threaten the industry in the long term, both from the point of view of loss of share in the domestic market, and also in the loss of the export potential on which the industry relies so heavily.

THE STRATEGIC OPTIONS AVAILABLE

In this section, we discuss some of the more important options open to the industry. None of them are mutually exclusive, and will be discussed in general terms since they will need considerably more study before they could be evaluated.

Passive Option

Maintenance of the Status Quo

The industry has some breathing space in view of the weak Canadian dollar and the projected improvement in the printing and writing foreign trade balance. This could maintain the industry at least

in its current state, if not considerably improved, for three or four years. This is provided that the supply-demand situation does not radically change during this period (for example by the entry of new competition).

In the status quo case, we expect to see improvements in exports to the United States (notably in groundwoods) and even to the offshore nations where currencies have strengthened significantly against the Canadian dollar.

Imports to Canada will likely moderately subside (provided inflationary pressures on Canadian output will improve against the U.S. yardstick).

With demand returning to more normal levels, and production possibly increasing at an even faster rate than demand, operating rates should improve, and with it, hopefully, profits.

In the longer range, we could foresee several plants running into trouble through lack of sufficient profitability to maintain viable operations. This will likely be a reality if the Canadian dollar strengthens and/or tariffs are significantly reduced from the book and writing imports.

Offensive Strategies

Exploit the Competitive Advantage in Printing Groundwood

Canada has historically been very competitive in groundwood printing papers having captured a 13% share of the U.S. market by 1975.

With increasing dependence of the United States on Canada for this grade of paper, it appears a natural product for Canadian producers.

Unfortunately, the groundwood segment of the existing printing and writing industry could soon have capacity limitations. Future required production to maintain penetration of the U.S. market could be met by the newsprint industry. However, consideration could be given to converting some of the (poorly utilized) book and writing capacity although we suspect that the cost of this would be prohibitive.

Development of Specialty Paper Markets

The movement into the high value specialty papers (such as technical, rag, filter and other thin papers) could prove beneficial to the industry burdened with high production costs. Provided domestic and foreign markets are proven to have the potential, there is scope for some rationalization of the industry. This would be a significant strategic move possibly requiring considerable reorganization of the marketing thrust of present producers.

Exploit Potential in Non-Traditional Markets

The printing and writing paper industry is usually one of the last to be self-sufficient in developing nations. Some emphasis could be placed on investigating Canada's competitiveness in these non-traditional markets.

Defensive Strategies

Reduction in Canadian Capacity

Canadian capacity far exceeds national demand for printing and writing grades of paper. To lessen the industry's dependence on

exports for maintaining operating rates, a reduction in capacity may be desirable.

Improved operating rates are the key to the industry's long-term health and, while mill closures are distasteful in many respects, they should still be regarded as a possible option.

Restricting Imports

The maintenance of high import duties, particularly for the writing and related grades, and/or other import restrictions, would provide some continued protection for selected segments of the industry.

In view of the current atmosphere where world tariffs and other international trade restrictions are being reduced, it would appear a less feasible option.

While a reduction in tariffs may suppress some of the controllable facets of inflationary pressures on the industry, such as labour, a positive factor in an industry not competitive with its major trading partner, it may also hasten the exit of the weaker mills.

Maintenance of high tariff protection, in our view, is likely to assist the industry best if it is done in parallel with positive improvements to efficiency. Thus, tariff barrier may not be effective as a long-range defensive strategy.

RATIONALIZATION OF THE INDUSTRY BY AGREEMENT

Most of the above options represent a degree of rationalization or specialization. Consideration could be given to working out an agreed strategy for rationalization between government and industry.

Such a strategy would aim at providing each producer with the necessary instruments to specialize in a particular product segment thus providing sufficient domestic demand to operate efficiently.

This option would require the cooperation of industry (possibly under the threat of reduced tariffs) and a government guarantee of freedom from prosecution under anti-trust laws.

FIGURE I

CANADIAN PRINTING & WRITING PAPER MARKET
CAPACITY, DEMAND, IMPORTS & EXPORTS

(1965 - 1977)

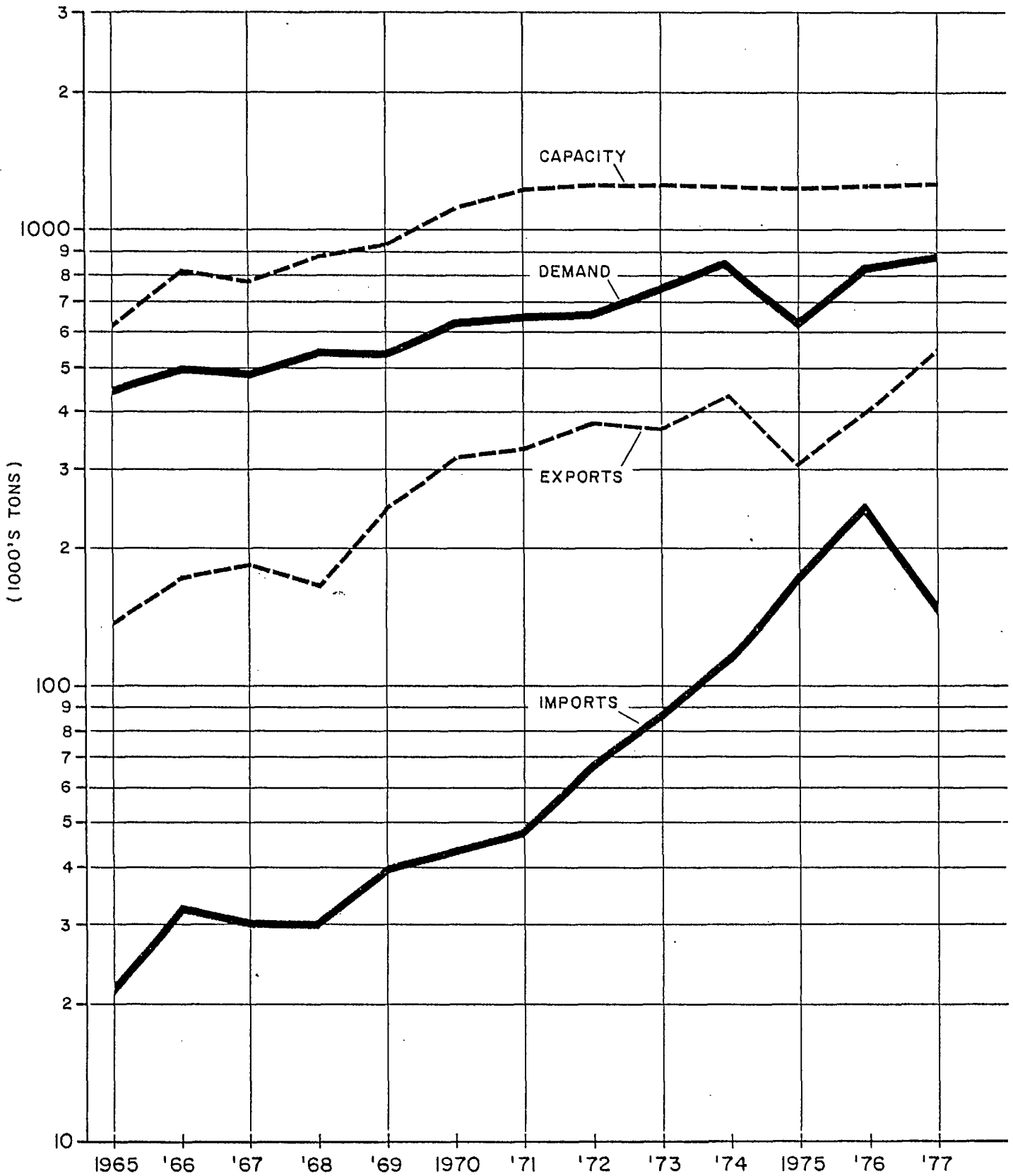


FIGURE 2

UNITED STATES PRINTING & WRITING PAPER MARKET
CAPACITY, DEMAND, IMPORTS & EXPORTS

(1965-1977)

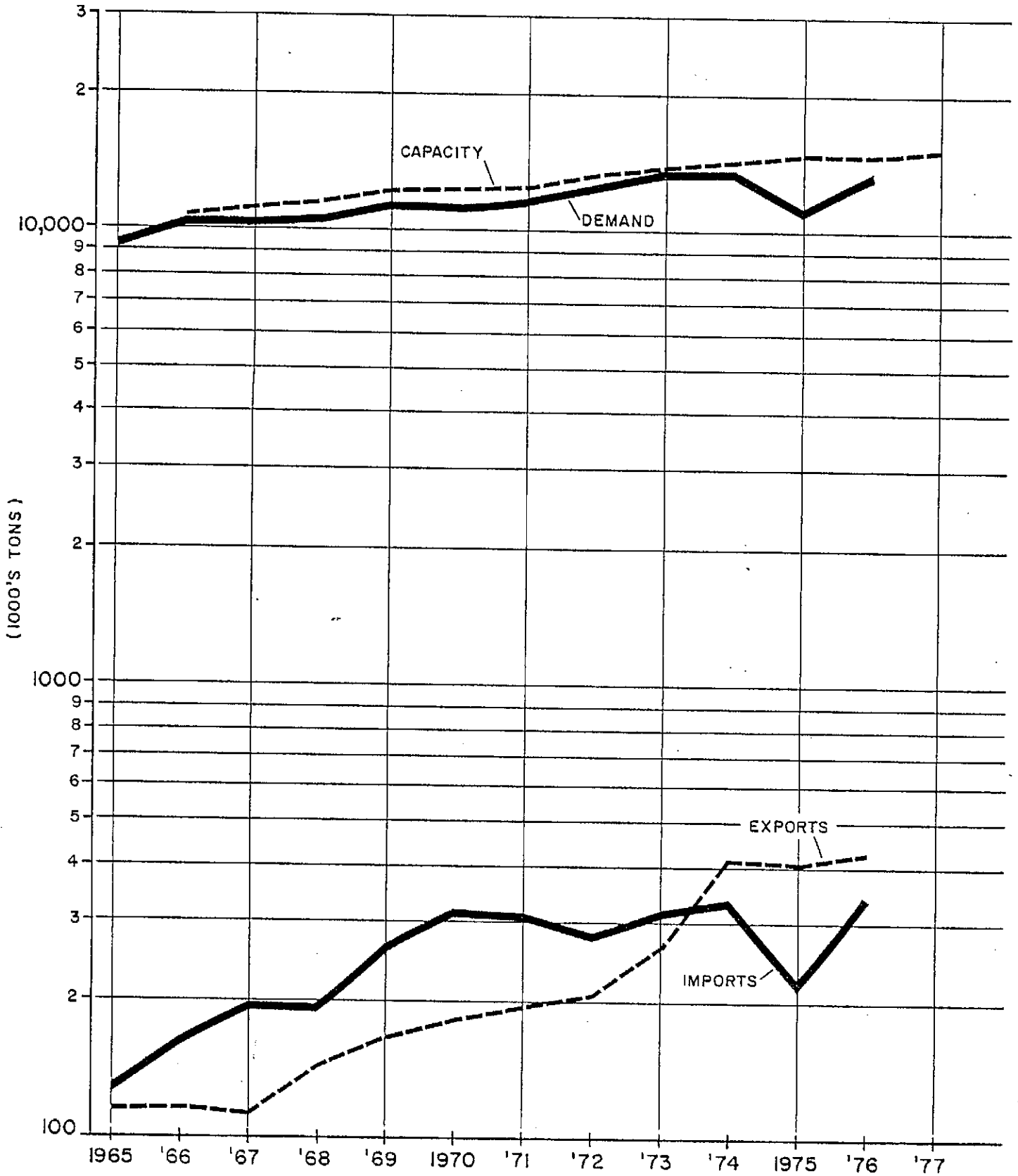
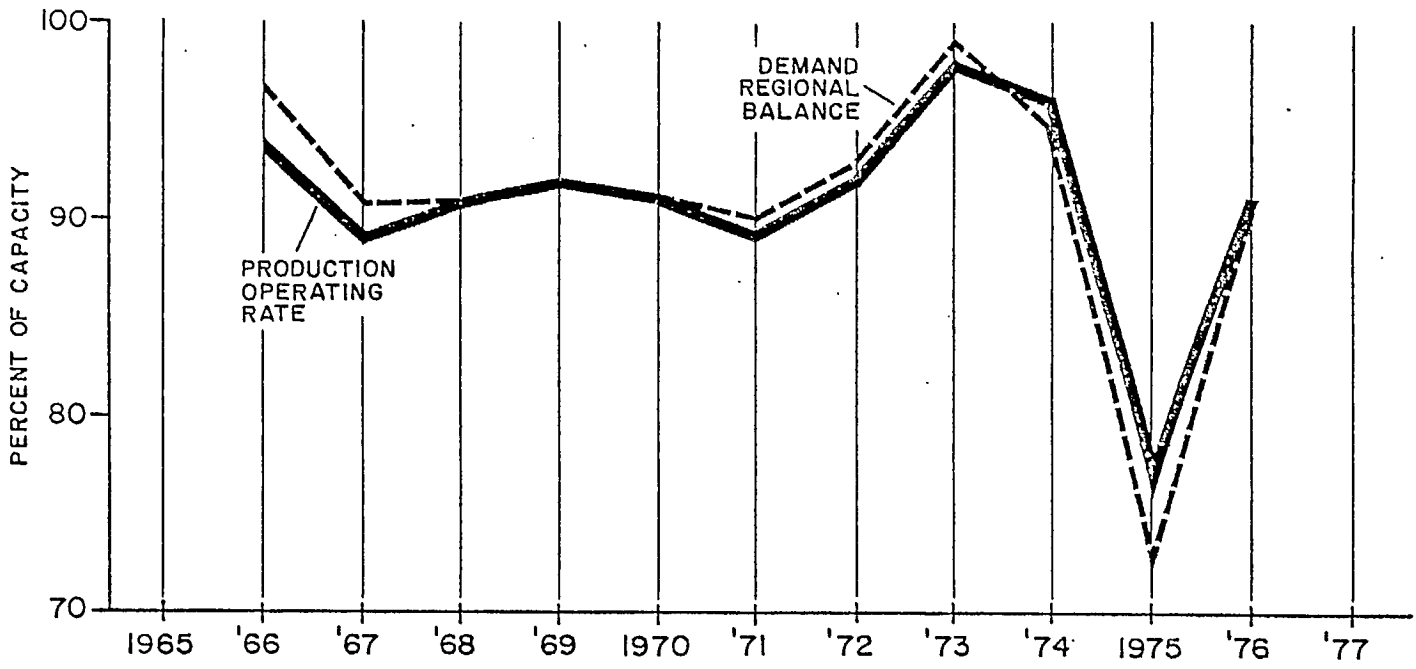


FIGURE 3

UNITED STATES BALANCE
PRINTING & WRITING PAPER MARKET



CANADA BALANCE
PRINTING & WRITING PAPER MARKET

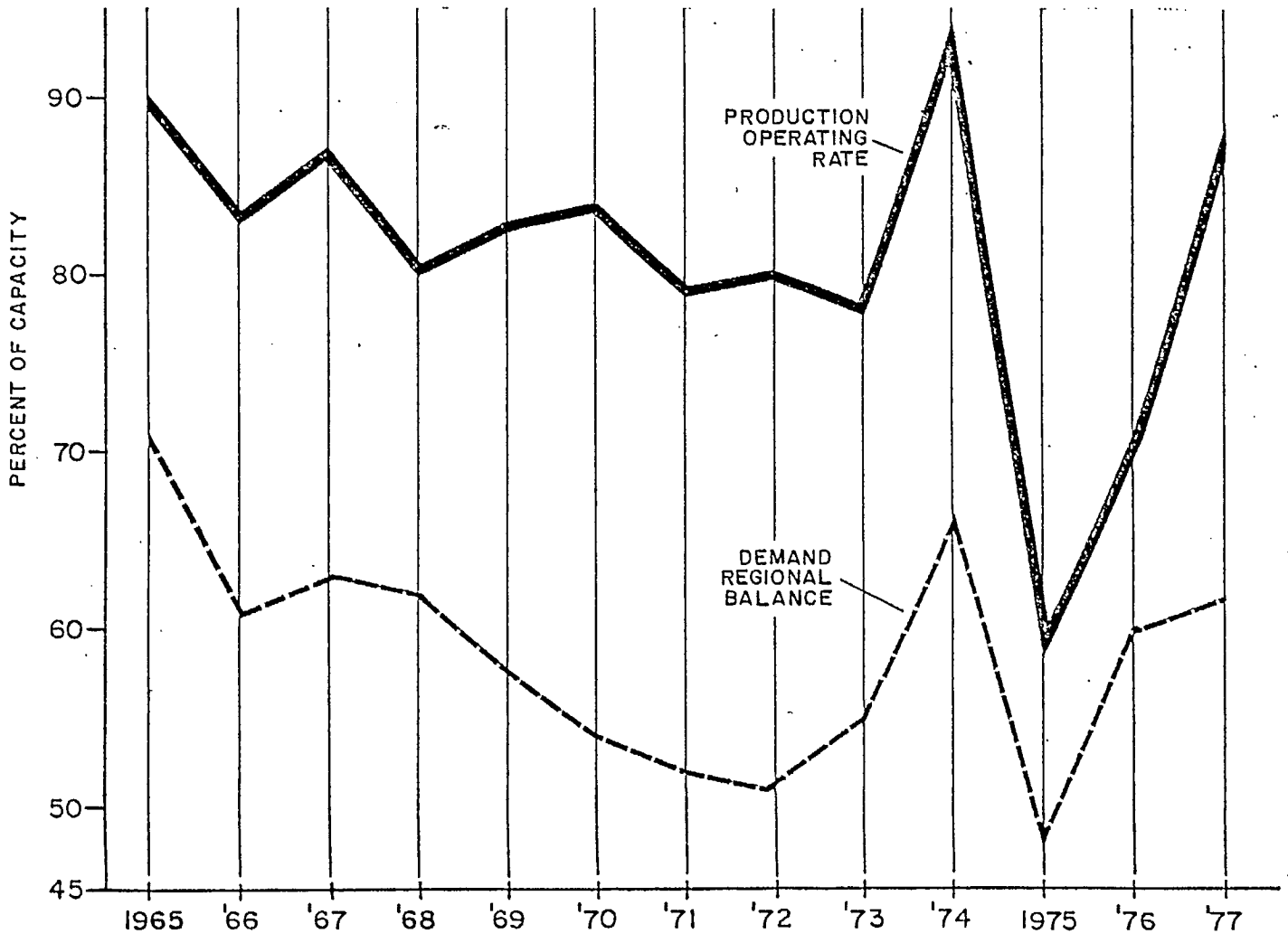


EXHIBIT 1
PRINTING AND WRITING PAPERS
GRADE STRUCTURE

PRINTING AND WRITING PAPERS

PRINTING PAPERS

Uncoated Groundwoods

- Publishing and printing
- Converting

Coated papers

Uncoated Book

- M.F., E.F., and super calendered
- offset
- envelope
- others

WRITING AND RELATED

Writing papers (chemical wood pulp)

- Bond and Writing
- Form Bond
- Ledger
- Mimeograph
- Duplicator
- Manifold
- Papeteries and Wedding
- Opaque Circular
- Other

OTHER FINE PAPERS

- Cotton Fibre Papers
 - Bond and Writing
 - Other Business
 - Technical and Other
- Cover and Text Papers
- Thin Papers ex. cigarette
- Bleached Bristols
 - Tabulating Index
 - Tag
 - File Folder
 - Index Bristol
 - Printing Bristol
 - Postcard
 - Coated Bristol

OPTIONS AVAILABLE TO THE CANADIAN
PRINTING AND WRITING PAPER INDUSTRY

INTRODUCTION

This study of the Canadian printing and writing industry was commissioned by the Department of Regional Economic Expansion as part of its study of the Canadian pulp and paper industry. The study is an initial examination of the structure of the printing and writing paper industry and provides the Department with a broad documentation of options available to the industry for use in government policy formulation. Much more work will be required before the options identified in this report can be fully evaluated.

Objectives

The objectives of this study are threefold:

1. To broadly examine the structure of the printing and writing paper industry in Canada in terms of products, markets, distribution, supply/demand considerations and export opportunities.
2. To determine the strategic issues facing the industry in terms of opportunities and threats.
3. To identify the basic options available to the industry and the actions required to evaluate and assess the viability of these options.

Methodology

For the purposes of analysis the definition of the fine paper industry was expanded to include all printing and writing grades. This was considered to be a more meaningful definition of the industry in terms of both products and threats and opportunities. Exhibit 1, opposite, lists the paper grades examined in this report.

The definition used conforms to the American Paper Institute classification scheme. This method of classification is more comprehensive than the Canadian system. The Canadian data was recast to bring it into line with the API system to provide comparative data. During the course of the analysis considerable difficulties were encountered in accomplishing this task. The end result, however, is felt to be more reflective of the state of the Canadian market than any other published data. The statistical analysis was supplemented with personal and telephone interviews of printers and publishers, trade associations, securities analysts, merchants, and converters as well as an extensive literature search.

All data are expressed in thousands of short tons unless otherwise noted. Tables showing data for 1965, 1970 and 1975 only are based on three year averages, i.e. 1965 is the average of 1964, 1965 and 1966. This was done to eliminate the year-to-year fluctuations and anomalies in the data.

Limitations

While it is felt that the data are accurate, none of the data were confirmed by the producers concerned nor by the Canadian Pulp and Paper Association. This was done at the request of the Department of Regional Economic Expansion.

BRIEF HISTORY OF THE PRINTING
AND WRITING PAPER INDUSTRY

The printing and writing paper industry is defined as that sector producing printing and groundwood specialities and book and writing papers.

The manufacture of paper has been carried on in Canada since 1803 when the first mill was established at St. Andrews, Quebec. Some of the mills of the fine paper group had their origins in the early period of Canadian paper manufacture before wood-pulp became the principal raw material. The manufacture of paper on the site of the Domtar's Don Valley mill was first undertaken about 1826 when a paper mill for the production of hand-made paper was established there. This mill had the distinction of being the first in Canada to install a paper machine which is reported to have been put into operation about 1832. Paper-making at Georgetown, Ontario, where Abibiti Paper Limited now operates a coating mill, was begun about 1852 by the Barber brothers. The first chemical wood-pulp mill in Canada was erected at Windsor, Quebec, in 1864, where Domtar now operates a paper mill, and the first groundwood pulp mill was put into operation a few years later at the Alex. Buntin plant at Valleyfield, Quebec. The use of wood-pulp for the manufacture of paper in Canada thus had its start about the time of Confederation and the pulp and paper industry developed rapidly from then on with the major development taking place after the turn of the century and particularly after the stimulus of demands occasioned by the First World War.

Paper merchants played an active role in the development of paper-making in Canada. The early history of the older paper firms reveals a number of principals who were also the leading figures in paper manufacture. In some cases, such as that of the Barber brothers,

entrance into the paper merchant business came after the establishment of a paper mill. Others, such as J.B. Rolland, took up the manufacture of paper after experience in the merchandising of paper.

During the development of the paper industry in Canada, customs duties have generally applied to the main classes of papers imported into Canada. A brief presented on behalf of the paper mills in 1949 stated:

"...It is certain, for instance, that if it were not for the Canadian tariff we would not have the kind of paper industry that we now have - viz. one that is developed and built to supply a comparatively limited home market, where each company is equipped to make many different grades in comparatively small quantities. Similarly, if it were not for the prohibitive U.S. tariff the pattern of fine paper production might very well have become similar to that of newsprint, where a mill would produce one or two grades of paper in large quantities with the pattern of distribution being one of serving a reduced volume of domestic needs and a substantially high volume of exports - principally to the U.S.

The essential fact in the foregoing is that the U.S. and the Canadian tariffs together determine the pattern of development of these companies into concerns designed to serve relatively small Canadian needs for a wide range of products, which in turn has caused the industry to face the problems of variety production rather than those of mass production. Exports have been a secondary consideration and have been confined almost entirely to British Empire countries where Canada has enjoyed the benefits of preferential tariffs."

The dual tariff structure, which both limited the access of U.S. paper into Canada and Canadian paper into the U.S., apparently led the Canadian producers to "organize" the Canadian market once the pre-World War II consolidation phase was achieved. Apparently these arrangements made eminent sense from the company's point of view:

- they had little opportunity for market expansion outside Canada
- the Canadian market was relatively small
- some pretense of competition had to be maintained in the system (i.e. in the sense that rationalization could hardly be carried further).

These arrangements, however, attracted the attention of the authorities in charge of the Combines Investigation Act and in 1948 an inquiry was launched to determine whether "a combine existed in connection with the manufacture, distribution and sale of fine papers in Canada".

The conclusions the Commission arrived at were that the mills had entered into and operated under arrangements designed to eliminate or lessen competition in the distribution and sale of their principal lines of fine papers. These arrangements took the form, in part, of agreed uniform prices and in the case of certain large individual accounts, agreements to respect each other's customers or in some cases not to solicit another's customer on a price competition basis.

Despite these substantial changes and the ensuing condemnations, the industry apparently continued to maintain rather "free communications" among its members and it is doubtful that the inter-

vention of the Commission led to significant changes in the behavior of the fine paper industry.

Overall the 1950's were a period of moderate market growth (about 3.6% a year); this limited expansion however hardly appears to have affected the various producers profits, which remained at a fairly substantial level (above 10% in terms of ROE).

The late 50's however saw the development of several changes:

- a fairly significant change in the rate of market growth which virtually doubled between the 1950's and the 1960's (from 3.6% to 6.5%)
- the acquisition of the Howard Smith group by Domtar (a chemical producer) which was in the process of diversifying into pulp and paper
- some preliminary discussions of changes to be brought to the Canadian tariff structure in relation to the GATT negotiations.

The response of the firms to this trend was two-fold:

- o First, they started installing new paper machines (8 large new paper machines were installed between 1955 and 1968) both to respond to growing internal demand and eventually to maintain some export business (in 1962 Domtar bought a fine paper mill in the U.K., which at that time admitted Canadian fine paper duty-free).

o Second, they entered into some kind of specialization. For example:

- Rolland took the lead on number 7 bond
- Domtar pushed book paper
- Eddy concentrated on register bond.

To a large extent these moves appear to have been initiated with the perspective of a tariff reduction in mind.

To the four existing Eastern Producers (Domtar, Rolland, Eddy, Abitibi), Reed Paper added itself in the mid sixties. This company was having problems disposing of its market pulp and found it convenient to set up an old newsprint machine at its pulp mill. Apparently in doing so it took a much more focused approach than its competitors and at least during a few years tried to concentrate on a very limited number of grades. In a rather similar way Domtar partly converted one of its obsolete kraft paper mills to fine papers. As a result of these various moves the industry total capacity increased by a least 33% between 1960 and 1965.

In spite of this rapid increase, however, no harmful effects were apparently felt by the producers; Rolland for example maintained ROE's in the vicinity of 14% for the whole 1960-1965 period.

The late 60's on the other hand brought some difficulties for the industry:

- o In January 1968 the GATT Agreements started to be implemented. According to the original scheme, Canada was to lower its fine paper tariff from 22.5 to 15% for papers

other than printing, which was 12.5% whereas at the same time the U.S. tariff was to drop approximately 3 to 4%.

- o In June 1969, the Canadian Minister of Finance, within his anti inflation campaign, decided to immediately enforce the lower tariffs (i.e. did away with the five year adaptation period).
- o Production costs (wood, labour) started to increase significantly for the whole pulp and paper industry.
- o The Canadian dollar started drifting upward bringing the exchange rate with the U.S. dollar back to parity in early 1970 and to \$1.02 in 1971.

The Eastern Canadian firms, faced with less protection from U.S. competition, undertook three types of measures:

- o With the exception of Eddy, they started integrating forward by buying paper merchants; Abitibi initiated the move in 1967 by buying Inter-City, a paper merchant which handled about 10% of its business, and was rapidly imitated by Rolland, and Domtar which acquired several paper merchants during the 1969-1971 period.
- o They lowered their prices to avoid the creation of a price umbrella for the American producers.
- o Finally Domtar and Eddy made some efforts to penetrate the U.S. Market. Domtar got rapidly frustrated in its efforts, as U.S. competitors pressed dumping charges against it.

The institution of new tariffs in 1969 had the effect of landing U.S. paper products in Canada at lower prices than prevailing Canadian prices. Canadian manufacturers believed that this tariff adjustment would do harm to the industry, and that they would be forced to lower prices so much as to lose money. It was estimated that the differences in run size for example would result in a 10-15 per cent disadvantage in Canadian manufacturing costs. This productivity gap had not been fully reflected in Canadian wage rates which were at that time held close to those of U.S. fine paper producers.

For the mills manufacturing printing and writing papers, 1969 was an difficult year. During the first half of the year, the fine paper manufacturers were in the process of adjusting, on a planned basis to the five-year schedule of tariff reductions which had been announced by the Canadian government following the 1967 GATT settlements. In June, however when Canada unexpectedly reduced its tariffs to the levels previously planned for 1972, there was naturally no compensating adjustment made in the tariffs of other nations, including the United States.

The effect on the paper mills was to expose them to greater price competition. This apparently reduced their earnings and weakened their ability to make the adjustments on which this future depended.

In an effort to help the industry adjust to the new tariff structure the Ministry of Trade and Commerce sponsored discussions with the industry regarding the allocation of the bulkiest paper grades. This attempt at encouraging specialization of the companies was aborted when the Ministry of Corporate and Consumer affairs refused any immunity from prosecution to the firms involved.

Imports showed some increase, especially in the more profitable grades during this period. Exports showed less growth in 1971, partly in the aftermath of the U.S. import surcharge of 10 per cent and partly because of a U.S. reclassification of register stock for duty purposes, which sharply increased the duty on this product. In addition, the upward movement of the Canadian dollar, at par with the U.S. in early 1972, and rising in 1973, reduced any competitive advantage it was giving this industry.

The entry of the United Kingdom into the Common Market in January of 1973 affected printing and writing paper shipments to that country. In the future the EEC fine paper producers are likely to be the major suppliers of their own needs with the Scandinavians continuing as incremental suppliers. The most important constraint for increasing market access to EEC countries is the trade agreement concluded in 1974 by the Scandinavians, giving them a tariff advantage over Canada that will gradually increase until it reaches a maximum of 12 per cent in 1984. Unless this advantage can be eliminated by subsequent trade negotiations, Canadian trade there may be damaged.

The industry in Canada was maintaining its share of the domestic market until late in 1974 when a sudden turn in the market took place. In 1973 and early 1974, paper scarcities, threats of shortages and repeated price increases led paper buyers to build inventories. This build-up took place during a period of strong economic activity when real ongoing demand was also buoyant. The inventory build-up under these conditions was not apparent until real demand began easing. With that slowdown, combined with high inventories, the paper markets quickly crumbled leaving producers with much reduced orders. In November of 1974, producers had to take extensive down time, cutting back production from 7-day operations to a 5-day week. These cutbacks were fairly uniform across the industry and the major price increases of 1974 (over 30 per cent) were not eroded despite the weak demand.

Exports of fine paper were also affected in 1974 as a result of customers substituting groundwood printing papers for a high fine paper demand that was unable to meet its supply. What fine paper was produced was required at home, thereby cutting even deeper into the export markets.

Retrospectively, these three years offered a welcome break to the Canadian fine paper industry:

- profits recovered sharply; Rolland's ROE reached 12% in 1973 and 21.03% in 1974
- the mills started discontinuing their least profitable grades and rationalizing their production lines
- operating rates increased to maximum levels (100% in 1973, 99% in 1974).

All this however came to a halt, when the printing and writing paper industry joined the industry wide strikes of 1975-1976. Prior to that occasion, mills had avoided closing simultaneously. In fact, some gentlemen's agreements had evolved among the mills and when one was on strike it could always obtain papers from its competitors to continue supplying its customers. The outcome of the strike was an immediate increase in U.S. imports.

At the end of the strike the Canadian producers had to lower their prices to reduce the beachhead established by the U.S. suppliers on the Canadian market. In doing so they incurred losses during the fiscal year of 1976 (Rolland had a - 11.24% ROE in 1976).

In comparison 1977 provided some relief. The Canadian dollar declined, a slight market growth was achieved and the U.S. producers started retreating. As a result most producers probably increased their profitability significantly.

The early seventies also had permanent effects:

- o Eddy is reported to be in a tight financial situation (in addition to its location problems) the company being located in the middle of Ottawa.
- o Domtar closed one of its most marginal mills, Georgetown, because of cost problems.
- o Rolland started converting its smallest mill to technical and high pressure laminate papers.

SIGNIFICANCE OF THE
CANADIAN INDUSTRY

The printing and writing paper segment of the pulp and paper industry is almost 100% Canadian controlled in terms of production capacity and produces both for the domestic and the export markets.

The Canadian printing and writing paper industry is comprised of six major producers and several other firms producing small amounts of paper considered to be within the printing and writing paper category.

The six principal producers in Canada operate 17 mills and plants and employed over 10,000 people in 1975 (approximately 10% - 12% of the total work force in the Canadian pulp and paper industry). Industry shipments represented 6.9% of total paper and paperboard shipments in 1975 and 12.1% of paper and paperboard sales. Exports represented less than 2% of total industry exports (tons) and less than 2% of export value. In terms of value added and profit contribution, printing and writing paper production is a significant contributor to the financial health of the industry.

Only one producer, Rolland Paper, is exclusively in the fine paper industry. When each company is analyzed in detail, we will see just how important the printing and writing paper segment is relative to the company's total production and sales, as well as the company's major market segments in fine paper.

TABLE 1
NORTH AMERICAN DEMAND FOR
PRINTING AND WRITING PAPERS BY REGION

<u>(M short tons)</u>	<u>North America Consumption</u>	<u>United States</u>	<u>Canada</u>	<u>Canada: U.S.A %</u>
1965	9,790	9,360	440	4.7%
1966	10,860	10,370	490	4.7%
1967	10,700	10,210	490	4.8%
1968	11,130	10,590	540	4.1%
1969	11,840	11,300	540	4.8%
1970	11,690	11,090	600	5.4%
1971	11,910	11,290	620	5.5%
1972	12,950	12,310	640	5.2%
1973	14,180	13,460	720	5.3%
1974	14,230	13,390	840	6.3%
1975	11,420	10,790	630	5.8%
1976	13,890	13,060	830	6.4%
1977	N/A	N/A	860	N/A

Average growth rates p.a. (three year averages)

1965-70	3.8%	3.7%	5.9%
1970-75	2.2%	2.0%	5.5%

Notes:

1. Source: see data sheet 2.
2. Figures independently rounded.

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KEY CHARACTERISTICS OF NORTH AMERICAN MARKET DEMAND

North America Overview

The demand for printing and writing papers increased only marginally, at a rate of 2.2% per annum, from 1970 to 1975 to reach 13,180 M tons by the latter date (based on a three year average). This growth was somewhat lower than the 3.8% of the previous five years; partly on account of the extraordinary low 1975 year, but also due to lessening demand. Factors influencing the long range lower growth are the shift towards non printed media and light weight papers.

Table 1, opposite, shows that the market has more or less sustained growth through the 1965-75 decade, except for the 1974-5 period when "demand" collapsed 25%. Actually, much of this apparent decline was synthetic, resulting from the decumulation of inventories at the merchant and end-user levels. Real demand declined at somewhat lower rates. (To avoid the data distortions of this effect we have used three year averages in our analyses).

Canadian Versus United States Market

Since 1970 the size of the Canadian printing and writing market has averaged 5.7% of the United States; Canadian per capita consumption being lower than consumption in the United States. Whereas the United States market has expanded at the rather mature rate of 2.0% per annum since 1970, the Canadian market remained relatively strong, experiencing a growth of 5.5% per annum over the same period.

The relative strength in the growth rate of the Canadian market is likely to continue and is a positive characteristic for an industry faced with production run and rationalization problems.

TABLE 2
ESTIMATED NORTH AMERICAN DEMAND
CONSUMPTION BY BROAD PRODUCT SEGMENTS
CANADA AND UNITED STATES

(M tons) (Based on three year averages)	1965	1970	1975	1975 % TOTAL	% GROWTH RATES PER ANNUM	
					1965-70	1970-75
<u>NORTH AMERICA</u>	<u>9,790</u>	<u>11,810</u>	<u>13,180</u>	<u>100%</u>	<u>3.8%</u>	<u>2.2%</u>
<u>PRINTING</u>	<u>6,330</u>	<u>7,520</u>	<u>8,030</u>	<u>61.0%</u>	<u>3.5%</u>	<u>1.3%</u>
• Groundwood, Uncoated	N/A	N/A	1,340		N/A	N/A
• Coated Printing	"	"	3,630		"	"
• Book Paper, Uncoated	"	"	3,060		"	"
<u>WRITING AND RELATED</u>	<u>3,460</u>	<u>4,300</u>	<u>5,150</u>	<u>39.0%</u>	<u>4.4%</u>	<u>3.7%</u>
• Writing	N/A	N/A	3,380		N/A	N/A
• Others Fine	"	"	1,770		"	"
- Bristols	"	"	1,210		"	"
<u>CANADA (Estimated)</u>	<u>440</u>	<u>590</u>	<u>770</u>	<u>100%</u>	<u>6.9%</u>	<u>5.5%</u>
<u>PRINTING</u>	<u>190</u>	<u>250</u>	<u>330</u>	<u>42.8%</u>	<u>5.6%</u>	<u>5.7%</u>
• Groundwood, Uncoated	N/A	N/A	E110		N/A	N/A
• Coated Printing	"	"	E70		"	"
• Book Paper, Uncoated	"	"	E150		"	"
<u>WRITING AND PAPER</u>	<u>250</u>	<u>340</u>	<u>440</u>	<u>57.1%</u>	<u>6.3%</u>	<u>5.3%</u>
• Writing	N/A	N/A	E260		N/A	N/A
• Others Fine	"	"	E180		"	"
- Bristols	"	"	E160		"	"
<u>UNITED STATES</u>	<u>9,350</u>	<u>11,230</u>	<u>12,420</u>	<u>100%</u>	<u>3.7%</u>	<u>2.0%</u>
<u>PRINTING</u>	<u>6,140</u>	<u>7,270</u>	<u>7,700</u>	<u>62.0%</u>	<u>3.4%</u>	<u>1.2%</u>
• Groundwood,	1,150	1,270	1,230		2.0%	0.6%
• Coated Printing	2,830	3,220	3,560		2.6%	2.0%
• Book Paper, Uncoated	2,160	2,780	2,910		5.2%	0.9%
<u>WRITING AND RELATED</u>	<u>3,210</u>	<u>3,960</u>	<u>4,720</u>	<u>38.0%</u>	<u>4.3%</u>	<u>3.6%</u>
• Writing	1,740	2,320	3,120		5.9%	6.1%
• Others Five	1,470	1,640	1,600		2.2%	(0.5%)
- Bristols	900	1,100	1,050		4.1%	(0.9%)

Source: API, industry sources.

The Product Segments of the
Printing and Writing Paper Market

Table 2, opposite, shows that printing papers, with 61% of the North American market, is the larger of the two printing and writing paper segments. The major segment can be further broken down into three sub-categories, uncoated groundwoods (publishing, printing and converting), coated papers and uncoated book papers (offset, envelope and tablet).

Writing and related papers are subcategorized into writings (i.e. chemical wood pulp) and other fines (i.e. cotton fibre, thin papers, cover and text, and bristols). Bristols consist mainly of tabulating index, tag and index bristols.

Printing Papers:

The relative sizes of the Canadian market segments are distinctly different from that of the United States. Although the detailed segmentation was not available (to us)¹ the data shows that the printing segment made up 42.8% of the total printing and writing paper market against 62.0% for the United States. The difference is accounted for by the large production of magazines and books in the United States for international consumption. The Canadian printing paper segment has shown a healthy 5.7% growth in the past five years. In the same period the United States printing paper market expanded at only 1.2% per annum.

Whereas the coated printing subsegment is probably the smallest in the Canadian printing papers it is the largest in the United States, making up 46% of the printing segment. It is the coated

¹ The CPPA and Manufacturers have this data.

printing papers which have accounted for most of the growth in the total printing segment since 1975 in the United States.

The above differences between the two markets have significant implications for Canadian producers. Since the home market is not large enough to absorb an economic output in coated papers, much of the production would need to be exported to the United States. However, the large United States market make it possible for their producers to not only have the security of a large home market but also skim off the Canadian market when capacity allows.

Writing and related papers:

The Canadian and United States markets have shown similar characteristics in the 1965-75 decade although the Canadian market has grown somewhat faster on account of the greater maturity of the U.S. market. The chemical wood pulp writing papers dominate the segment and in the United States accounted for all of the 3.6% per annum growth in the segment since 1970. The other sub segment, other fines, declined by 0.5% per annum over the same period, mainly due to the shrinking market for tag and file tabulating bristols.

The Future Printing
and Writing Market

The historic performance of the market in the last five or indeed ten years may not be indicative of the future. Since the present options open to the industry are a function of the future, it is necessary that a clear understanding of the market (and segment) trends be obtained.

In this preliminary work it was not possible to develop these detailed forecasts. However, Predicast Inc. long range forecasts (of October 1976) gave the following annual growth rates for the 1973-85 period for the United States:

	Annual Growth % 1973 - 1985
	<u>(United States)</u>
Printing and Writing Total	3.5%
Printing papers	3.4%
- Groundwood uncoated	3.3%
- Coated Printing	3.2%
- Book paper, uncoated	3.6%
Writing and related	3.6%
- writing, chemical	4.4%
- others	2.2%
- bristols	1.4%

Source: Predicast Inc., 1976 "Paper Trends".

The Canadian market is expected to expand at a faster rate than the United States in most segments, and in aggregate at about 4.8% per annum over the same period.

According to industry sources, there is an observable trend towards lower grade printing and writing papers in general in Canada (for example: No. 8 bond is becoming more popular than No. 7). These grade changes could not be investigated in depth but would apparently be advantageous to United States producers who are geared to the lower quality American market.

Inherent in this trend is a shift towards groundwood based papers. Appendix A shows that groundwood papers as defined in Canada (i.e. 50% or more groundwood content) had substantially increased its share of the total market during the 1974-6 period. This, of course, may not be indicative of a long range trend, because of the extraordinary market conditions of the period.

Technological change in the printing industry may have a impact on the consumption of paper. For example electronic methods of information storage and transfer may result in a reduction in per capita consumption. The development of non impact printing systems is a possibility. The widespread adoption of this method depends on technical developments in the paper industry to bring the cost of the special paper required within reach of the users of these new printing systems.

IMPORT SHARE OF THE CANADIAN MARKET

Significance of and Reasons for Imports

Under the protection of import tariffs and currency differentials with the United States, the domestic industry had been able to develop relatively free from imports up to the early seventies. Imports on average amounted to only 6% of Canadian demand between 1964-67 and 8% between 1969-71.

The rapid increase in the proportion of imports to demand coincided with the almost 10% upward valuation of the Canadian dollar from 1970 through 1972. This, combined with the lagging affect of the (1969) reduction in import tariffs from 25.0% to 12.5%, provided the incentive for foreign producers to pursue the high Canadian prices.

TABLE 3
PRINTING AND WRITING PAPER
IMPORTS AS A PERCENTAGE OF CANADIAN
MARKET DEMAND BY U.S.A. AND OTHERS

(M tons) (three year average)	1965			1970			1975		
	Demand	Imports	%	Demand	Imports	%	Demand	Imports	%
ALL PRINTING AND WRITING	440	27	(6)	590	48	(8)	770	189	(25)
United States	-	23	[73]	-	45	[94]	-	186	[98]
Other Countries	-	4	[15]	-	3	[6]	-	3	[2]
PRINTING	190	11	(6)	250	24	[9]	330	102	(31)
United States	-	8	[73]	-	23	[96]	-	101	[99]
Other Countries	-	3	[27]	-	1	[4]	-	1	[1]
WRITING AND RELATED	250	16	(6)	340	24	(6)	440	87	(20)
United States	-	15	[94]	-	22	[86]	-	85	[98]
Other Countries	-	1	[6]	-	2	[14]	-	2	[2]

SOURCE: Statistic Canada 65-203

() is per cent of Canadian demand.

[] is per cent of imports in the segment.

The last factor, the high Canadian prices, became a stronger incentive for foreign producers between 1971 and 1974 when Canadian prices increased by 52% compared to the United States increase of 30% over the same period.

Then in the following year, 1975, when United States prices moved up only marginally (i.e. about 2.9%), Canadian prices continued rising at a rate of 6.6%. This aggravated the price differential and, combined with large strike related downtime problems in Canada (operating rates were down to 59%), resulted in a substantial 28% loss of the market to importers.

Despite a reduction in the price differential in 1976 imports remained a high proportion of demand (strike factors were still at play) but in 1977 showed signs of decreasing.

Paper merchants have stated that the Canadian dollars 14% decline since the 1976 peak will result in further reductions in imports although some direct buying will continue to maintain the security of supply.

The United States as the Major Importer

Table 3, opposite, shows that the United States had been successful in maintaining by far the larger portion of Canadian imports of printing and writing papers. The 79%⁶⁵ portion held in 1965 increased to 93% by 1970, the gain being made in printing papers (rather than writings).

However, the trend was reversed in the first half of the seventies when other countries, notably the Netherlands, U.K., Sweden, and Japan increased their share at the expense of the United States. The United States absolute imports however did increase significantly by

'TABLE' 4

IMPORTS

SHARE OF VARIOUS SEGMENTS OF

CANADIAN MARKET

(M tons) (three year average)	1965			1970			1975		
	Canadian		USA Imports	Canadian		USA Imports	Canadian		USA Imports
	Demand	Imports	Q %	Demand	Imports	Q %	Demand	Imports	Q %
ALL PRINTING AND WRITING	440	27	23 (5)	590	48	45 (8)	770	189	186 (24)
PRINTING (1)	190	11	8 (4)	250	24	23 (9)	330	102	101 (31)
• Groundwood, uncoated	N/A	1	1 [100]	N/A	3	3 [100]E	110	10	10 [100]E
• Coated printing	"	3	2 [66]	"	10	9 [90]E	70	31	30 [97]E
• Book Paper Uncoated	"	7	5 [71]	"	11	10 [91]E	150	61	61 [100]E
WRITING AND RELATED	250	16	15 [61]	340	24	22 [76]	430	87	85 (20)
• Writing	N/A	5	5 [100]	N/A	12	12 [100]	E260	35	35 [100]
• Others	"	10	9 [90]	"	12	10 [83]	E180	48	46 [96]
- Bristols	"	1	1 [100]	"	2	2 [100]	E160	4	4 [100]

(1) Source U.S.A. export data FT610.

(2) Statistics Canada 65-203 Import data for Canada.

() is per cent of Canadian Demand.

[] is per cent of imports in the sub-segment.

over 25% per annum (in a market which grew at only 5.5% per annum over the same period).

By 1975 the United States accounted for about 72% of all printing and writing imports (based on a three year average), a similar portion of both printing and writing segments of imports

Imports Share of the Product Segments

The growth in the volume of imports has been rapid in all segments of the market, particularly since 1970 as the following table shows:

	Estimated	
	<u>P.A.% Growth of Imports 1970-75</u>	
	<u>Total</u>	<u>United States</u>
Printing and Writing	31.5%	32.8%
Printing	33.6%	34.7%
- Groundwood uncoated	27.2% E	27.2% E
- Coated Printing	25.4% E	27.2% E
- Book Paper, uncoated	40.9% E	43.6% E
Writing and related	29.4%	31.0%
- writings	23.9%	23.9%
- others	32.0%	35.7%

The apparent almost "phenomenal" growth in imports should be viewed in the perspective of the small volume of 1975 shown in Table 4, opposite. The product/markets where imports had achieved reasonable volumes by 1970, such as coated printings and writings, showed the least growth - albeit still high.

The climb in U.S.A. imports to Canada, beginning in earnest in the early seventies, was preceded (1969 through 1971) in the United States with a moderate 2% decline in operating rates, from 92%. While this may have had some influence on the increase in Canadian imports, it should be seen in the perspective of the fact that:

- (a) Total U.S.A. exports in the peak 1974-76 period were only 2.8% of U.S.A. capacity; in normal years one half this percentage. Thus U.S.A. exports are not particularly significant to the industry.
- (b) U.S.A. exports to Canada, even at the above peak, (which was during the period of the Canadian strikes) made up only about 30% of total U.S.A. exports. In the 1969-71 period the proportion was closer to 20%. Indeed Canada's total (U.S.A. and others) imports in the peak period were only 1% of U.S.A. capacity.
- (c) U.S.A. exports to Canada also climbed steadily from 1971 through 1974, despite a rapidly improving operating rate (brought about by increasing local demand rather than exports)

Canada is therefore not generally a dumping ground for U.S.A. excess production in terms of a loose U.S.A. market. It is more likely that American industry makes calculated decisions to pursue genuinely more lucrative markets; if this market is Canadian then it is open to this competition.

CANADIAN EXPORT PATTERNSThe Significance of Exports
to Canadian Producers

The Canadian printing and writing paper industry has placed considerable emphasis on export markets over the last decade, and overall have indeed relied on export markets to maintain production operating rates. This is evident from the fact that the regional demand balance (i.e. Canadian demand as a proportion of capacity) has remained below 60% for most of the decade. (By comparison regional balance in the United States has consistently exceeded 90%).

Exports as a percentage of Canadian production rose from 24% in 1965 to 35% in 1970 and approximately maintained that level through 1975 (based on three year averages). Exports as a proportion of demand increased from 31% in 1965 to 52% in 1970 but fell back somewhat to 48% by 1975.

Exports grew slower than Canadian demand by 2 percentage points (at 5.5%) during those years, compared to the late sixties when exports rose from 138,000 tons in 1965 to 308,000 tons in 1970 - an exceptional rate of 17.4%. Nearly all this earlier growth was accounted for by the United States markets, and coincided with a weak Canadian dollar.

Over 83% of the exports were in the printing grades (printing book, uncoated) in 1975. In that year, 58% of printing paper production was for export, a proportion seven points below that in 1970.

In writing and related papers, 13% of production was exported in 1975, a proportion not much different in 1965 or 1970. It is clear that the writing and related segments of the industry is more domesti-

TABLE 6

PRINTING AND ESTIMATED WRITING PAPERSREGIONAL SIGNIFICANCE OF EXPORTMARKETS AND CONTRIBUTION TOCANADIAN PRODUCTION

(M tons) (three year average)	1965		1970		1975	
	Prod	Exports(%)	Prod	Exports(%)	Prod	Exports(%)
PRINTING AND WRITING TO:	579	138 (24)	886	308 (35)	989	369 (37)
United States		87 [63]		251 [81]		279 [76]
W. Europe		28 [20]		23 [8]		41 [11]
Others		23 [17]		34 [11]		49 [13]
PRINTING PAPERS TO:	291	106 (36)	489	250 (51)	532	307 (58)
United States		85 [80]		227 [91]		245 [80]
W. Europe		15 [14]		14 [5]		37 [12]
Others		6 [6]		9 [4]		25 [8]
WRITING AND RELATED TO:	288	32 (11)	397	58 (15)	457	62 (13)
United States		2 [6]		24 [41]		34 [55]
W. Europe		13 [41]		9 [16]		4 [7]
Others		17 [53]		25 [43]		24 [38]

(1) Source CPPA Reference Tables.

(2) Source Statistics Canada 65-202.

() equals per cent of production.

[] equals per cent of segment exports.

TABLE 5

CANADIAN EXPORTS BY PRODUCT

TYPE AND CONTRIBUTION TO

TOTAL 1965-1975

M tons (3 Year Averages)	1965		1970		1975	
	Q	% TOTAL	Q	% TOTAL	Q	% TOTAL
Printing & Writing	138	(100%)	308	(100%)	369	(100%)
<u>Printing</u>	<u>106</u>	<u>(77%)</u>	<u>250</u>	<u>(81%)</u>	<u>307</u>	<u>(83%)</u>
Groundwood	96	(70%)	171	(55%)	214	(58%)
Coated	"		"		"	
Book Paper	10	(71%)	79	(26%)	93	(25%)
<u>Writing & Related</u>	<u>32</u>	<u>(23%)</u>	<u>58</u>	<u>(19%)</u>	<u>62</u>	<u>(17%)</u>
Writing	29	(21%)	51	(17%)	55	(15%)
Other Fine	3	(2%)	7	(2%)	7	(2%)

Source: See Market Data Sheets

cally oriented (than the printing papers segment): but in comparison with the United States, where less than 3% of production is exported in a typical year, Canada is significantly dependent on exports to maintain the operating rates of its writing paper mills.

Exports by Paper Segment

Table 5, opposite, shows that printing papers have been the main stay of the industry's exports accounting for an increasing portion of the total, reaching 83% by 1975. Groundwood uncoated, which accounted for 58% of exports in the same year, grew faster than average in the previous five years. Book papers exports increased at about the same rate as the average over the period.

Both the writing and the other fine sub-categories of writing and related demonstrated poor growth at 1.3% per annum in the 1970-75 period, compared to the 12.6% per annum in the five years earlier. Writing grades made up nearly all of the category's 17% contribution to total printing and writing exports in 1975.

The Regional Direction of Exports

Four countries, the United States, the United Kingdom, South Africa and Australia have claimed more than 90% of printing and writing paper exports over the last decade.

As Table 6, opposite, shows the United States has been the main export market taking 63%, 81% and 76% of Canadian printing and writing exports in 1965, 1970 and 1975 respectively (based on three year averages). Western Europe, which accounted for 20% of exports in the sixties, had halved its portion by 1975 even though total imports had doubled between 1976-75.

The following is a ranking by paper grade of countries in order of magnitude of Canadian exports for the 1972/74 period.

Groundwood printing:

1. United States
2. United Kingdom
3. Australia
4. Hong Kong

Book paper, uncoated:

1. United States
2. United Kingdom
3. Venezuela
4. Japan

Writing and reproduction:

1. United States
2. South Africa
3. Australia
4. United Kingdom

Fine paper:

1. United States
2. Australia
3. South Africa

In printing grades the U.S.A. is by far the major export market. Exports to Europe have been nearly all to the United Kingdom. These exports used to be book papers at the turn of the decade but in 1975 were mostly groundwood uncoated.

In writing and related papers, exports to the United States have accounted for a rapidly increasing share of the total - growing

from 6% in 1965 to 55% a decade later. Western Europe (nearly all the U.K. but some for Netherlands) was a significant contributor to Canadian exports in the mid-sixties but had dwindled to only 7% of the total by 1975. Other countries, particularly South Africa and Australia, have been major target markets for exports although the share decreased from a high of 53% in 1965 to 38% in 1975.

South Africa has been the major contributor to the others fine category making up 13%, 17% and 5% of Canadian exports of total writing and related paper exports in 1965, 1970 and 1975, respectively (based on three year averages).

The loss of the South African and the United Kingdom market in the order of 12,000 tons (or 21% of 1970 exports) considerably restricted export growth of writing papers in the first half of the seventies.

Since export markets (other than the U.S.A.) are important to the health of the Canadian industry we suggest that offshore markets - particularly in third world areas - would be a worthwhile area of research. In the following paragraphs we look briefly at Canada's position in the U.S.A. and Europe.

Canada's Position in the United States Market

Canada is the most significant importer of printing and writing paper to the United States, making up the following portion of U.S.A. total imports:

TABLE 7
CANADIAN POSITION IN
THE UNITED STATES
PRINTING AND WRITING PAPER MARKET

(M tons) (three year average)	1965		1970		1975	
	USA Demand	Canada Exports(%)	USA Demand	Canada Exports(%)	USA Demand	Canada Exports(%)
<u>ALL PRINTING AND WRITING</u>						
PRINTING	<u>6,140</u>	<u>85 (1.4%)</u>	<u>7,270</u>	<u>227</u>	<u>7,700</u>	<u>245 (3.2%)</u>
• Groundwood uncoated	1,150	80 (7.0%)	1,270	166 (13.1%)	1,230	161 (13.1%)
• Coated Printing	2,830	- (0%)	3,220	- (0%)	3,560	- (0%)
• Book Paper, uncoated	2,160	5 (0.2%)	2,780	61 (2.2%)	2,910	84 (2.9%)
WRITING AND RELATED	<u>3,210</u>	<u>2 (0%)</u>	<u>3,960</u>	<u>24 (0.6%)</u>	<u>4,720</u>	<u>34 (0.7%)</u>
• Writings	1,740	2 (0%)	2,320	23 (1.0%)	3,120	32 (1.0%)
• Others	1,470	-	1,640	1 (")	1,600	2 (0.1%)
- Bristols	900	-	1,100	-	1,050	N/A

Sources: (1) See various market data sheets.
(2) Statistics Canada 65-202.

(%) equals share of United States Demand

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	<u>1965</u>	<u>1970</u>	<u>1975</u>
Printing	77%	80%	88%
Writing and Related	14%	99%	99%
Printing and Writing	70%	85%	94%

Although Canada has increased both the quantity and share of imports to the United States over the last decade the actual share held of the printing and writing market remained small at 2.2% in 1975. This share had been maintained over the five year period when the U.S. market grew at 2.0% per annum.

Indeed it is worth noting from Table 7, opposite, that Canada maintained its share in each of the product sub-segments, which in groundwood uncoated papers was 13.1% of United States demand. Groundwood uncoated papers have made up almost 60% of Canadian exports of printing and writing papers to the United States. Book papers account for another one half of this portion, and writings the remainder.

The fact that Canada maintained its share during the period, a share which was double the 1965 figure, is noteworthy in that it demonstrates that a competitive edge was not lost despite the strong Canadian dollar.

Hence the 1970-75 poor showing of exports to the United States was a function of the maturation of share up to 1970 (when competitive advantages may have eased) and the slower growth in the market as a whole. Growth slowed to the 2.0% p.a. level from 3.7% p.a. before 1970.

Canadian Exports to Europe

Exports to Europe in the mid-sixties made up 20% of the total exports for printing and writing. Although they have increased 40% since that time, the portion to the total has balanced.

Export volumes between 1974-1976 averaged 41,000 tons; about 90% of which was to the United Kingdom, approximately as follows:

(M tons, 3 year average)	<u>Europe</u>	<u>U.K. %</u>
Printing and Writing	<u>41</u>	<u>95%</u>
Printing	<u>37</u>	<u>96%</u>
Groundwood Uncoated	33	99%
Book	4	63%
Writing and Related	<u>4</u>	<u>85%</u>

Other European countries which accounted for more than 1,000 tons of paper were the Netherlands (writings and book paper) and West Germany (book paper).

According to the Canadian export classification most of the U.K.'s 1970 imports from Canada were uncoated book and writing paper in 1970, but nearly all uncoated groundwoods in 1975. These exports make up small shares of the total imports to these countries. (In the U.K. about 12% of 1976 imports were Canadian).

The United Kingdom, unlike most of the other EEC countries, imports printing and writing papers mainly from outside the member state regions. The concentration of Canadian European exports on this country is likely due to the Commonwealth trade preference given to Canada. Finland is Canada's major competitor.

Unfortunately the small hold that Canadian producers do have on the U.K. markets will probably diminish with the high tariff

introduced in the second half of 1978 (i.e. from 9.6% to 12.0%), compared to the free entry of Scandinavian imports (provided it is within 80% of the 1968-71 average). Even the last provision will be eliminated by 1984.

In Europe, with Canada facing tariffs of 12.0, and Scandinavian imports entering free by 1984 (from the present level of 8%) the prospects are equally poor. This is of course assuming that a new tariff structure between Canada and Europe will not be negotiated.

THE SUPPLY POSITION

The Regional Balance

Canada's printing and writing industry has historically had considerably more capacity to supply the country's needs than was required. Demand over capacity, the regional (national) balance, has been under 60% more often than above in the 1965-75 decade. In 1976 it was at the 60% level. This means that industry relies heavily on export markets to maintain healthy operating rates.

The United States in contrast boasts a regional (national) balance of over 90% in the 1965-75 decade. The U.S. market is therefore capable of operating at high operating rates without foreign trade.

Historic Operating Rates

Table 8, opposite, also shows movement in operating rates (actual production over capacity) for the printing and writing industry in Canada and the United States. The rates are described graphically in Figure 3, overleaf.

TABLE 8

CANADA & U. S. A.

PRINTING & WRITING PAPER

REGIONAL BALANCE & OPERATING RATES

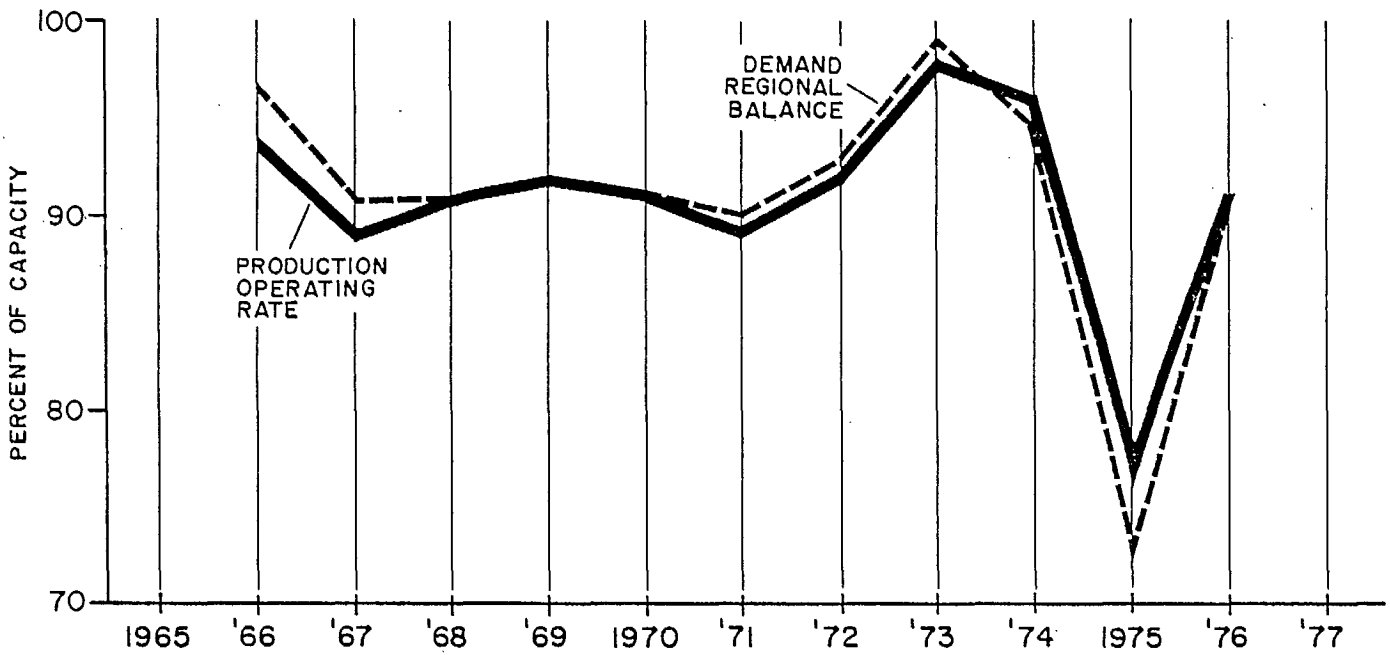
	CANADA		UNITED STATES	
	REGIONAL BALANCE	OPERATING RATE	REGIONAL BALANCE	OPERATING RATE
	%	%	%	%
1965	71	90	--	--
1966	61	83	97	94
1967	63	87	91	89
1968	62	80	91	91
1969	58	83	92	92
1970	54	84	91	91
1971	52	79	90	89
1972	51	80	93	92
1973	56	78	99	98
1974	66	94	95	96
1975	48	59	73	76
1976	60	70	90	91
1977	62	88	N/A	N/A

Regional Balance = $\frac{\text{Regional Demand}}{\text{Regional Capacity}}$ %

Operating Rates = $\frac{\text{Regional Production}}{\text{Regional Capacity}}$

FIGURE 3

UNITED STATES BALANCE
PRINTING & WRITING PAPER MARKET



CANADA BALANCE
PRINTING & WRITING PAPER MARKET

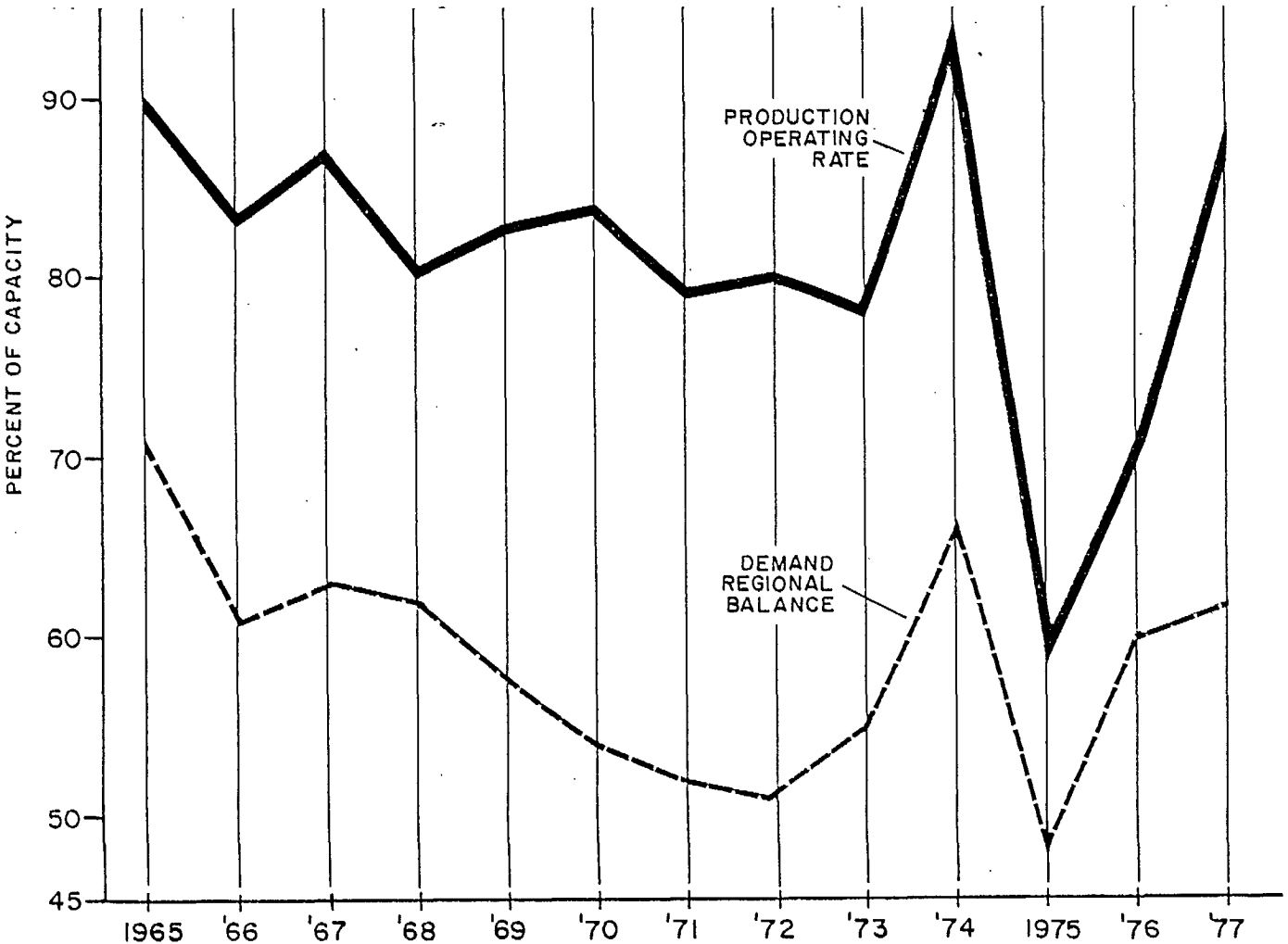


TABLE 9-B

U.S.A. % OPERATING RATES BY PRODUCT

(% of Capacity)

<u>YEAR</u>	<u>PRINTING & WRITING</u>	<u>GROUNDWOOD UNCOATED</u>	<u>GROUNDWOOD COATED</u>	<u>BRISTOLS</u>
1965	-	-	-	-
66	94	99	93	-
67	89	93	89	100
68	91	93	86	97
69	92	93	90	98
1970	91	99	89	100
71	89	87	86	90
72	92	91	92	83
73	98	100	95	90
74	96	100	97	100
1975	76	100	82	96
76	91	100	98	78
77	-	-	-	89

SOURCES: Calculated From API Data.

TABLE 9

CANADIAN PRINTING & WRITING

INDUSTRY OPERATING RATES

(% of Capacity)

	<u>P & W</u>	<u>GROUNDWOOD PRINTING & SPECIALTIES</u>	<u>OTHER BOOK & WRITING</u>
1965	90	N/A	N/A
1966	83	N/A	N/A
1967	87	N/A	N/A
1968	80	N/A	N/A
1969	83	N/A	N/A
1970	84	N/A	N/A
1971	79	N/A	N/A
1972	80	N/A	N/A
1973	78	N/A	N/A
1974	94	92	91
1975	59	69	52
1976	70 est	E88	E59
1977	88 est		
1978			
1979			

SOURCE: CPPA DATA ON PRODUCTION AND CAPACITY

Canada:

Despite sustained growth in production (except for 1975), Canadian operating rates have trended negatively since the 1965 high of 90% to a low of 78% in 1973. After this date the figures are distorted by extraordinary market conditions. The declining operating rates can be accounted for by:

- (a) A (rapidly) declining regional balance, thus placing more emphasis on exports which were not strong enough to take up the slack.
- (b) From 1971, the loss of a significant share of the home market to imports.

The limited data on capacity by Canadian product segments shows that from 1974 the operating rates in groundwoods fared better than "other book and writing papers".

United States:

The United States has maintained operating rates above 89% throughout the 1965-75 decade except for 1975. The rates are determined almost entirely by domestic demand since foreign trade is so small in comparison. Indeed the import/export effect has influenced the operating rate by only one per cent on average over the decade.

Table 9, opposite, shows the operating rates for three of the sub categories of printing and writings. It is noteworthy that uncoated groundwood capacity has been fully utilized since 1973 and it is in this segment only that Canada has been able to compete on a significant

scale. (Canada had a 13% share of U.S. groundwood demand in the 1974/76 period).

The Future Balance

In this study we were not able to investigate future trends in any detail so the following discussion will be necessarily broad and tentative.

Canada:

Since the industry relies heavily on exports it is difficult to determine future rates. The industry has sufficient capacity (projected 1979 of 1,470 tons) to meet domestic demand through the next 10 years, given growth of 4.8% per annum.

Exports to Europe (which made up 4% of 1975 production based on three year average) are threatened in the next four years. The export potential of other regions, South Africa, Australia and the underdevelopd regions is an unknown.

Exports to the United States may not be too susceptible to loss in the medium range particularly in goundwood uncoated papers where Canada has a strong foothold. This is because of the projected supply shortfall in this segment in the United States market.

United States:

Since foreign trade is not particularly signigicant to the U.S.A. printing and writing paper industry, future operating rates are somewhat more predictable given rough estimates of future demand.

TABLE 10

UNITED STATES FORECAST REGIONAL

(NATIONAL) BALANCE IN PRINTING & WRITING PAPERS

(M Tons)	<u>PRODUCTION</u>	<u>DEMAND</u>	<u>CAPACITY</u>	<u>% REGIONAL BALANCE</u>	<u>% OPERATING RATE</u>
<u>Printing & Writing:</u>					
1976	13,258	13,064	14,497	90.1%	91.5%
1980	N/A	14,990	15,971	93.9%	N/A
PA Growth %	N/A	3.5%	2.5%	--	--
<u>Uncoated Groundwood:</u>					
1976	1,459	1,350	1,341	100.6%	108.8%
1980	N/A	1,537	1,338	114.9%	N/A
PA Growth %	N/A	3.3%	0	--	--
<u>Coated Printing:</u>					
1976	4,063	3,870	4,156	93.1%	97.8%
1980	N/A	4,390	4,585	95.7%	N/A
PA Growth %	N/A	3.2%	2.5%	--	--
<u>Bristols:</u>					
1976	1,041	998	1,164	85.7%	89.4%
1980	N/A	1,055	1,223	86.3%	N/A
PA Growth %	N/A	1.4%	1.2%	--	--

Sources: (1) Forecasts of demand by Predicast Inc. based on long range outlook
 (2) Capacity projections by API 1976-1979 Capacity Survey

Overall regional balance and operating rates are likely to improve as demand growth outstrips capacity growth through 1980. These rates will probably be in the '94% area, given a growth in demand of 3.5% per annum over 1976.

Table 10, opposite, shows that operating rates for uncoated groundwood will remain high. Indeed demand exceeds capacity through 1980 since no new capacity is expected. Excess demand will need to be met by imports.

Coated Printing rates will remain high and Bristols comparatively low.

EXHIBIT 2

SUMMARY OF THE MAJOR PRODUCERS IN THE

CANADIAN FINE PAPER INDUSTRY

<u>COMPANY</u>	<u>Location</u>	<u>MILLS</u> <u>Capacity</u>	<u>Pulp</u>	<u>INTEGRATION</u>		<u>MERCHANTS</u>	<u>SHARES</u>		<u>EXPORT</u> <u>%</u>	<u>MAIN PRODUCTS</u>	
				<u>Machines</u>	<u>Converters</u>		<u>Capacity</u>	<u>Market</u>		<u>Uncoated</u>	<u>Coated</u>
<u>Domtar</u>	Beauharnois	13,000 tons/year	yes	2							rag & flax
	Windsor	100,000 tons/year	yes	5							bond, offset (base stock) envelope printing grades
	Cornwall	210,000 tons/year	yes	6							bond, offset food containers specialties printing grades
	Toronto	12,000 tons/year	no	1							text, cover
	St. Catharines	50,000 tons/year	no	3							bristols, food containers onionskin (base stock)
	TOTAL	385,000 tons/year			16	Dominion Envelope	3 major 4 minor	28%	28%	35%	
<u>Abilibi</u>	Thunder Bay	94,000 tons/year	yes (ground wood only)	3							printings
	Thorold	91,500 tons/year	yes (secondary fibre)	5							bond, book litho
	Georgetown	15,000 tons/year	no	0	(coating only)						roll specialties
	TOTAL	200,500 tons/year			8	Hilroy Ltd. Canadian Stationery Co. Canada Envelope	1 major 4 minor	14.5%	18%	5%	
<u>E.B. Eddy</u>	Hull	73,500 tons/year	no	3							register
	Ottawa	56,000 tons/year	no	3							bonds, offsets
	Espanola	45,000 tons/year	yes	4							specialty grades
	TOTAL	174,500 tons/year			10	no	no	12.5%	12.5%	15%	
<u>Rolland</u>	Ht. Rolland	26,000 tons/year	no	2							specialties
	St. Jerome	107,000 tons/year	no	6							rag, bonds register
	Toronto	28,000 tons/year	no	0	(coating only)						printings
	TOTAL	161,000 tons/year			8	no	3	11.5%	11%	8%	
<u>MacMillan- Bloedel</u>	New Westminster	35,000 tons/year	no	1	no	no	2.5%	2%	N/A		book grades
<u>Reed Paper</u>	Dryden	30,000 tons/year	yes	1	no	no	2%	2%	N/A		offset envelope

*do not add up
→ must give*

THE CANADIAN PRODUCERS

Summary

This section will provide a brief history of the main Canadian fine paper producers and the problems each faces. Exhibit 2, opposite, provides a tabular summary of the major Canadian producers.

DOMTAR

Summary

Domtar is the largest fine paper producer in Canada. Current production capacity is approximately 400 M tons. Fine paper sales account for about 25% of Domtar's total sales (\$887 MM in 1976). Domtar's market share is approximately 27% of Canadian consumption. Domtar produces over 500 grades of fine, coated, uncoated, speciality, printing and business papers in a wide variety of colours, finishes, weights and sizes. The company operates five paper mills at Cornwall, Toronto, St. Catharines, Beauharnois and Windsor. A coating plant in Georgetown, Ontario was closed in 1977.

Domtar is also a major producer of wood pulp at Cornwall and Windsor. These two integrated operations manufacture pulp for the production of paper at other Domtar mills and for other paper companies. Flax and cotton rag pulps are produced for internal use at the Beauharnois mill. Exports of fine paper are reported to account for approximately 35% of Domtar's total fine paper sales.

History

Domtar entered the fine paper business with the acquisition of Howard Smith Paper Mills Limited by Dominion Tar in 1962. In that same year Dominion Tar required St. Lawrence Corporation Limited and Donnacona Paper Company Limited in 1962. Also in 1962, the company

acquired Hendon Paper Works Company Limited of Sunderland, England, a fine paper producer.

The corporate name was changed to Domtar in 1965.

Domtar sold the newsprint and coated publication grade paper mill at Trois Rivieres to Kruger Pulp and Paper Limited in 1973. Domtar retains the rights until August 31, 1980 to the mill's production of publication grade coated papers.

Since 1965 the company has followed a pattern of forward integration. Domtar purchased Buntin Reid Paper Company Limited, Canada's largest fine paper merchant, in 1970 as a "defensive measure". Buntin Reid reportedly maintains an approximate 25% share of the Ontario fine papers market. Other merchant subsidiaries of Domtar are:

- Schofield Paper Company Limited
- Federal Paper Company Limited
- Canada Paper "Wholesale" Limited
- The Fred W. Halls Paper Company Limited
- Buntin Gillies and Company Limited
- MacFarlane, Son and Hodgson Limited.

Of the above companies, only Buntin Reid Limited, and MacFarlane, Son and Hodgson Limited operate autonomously. The remainder operate almost solely as distributors of Domtar papers. Domtar is also engaged in envelope manufacture through its ownership of Dominion Envelope Company Limited. This company was acquired in 1975. Domtar will have full ownership of Dominion Envelope in 1979.

Distribution

Approximately 33 per cent of fine papers are distributed through a network of regional sales offices in Vancouver, Winnipeg, Toronto and Montreal as well as the Domtar fine paper merchants (including Canada's largest, Buntin Reid Paper Company Limited) and most major independent fine paper merchants. The balance of sales are made directly to paper converters.

As the leading Canadian exporter of fine papers, Domtar sells through 45 sales representatives to 60 countries on 5 continents. Sales in the United States are made directly to printers and converters as well as through selected distributors. Domtar apparently holds about 27 per cent of Canadian fine paper sales and is Canada's leading exporter, selling approximately 35 per cent of its production.

In the United Kingdom, Domtar owns a fine paper mill at Sunderland which also operates as a paper merchant with warehouses and sales offices in London and other major cities distributing a large percentage of the paper produced by the Sunderland mill, as well as Canadian made Domtar papers.

Mills

Domtar operates two mills in Quebec, one at Beauharnois and one at Windsor.

Beauharnois, (Quebec)

The Beauharnois mill has a rated capacity of 13,000 tons of fine and specialty papers. Most of the production is devoted to rag papers for high quality bond papers, currency papers and envelope papers. The mill was built before 1920 but has been kept up-to-date.

Windsor, (Quebec)

The Windsor mill has a capacity of 475 tons/day of pulp (60 t/d unbleached hardwood, 50 t/d unbleached softwood, 365 t/d bleached hardwood). Dried pulp production is 310 t/d. Paper production capacity is 295 t/d bleached and unbleached kraft.

Windsor made only kraft packaging grades until the mid 1960's at which point declining markets and high softwood costs forced a change. A bleach plant permitted the bleaching of hardwood pulp for use in fine, printing and writing papers and a program of mill changeover was begun. The mill has a present capacity of approximately 100 M tons per year and specializes in bond, offset, envelope, and coating base stock. Other grades produced are duplicator, mimeo, tag, laminating, and tablet. The mill was constructed in 1910 and is in need of modernization, especially the kraft pulp plant, which has no effluent treatment. The paper machines are old but in good condition.

Domtar's other mills are in Ontario at Cornwall, Toronto and St. Catherines.

Cornwall, (Ontario)

The Cornwall mill has a rated capacity of 400 tons/day bleached hardwood kraft pulp and 595 tons/day fine papers, food container stock and specialties. The company has spent approximately \$15 MM in the past two years on modernization of the mill to maintain its competitive position.

Toronto, (Ontario)

This mill has an annual capacity of 12 M tons/year. It is non-integrated and specializes in the production of text and cover papers.

St. Catherines, (Ontario)

The St. Catherines mill has a rated capacity of 140 tons/day. It is non-integrated and produces file folder and tag stock, bristols, food container stock, glassine, onion skin, carbonizing and coating base stock. The mill is in need of modernization.

Historical Data

Domtar does not provide detailed sales for the fine paper operations. Company sources indicate fine paper production as a per cent of total pulp and paper production has been:

(M tons)

<u>Year</u>	<u>Fine Paper Production</u>	<u>Total P&P Production</u>	<u>% Fine Paper</u>
1966	208	1,365	15.2%
1967	205	1,339	15.3%
1968	215	1,321	16.3%
1969	250	1,476	16.9%
1970	300	1,491	20.1%
1971	322	1,434	22.5%
1972	328	1,409	23.3%
1973	384	1,422	27.0%
1974	373	1,392	26.0%
1975	266	961	27.7%
1976	351	1,065	33.0%

ABITIBI

Summary

Abitibi is the second largest Canadian producer of fine papers with an approximate 18% of the Canadian market. Production of printing

and groundwood specialties and other fine papers accounted for approximately 12% of Abitibi's production in 1976 and 16% of sales. Exports account for only 5.0% of Abitibi's fine paper sales.

History

Abitibi entered the fine paper business in 1930 with the acquisition of Provincial Paper Limited. The company has mills at Thorold, Thunder Bay and Georgetown Ontario.

The company is integrated forward through its ownership of the following merchants:

- Inter City Papers Limited
- Clarendon Paper Sales Company
- Neville Papers Limited
- Lauzier-Little Papers Limited
- Hillier Paper Limited.

Inter-City Papers operates as a relatively independent firm and controls Clarendon Paper, Neville Papers and Lauzier-Little Papers. Abitibi also controls several converters. These are:

- Hilroy Limited (home and school supplies)
- Canadian Stationery Company Limited (office supplies)
- Canada Envelope Company.

Abitibi is the largest Canadian manufacturer of home, school and office supplies and one of the largest producers of envelopes. In 1974 sales of envelopes and converted products totalled \$36 MM. Purchases from Abitibi mills approximated 75% of their paper requirements. 1974 merchant sales were approximately \$50 MM. In 1977 Abitibi sales to merchants were 43% of total fine paper sales.

Abitibi is a net purchaser of pulp and will be even more so when the sulphite mill at its Thunder Bay mill is closed in the second quarter of 1978.

Mills

Thunder Bay, (Ontario)

The Thunder Bay mill specializes in the production of coated papers. A new on-machine coater was added in 1976 to increase capacity. Rated capacity is 94 M tons per year. The mill will be non-integrated with the closure of the sulphite pulp mill in the second half of 1978. The groundwood pulp plant is in urgent need of modernization. It is probable that the mill will be closed by 1980, leaving the paper mill completely non-integrated.

Thorold, (Ontario)

The Thorold mill has a rated capacity of 91,500 tons per year. It specializes in uncoated papers, mainly bond, mimeo, duplicating, book, litho and envelope grades. The mill is integrated through a secondary fibre pulp mill supply approximately 43% of its pulp requirements. The machines, although old, are well maintained.

Georgetown, (Ontario)

The Georgetown mill was a non-integrated facility producing coated papers. With the improvements to the Thunder Bay operations the Georgetown facility ceased coating operations in 1976 and was switched to production of roll specialties. Capacity is 15,000 tons per year.

Historical Data

Production history for Abitibi (including estimated groundwood and printing specialties production) is as follows:

<u>Year</u>	<u>Fine Paper Production</u> (M tons)	<u>Total Paper Production</u> (M tons)	<u>% Fine</u>
1972	170	1,834	10.7%
1973	197	2,123	9.3%
1974	200	2,172	9.2%
1975	102	1,614	6.3%
1976	138	1,155	11.9%

There are indications that Abitibi is gradually placing more emphasis on groundwood specialties. In 1978 it is expected that the Sault Ste. Marie mill will be solely devoted to groundwood specialty production. The Kenogami mill is expected to be completely switched over by 1981 as well. Abitibi officials have stated that they foresee groundwood replacing fine papers in a number of uses and that newsprint can be upgraded to magazine stock with some bleaching skill. 1982 groundwood capacity will be 400 M tons. Abitibi sustained losses on its fine paper operations in 1975, 1976 and 1977. The 1977 loss is reported to be approximately \$15 MM.

E.B. EDDY

Summary

E.B.Eddy is the third largest Canadian producer of fine papers with a rated capacity of approximately 175,000 tons per year. The company operates three mills (Hull, Ottawa and Espanola) and is a subsidiary of the Weston group of companies. Eddy also owns a U.S. fine paper producer, Eastern Fine Papers, located in Brewer, Maine. Eddy has been in financial difficulties in the past few years. Weaknesses have been experienced in all product segments (fine papers, tissue, paperboard, market pulp and lumber).

Fine paper sales are unknown but probably account for one third of total forest products sales 1976 forest products sales were \$182 MM (\$158 MM in 1975). Exports reportedly account for about 15% of fine paper production. The company has no merchant integration.

Mills

In the period 1954 to 1968 the Company installed four new high speed paper machines and a tissue converting plant in Hull. In the same period, the existing machines and pulping facilities were undergoing a constant modernization program. The Hull sulphite mill was closed in 1972.

Eddy has the latest installation (1968) and the largest fine paper machine installed in Canada at its Hull mill. Along with this modern facility, which cost almost \$20 million nine years ago are two old narrow machines. For comparison purposes the width of the new machine is 196" while the old narrow machines are 117" and 102" wide, and the average daily production is 150 tons compared to 30 for each of the narrow units. The small machines, which were originally installed in 1906 and rebuilt several times, have been kept in a good state of repair but are no longer cost competitive due to the low productivity per man day. These two paper machines are now operating at about 70 per cent capacity on short runs and on special grades and colours, mainly producing bonds, registers, writing, book, litho, offset, bristol and cup sulphite. The absence of integration also contributes to the losses from these two machines.

With the Hull mill employing almost 1,500 people, and, along with about 500 at their Ottawa mill and 150 in the paper division of the Espanola mill, total employment in the fine paper sector of E.B. Eddy is 2,150.

The Ottawa mill has a daily production capacity of 160 tons of fine and specialty paper and the Espanola mill 140 tons per day. Of the yearly capacity of 130,000 tons at the Hull and Ottawa mills, shipments to the Province of Quebec amounted to approximately 46,000 tons in 1976.

About 50 per cent of the woodpulp consumed in the paper operations at Hull is supplied from the company's Espanola bleached sulphate mill. The balance is purchased from Quebec pulp mills except for a small tonnage of special quality grade which is not available in the province.

Because the Hull paper mills are no longer integrated with pulping operations, their raw material costs are not competitive with many other mills. It has become necessary for the company to embark on a program to utilize recycled papers. A small recycling plant is currently in operation, however a major capital expenditure is required to proceed with the construction of a full scale plant to supply their requirements.

The Espanola mill has a capacity of 45,000 tons per year of fine and specialty papers. The mill produces carbonizing, coating base stock, embossing, gift wrap, laminating, grease proof, release, parchment and other special papers. The mill has two Foundriniers (164" width, 152" trim, 800 fpm), 1 Yankee Foundrinier (136" width, 124" trim, 1,500 fpm), and a parchment Foundrinier (92" width, 80" trim).

Historical Data

Financial data available from the annual reports of George Weston Limited indicate the following:

<u>Year</u>	<u>Forest Products Sales (\$MM)</u>	<u>Operating Profit</u>
1970	117	N/A
1971	119	"
1972	116	"
1973	140	"
1974	221	"
1975	158	\$10.5 MM (1)
1976	182	\$ 5.5 MM (1)
1977	210 est.	\$ 1.6 MM

(1) includes operating profit of Sommerville Industries, sold at end of 1976.

ROLLAND PAPER COMPANY

Rolland manufactures over 100 grades of uncoated fine and specialty papers. The Company also produces a full line of coated printing, fancy and specialty papers. The paper manufacturing operations are in St. Jerome and Mont Rolland, Quebec. Annual saleable capacity is about 117,000 tons. Coating operations are in Scarborough, Ontario.

Unlike Domtar and Abitibi, Rolland has no timber limits, no woods operations, and no wood pulp production. All raw materials are purchased. Consolidated-Bathurst owns 10.4% of Rolland's voting shares, and 21.7% of Rolland's non-voting shares. The Company is a major supplier of pulp to Rolland from its Pontiac mill.

Rolland's fine paper sales are handled from coast to coast through the Company's own offices in Montreal, Toronto, Ottawa and

Quebec City, through convertors, and through the majority of Canadian fine papers merchants.

Like Domtar and Abitibi, Rolland has been acquiring fine paper merchants over the last few years. Fine Papers Limited was acquired in 1969, The Wilson-Munroe Company in 1970, and Kruger Fine Paper in 1975. The Ontario portion of this merchant business was consolidated under the name Graphic Papers in 1977. Rolland has about 12% of the Canadian market. Because Rolland is completely non-integrated and wholly dependent on fine paper sales its costs and earnings fluctuate more widely than those of the other major producers. Pulp prices are a major factor in the financial health of Rolland. The past three years have put a severe strain on the company. Current market thought is that depressed pulp prices, which contributed to Rolland's small profit in 1977, will rise within 12 months and force a loss situation; accordingly, some long terms fixed price pulp supply arrangements are required.

Mills

Rolland operates three mills at Mont Rolland and St. Jerome Quebec and at Scarborough (coating operations only). The Mont Rolland mill, built in 1898, has been converted to the production of technical papers. The plant has been modernized and new pollution control equipment installed. The mill has a capacity of 75 tons per day.

The St. Jerome mill specializes in the production of high quality printing and bond papers. A high proportion of production is rag or flax bond. The mill produces a full range of papers on six machines and has a capacity of 305 tons per day.

The Scarborough plant specializes in the production of coated papers. It is just a coating operation and has a capacity of 93 tons per day.

Exports account for approximately 8% of Rolland's sales.

Historical Data

The following financial data is available from the annual reports of the company.

<u>Year</u>	<u>(\$ MM)</u> <u>Sales</u>	<u>(\$ MM)</u> <u>Net Profit</u>	<u>ROCE</u>
1967	32.8	1.9	5.9%
1968	34.9	1.4	4.4%
1969	35.6	1.5	4.8%
1970	34.1	(0.4)	(1.4%)
1971	41.6	0.15	0.5%
1972	46.4	1.4	4.6%
1973	61.1	2.7	8.6%
1974	83.2	5.4	14.7%
1975	99.8	0.18	0.4%
1976	106.6	(2.4)	(5.7%)
1977	107.0	0.4	0.8%

MACMILLAN BLOEDEL

The company operates in the fine paper business in Canada through its Island Paper Mills division at New Westminister, B.C. This is the only fine paper mill in western Canada. M.B. also operates fine paper mills in Holland, Belgium and Spain.

Island Paper Mills was established in 1960. It is non-integrated and has a capacity of 100 tons per day of bond, tablet, register

bond, writing, book, litho, offset, duplicator, envelope, tag, and label papers. The mill has one paper machine.

REED PAPER LIMITED

Reed Paper operates a fine paper production facility at its Dryden bleached kraft mill. Reed Paper is a subsidiary of Reed International of England.

Fine paper production was started in 1961 in an effort to utilize excess kraft production and some idle paper machines. The company has taken a more focused approach to its fine paper operations than other producers. Reed concentrates on production of envelope and bond papers and does a high percentage of its business with governments, as well as private labelling for major merchants such as Barber-Ellis. Reed has no merchant operations. Capacity of the Dryden mill is approximately 30,000 tons per year. This can be increased by changing over other paper machines from sack kraft production.

Reed is in serious financial difficulties at the moment, having incurred a loss of \$66.2 MM in 1977. The company is for sale but it is expected that only peripheral operations (decorative products, pigments, resource recovery and recycling) will be sold. The Dryden pulp mill continues to need large scale modernization to make it cost competitive and meet pollution requirements.

Other Producers

There are several small producers of printing and writing papers in addition to the firms described previously. Among these small producers are:

- J. Ford and Co.

EXHIBIT J
 UNITED STATES REGIONAL DISTRIBUTION OF PRODUCTION
 (in tons)

Grade	Northeast								South								Midwest								West				Total United States							
	1960	%	1965	%	1970	%	1975	%	1960	%	1965	%	1970	%	1975	%	1960	%	1965	%	1970	%	1975	%	1960	%	1965	%	1970	%	1975	%	1960	1965	1970	1975
Groundwood	656	22.7	642	18.2	693	18.0	715	18.7	N/A	N/A	N/A	N/A	208	7.2	255	8.7	219	9.1	216	7.3	150	4.5	160	4.7	N/A	N/A	N/A	N/A	166	17.4	185	18.1	862	1038	1217	1277
Machine Coated	618	21.4	952	27.1	1062	27.5	998	26.1	"	"	"	"	799	27.7	800	27.4	836	34.7	1134	38.3	1280	38.5	1335	39.5	"	"	"	"	136	14.2	166	16.2	2033	2826	3277	3328
Book	876	30.3	923	26.2	925	24.0	864	22.6	274	"	426	"	818	28.3	750	25.6	648	26.7	628	21.1	663	19.9	600	17.8	64	"	133	"	197	20.6	192	18.8	1571	2110	2603	2401
Fine	738	25.6	1002	28.5	1178	30.5	1245	32.6	197	"	255	"	1061	36.8	1120	38.3	704	29.2	985	33.2	1231	37.0	1285	38.0	132	"	205	"	456	47.7	495	48.4	2333	3166	3926	4144
Bristol	N/A	N/A	N/A	N/A	122	3.2	112	2.9	N/A	"	N/A	"	655	22.7	618	21.1	N/A	N/A	N/A	N/A	69	2.1	65	1.9	N/A	"	N/A	"	141	14.8	130	12.7	633	870	987	936
Writing	"	"	"	"	1056	27.4	1135	29.7	"	"	"	"	406	14.1	502	17.2	"	"	"	"	1162	35.0	1220	36.1	"	"	"	"	315	33.0	365	35.7	1700	2296	2939	3208
Total Region Printing and Writing	2888		3519		3858		3822		"	"	"	"	2886		2925		2407		2963		3324		3380		"	"	"	"	953		1023		6799	9140	11023	11150
% U.S. Total Printing and Writing	42.5%		38.5%		35.0%		34.3%		N/A		N/A		26.2%		26.2%		35.4%		32.4%		30.2%		30.3%		N/A		N/A		8.7%		9.2%					
Groundwood	76.1%		61.8%		56.7%		56.0%		"		"		17.1%		20.0%		25.4%		20.8%		11.7%		12.5%		"		"		13.6%		14.5%					
Machine Coated	30.4%		33.7%		32.4%		30.0%		"		"		24.4%		24.0%		41.1%		40.1%		39.1%		40.1%		"		"		4.2%		5.0%					
Book	55.8%		43.7%		35.5%		36.0%		17.4%		20.2%		31.4%		31.2%		41.2%		29.8%		25.5%		25.0%		4.1%		6.3%		7.6%		8.0%					
Fine	31.6%		31.6%		30.0%		30.0%		8.4%		8.1%		27.0%		27.0%		30.2%		31.1%		31.3%		31.0%		5.7%		6.5%		11.6%		11.9%					
Bristol			N/A		12.4%		12.0%		N/A		N/A		66.4%		65.0%		N/A		N/A		7.0%		6.9%		N/A		N/A		14.3%		14.9%					
Writing			"		35.9%		35.4%		"		"		13.8%		15.6%		"		"		39.5%		38.0%		"		"		10.7%		11.4%					

Source: Regional Data; Pulp and Paper June Issues
 United States Totals; Predicast Inc.
 U.S. Total for 1960 estimated to be 5% less than 1961
 1975 Regional data based on 1970 % and adjustments

- Crown Zellerbach Canada
- Fraser Companies Limited
- Ontario - Minnesota Pulp and Paper Co.

It is estimated that these firms account for approximately 5% of Canadian consumption of printing and writing papers.

There is the possibility of two new producers entering the market. Kruger Pulp and Paper is currently negotiating with the R.R. Donnelly Company of Chicago to supply that firm with 70,000 tons per year of coated magazine paper under a long term take or pay contract. This would require conversion of one of Kruger's newsprint machines at Trois Rivieres. Irving Pulp and Paper is also considering the conversion of its Lake Utopia mill to produce groundwood specialties and magazine stock.

UNITED STATES PRODUCERS

This section will briefly describe the major U.S. fine paper producers and their market specialization.

Production capacity for fine and printing papers in the United States amounted to 14,963 M tons in 1977 according to the API. Approximately 65% of this capacity was located in the New England area and the upper mid-west. The South had approximately 26% of capacity and the West 7%.

Within the grades there is some degree of regional specialization. The New England area tends to concentrate on production of book and writing papers, especially bonds, and groundwood papers. The mid-west specializes in machine coated papers while the South has a high proportion of bristols and book papers. Exhibit 3, opposite, shows the

regional distribution of production for 1960, 1965, 1970 and 1975.
(1975 figures are estimated based upon 1970 data).

The United States market is split approximately 60% large integrated producers and 40% small, usually non-integrated producers. The small producers are predominately found in the New England area. They are usually old, family run firms specializing in small run speciality papers and are usually poorly capitalized. The large integrated producers dominate the commodity markets, are efficient, have relatively modern facilities, and are well financed.

The major firms within each segment are:

<u>Grade</u>	<u>Company</u>	<u>% U.S. Production 1974</u>
Uncoated groundwood	St. Regis	15%)
	Fraser) 35%
	Crown Zellerbach)
Uncoated Book	Champion International	12%)
	International Paper	12%)
	Union Camp) >40%
	Westvaco)
	Weyerhaeuser)
Coated printing	Consolidated Paper	>12%)
	St. Regis	8%)
	International Paper	8%)
	Westvaco	8%) >75%
	Champion International	8%)
	Crown Zellerbach	8%)
	Blandin Paper	5%)
	+ 3 others)

<u>Grade</u>	<u>Company</u>	<u>% U.S. Production 1974</u>
Writing and Related	International Paper	11%
	Nekoosa	10%
	Hammermill Paper	8%
	Mead	10%
	Boise Cascade	7%
	Champion International	7%
Bleached bristols	Crown Zellerbach)
	International Paper) 75%
	Scott Paper)

Source: Predicast Inc.

In terms of sales the largest U.S. producers are:

	<u>1974 % of Market</u>
- International Paper	11%
- Great Northern Nekoosa	10%
- Champion Interantional	7%
- Mead	4%
- Crown Zellerbach	5%
- St. Regis	5%

	<u>1974 % of Market</u>
- Scott Paper	5%
- Westvaco	5%
- Hammermill Paper	5%
- Boise-Cascade	<u>4%</u>

Total 10 largest 61%

Source: A.D. Little, Inc.

Major expansion plans announced to date covering the period to 1980 include:

<u>Company</u>	<u>Expansion Type</u>	<u>Size</u>	<u>Start up and cost</u>
International Paper Jay, Maine	carbonizing tissue white papers	94 t/d 400 t/d	1977 \$186.3 MM
Consolidated Papers Whiting, Wis.	coated paper	103 M t/y	1979 \$ 70.5 MM
Champion International Courtland, Ala.	uncoated papers	N/A	1980 \$256. MM
Boise Cascade Wallula, Wash.	white papers	400 t/d	1979 \$215 MM

Source: API 1976 Capacity Survey.

TABLE 11

VALUE OF SHIPMENTS PER TON BY GRADE

	UNCOATED CANADIAN(1)		GROUNDWOOD UNITED STATES	BOOK PAPER UNCOATED			WRITING & RELATED			COATED PRINTING UNITED STATES
	<u>\$C</u>	<u>\$US</u>		<u>\$C</u>	<u>\$US</u>	UNITED STATES	<u>\$C</u>	<u>\$US</u>	UNITED STATES	
1965	158	146	-	293	271	-	334	309	-	-
66	171	159	-	305	384	-	337	313	-	-
67	162	151	166	325	302	255	349	325	372	265
68	160	149	176	308	286	242	342	318	347	277
69	179	166	181	308	286	255	337	313	355	295
1970	173	163	179	308	290	263	325	306	363	288
71	163	161	198	309	306	263	321	318	359	290
72	170	172	178	319	322	253	326	329	360	289
73	192	194	181	353	356	302	376	380	398	331
74	261	266	256	492	501	437	557	560	491	405
1975	286	283	300	555	549	438	607	601	561	453
76	-	-	402	-	-	460	E604	592	579	450
77	-	-	-	-	-	-	-	-	-	-

1) In Canada, defined as groundwood, printing and specialties.

2) In Canada, defined as book paper.

3) In Canada, defined as fine papers.

SOURCES: Statistics Canada and API supplied the basic data.

TABLE 12
TRENDS IN FINE PAPER PRICES COMPARED TO
PULP AND INDUSTRY PRICES GENERALLY

Index 1971=100

	Canada(a)		USA(d)	Canadian(b)	Canadian(c)
	Printing	Fine	Fine	Pulp	Industry Selling
1960	N/A	80.1	N/A	79.8	85.7
1965	"	84.8	"	91.0	61.1
1966	"	88.7	83.4	91.5	92.7
1967	"	93.2	86.4	92.1	94.8
1968	"	92.0	88.9	89.4	94.7
1969	"	96.0	91.9	92.4	97.7
1970	N/A	97.9	100.0	105.3	100.5
1971	100.0	100.0	100.0	100.0	100.0
1972	103.4	102.5	101.6	92.3	100.5
1973	119.6	116.9	105.0	119.5	113.3
1974	154.2	152.4	130.2	189.1	157.1
1975	163.9	162.5	138.6	236.0	189.1
1976	164.8	161.6	153.3	226.9	191.7
1977	E178.6	164.3	E154.0	221.4	204.2

Average growth rates p.a. (three year averages)

1970-75	10.8%	10.2%	6.7%	16.9%	12.5%
1975-77	4.3%	10.6%	0.2%	3.2%	3.9%

(a) STATSCAN 62-011; 10 2710 046

(b) STATSCAN 62-011; 10 2710 012 00 34123 02 (Wood-pulp, sulphate and soda, paper grades, unbleached for export)

(c) STATSCAN 62-0211; 10 2710 (Pulp and Paper Mills)

(d) API DATA, This column is an average of Book Paper, Offset; and Writing Paper.

THE COST COMPETITIVENESS
OF THE INDUSTRY

Cost Structure Comparisons

The Department of Industry, Trade and Commerce has recently conducted studies which indicate that the Canadian "Fine Paper Industry" (definition unknown) is not cost competitive with the United States on a number of score:

- the short production runs (due to limited markets) in Canada require costly downtime which must be written off in paper prices
- raw material (fibre) costs are "substantially" higher in Canada
- the tendency of the U.S. industry to be upstream integrated in pulp is an advantage in that no drying or transportation cost is involved.

Since we did not have access to the detail of the above study we could not integrate it with this one. While cost competitiveness is by no means the only competitive factor to be considered it is obviously an important one since price differentials of a few percent are critical in the market place.

Average Value of Shipments

The available data (Table 11, opposite) on the various product segment unit value of shipments provide some explanation of the direction of foreign trade between Canada and the United States.

Canadian prices have been converted to U.S. dollars for comparison. It should be noted that the categories of papers do not fully match one another in definition and some of the price differential between the countries could be accounted for by this fact. It is also possible that the different mix in grades of paper within the segments will account for some differences. Note that the unit value of shipments does not take into account tariff and transport barriers between the countries.

Uncoated groundwood:

United States "unit values" of uncoated groundwood have tended to be higher than those in Canada. In the years of Canadian export growth in the segment (i.e.: 1969-71) unit values were about 8% higher than in Canada. The unit values were more closely matched in the following three years (when Canadian exports to the U.S. moderated) but in 1975 returned to the historic difference.

Conversely, the United States has not made significant inroads into the Canadian groundwood uncoated market.

Book papers, uncoated:

Canadian unit value of book papers have on average been considerably higher (by about 18%) than the United States. In 1975 the difference was 25%. Book papers accounted for one-third of U.S. exports of printing and writing papers to Canada in 1975. Canada, however, exported more (by 38%) book paper to the U.S.A. than was imported.

Writing and related:

The generally higher United States unit values (by 16% in the early seventies) was reversed for the 1974/5 period, and likely remained slightly higher in Canada through 1976.

The United States had made a rapid 20% (85,000 ton) inroad into the Canadian writing and related segment by 1975. Canada sales to the U.S.A. amounted to 0.7% (34,000 tons) in the same period.

Price Index Trends

The price index series of Table 12, opposite, shows that printing and writing paper price increases in the early seventies were somewhat less than industry selling price escalation in general. Pulp price increased at about 7% points higher than the 10-11% per annum growth of printing and writing paper between 1970-75, in Canada.

However, paper price increases in Canada were considerably higher at 10.5% per annum than in the United States where escalation was kept to 6.7% per year in the same period.(1)

Tariff Barriers

Canada:

Import duties to Canada averaged about 22.5% ad valorem up to 1968 but were reduced (as a counter inflationary measure) in 1969 to 12.5% for book papers and 15.0% for writing and related papers. Industry apparently was critical of this sudden reduction as it was expected to be introduced gradually over a four year period. (2)

-
- (1) Actually the comparison between two sets of price indices is often not strictly valid since the method of computation may be different. We would want to examine the series in more detail before making further comment.
- (2) It was said that plans for rationalization were disrupted because of the unexpected tariff reduction in one year.

TABLE 12
TRENDS IN FINE PAPER PRICES COMPARED TO
PULP AND INDUSTRY PRICES GENERALLY

Index 1971=100

	Canada(a)		USA(d)	Canadian(b)	Canadian(c)
	Printing	Fine	Fine	Pulp	Industry Selling
1960	N/A	80.1	N/A	79.8	85.7
1965	"	84.8	"	91.0	61.1
1966	"	88.7	83.4	91.5	92.7
1967	"	93.2	86.4	92.1	94.8
1968	"	92.0	88.9	89.4	94.7
1969	"	96.0	91.9	92.4	97.7
1970	N/A	97.9	100.0	105.3	100.5
1971	100.0	100.0	100.0	100.0	100.0
1972	103.4	102.5	101.6	92.3	100.5
1973	119.6	116.9	105.0	119.5	113.3
1974	154.2	152.4	130.2	189.1	157.1
1975	163.9	162.5	138.6	236.0	189.1
1976	164.8	161.6	153.3	226.9	191.7
1977	E178.6	164.3	E154.0	221.4	204.2

Average growth rates p.a. (three year averages)

1970-75	10.8%	10.2%	6.7%	16.9%	12.5%
1975-77	4.3%	10.6%	0.2%	3.2%	3.9%

(a) STATSCAN 62-011; 10 2710 046

(b) STATSCAN 62-011; 10 2710 012 00 34123 02 (Wood-pulp, sulphate and soda, paper grades, unbleached for export)

(c) STATSCAN 62-0211; 10 2710 (Pulp and Paper Mills)

(d) API DATA, This column is an average of Book Paper, Offset; and Writing Paper.

Table 13

(% ad valorem, most favoured nation)

Duties on Imports into Canada

	<u>1969*</u>	<u>pre-1968</u>	<u>1951</u>	<u>1948</u>	<u>1939</u>	<u>1937</u>	<u>pre-1937</u>
Printing Paper (coated or uncoated)	12.5	22.5					
Uncoated book, printing, litho papers	12.5	22.5		25.0	27.5	32.5	
Coated printing paper	12.5	22.5		25.0	27.5	32.5	
Book or coated paper for magazines, newspapers and periodicals	0	0	0			5.6-8.2	22.5
Manifold paper and duplicating paper	15.0	22.5					
Blotting paper, bristols, boards and blanks	15.0	22.5			27.5	25.0	
Paper, n.e.s.	15.0	22.5-25.0					

Duties on Imports into U.S.

Book paper and printing paper #252.67					**	.08¢/lb.+ 2% (2.5%)	.17¢/lb.+ 4%
Coated print paper						1¢/lb. + 2% (2.3%)	2¢/lb. + 4.5%
Paper impregnated, coated, not litho-printed) item #254.46						1¢/lb. + 2% (2.3%)	2¢/lb. + 4.5%
Paper, n.e.s. item #256.30						7.5% (7.5)	15%

* Canada instituted full tariff reductions in June of 1969 rather than on the 5-year schedule as previously proposed.

** () indicate approximate percent ad valorem rate based on 1975 prices.

TABLE 14

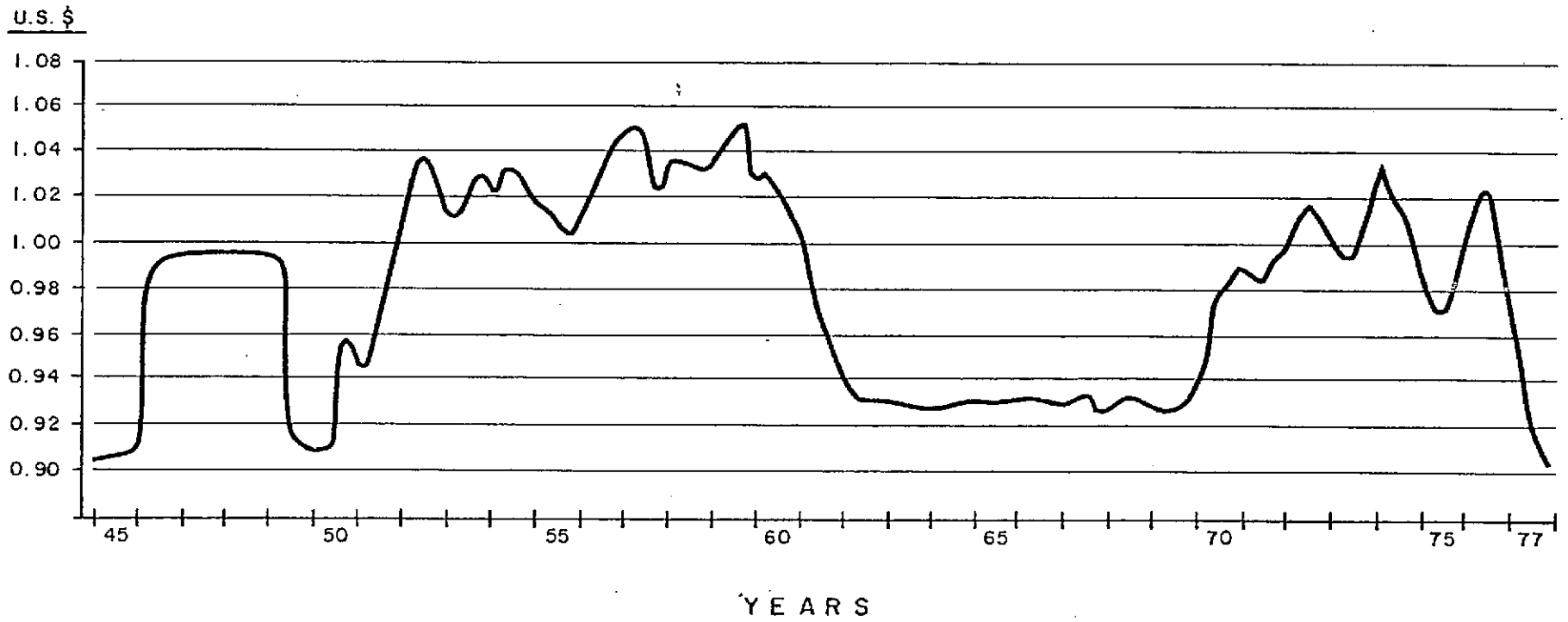
ESTIMATED CURRENCY, TARIFF AND PRICE EFFECT OF
MARKETING IN CANADA AND U.S.A.

% = Difference in Sale Value
(%) = Disadvantage

PRODUCT	U.S.A. COMPANY MARKETING IN CANADA				CANADIAN COMPANY MARKETING IN UNITED STATES			
	1965/66	1968/69	1971/76	1977	1965/66	1968/69	1971/76	1977
GROUNDWOODS								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff (1)	0	0	0	0	(6.0)	(2.5)	(2.5)	(2.5)
Price (Local)	<u>N/A</u>	<u>(5.3)</u>	<u>(43.2)</u>	<u>(31.9)</u>	<u>N/A</u>	<u>5.3</u>	<u>43.2</u>	<u>31.9</u>
Aggregate	N/A	(12.3)	(43.2)	(41.9)	N/A	9.8	40.7	39.4
BOOK PAPERS								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff	(22.5)	(12.5)	(12.5)	(12.5)	(6.0)	(2.5)	(2.5)	(2.5)
Price (Local)	<u>N/A</u>	<u>23.9</u>	<u>20.2</u>	<u>30.5</u>	<u>N/A</u>	<u>(23.9)</u>	<u>(20.2)</u>	<u>(30.5)</u>
Aggregate	N/A	4.4	7.7	8.0	N/A	(19.4)	(22.7)	(23.0)
WRITING & RELATED								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff	(22.5)	(15.0)	(15.0)	(15.0)	(15.0)	(7.5)	(7.5)	(7.5)
Price (Local)	<u>N/A</u>	<u>(3.4)</u>	<u>1.6</u>	<u>0.9</u>	<u>N/A</u>	<u>3.4</u>	<u>(1.6)</u>	<u>(0.9)</u>
Aggregate	N/A	(25.4)	(13.4)	(24.1)	N/A	2.9	(9.1)	1.6

FIGURE 4

THE CANADIAN DOLLAR IN TERMS OF THE U.S. DOLLAR



United States:

U.S. import duties by comparison are small, amounting to about 2.5% on printing grades and 7.5% on writing and related grades at 1975 prices.

Both the Canadian and United States duties shown in Table 13, opposite, are being renegotiated as part of the current Tokyo round. Changes would likely occur in the early eighties.

Currency Fluctuations

The importance of the level of the Canadian dollar compared to foreign currencies, particularly the U.S. dollar, is underscored when one considers that Canada's industry relies heavily on exports (to the tune of 40% of capacity) to maintain operating rates. A low value of the Canadian currency offers material price protection from foreign imports as well as increased incentives to target export markets where prices (in terms of the Canadian equivalent) may be profitable. The reverse is generally true for a higher value Canadian dollar.

Since 1965 when the Canadian dollar was about 7% below the American, (Figure 4, opposite) it has swung in the 1970-2 period to par and remained at that level on average through 1976. In 1977 the Canadian dollar had been discounted 10% against the American

Although Canada does not import much printing and writing paper from countries other than the United States, about one-quarter of exports are destined elsewhere. The value of the dollar in relation to offshore currencies could therefore be of significant influence.

Combined Effect of Currency Exchange, Tariffs and Prices on Price Competitiveness

One of the problems faced in analyzing the price competitiveness (U.S. versus Canada) of the industry is to account for the

TABLE 14

ESTIMATED CURRENCY, TARIFF AND PRICE EFFECT OF
MARKETING IN CANADA AND U.S.A.

% = Difference in Sale Value

(%) = Disadvantage

PRODUCT	U.S.A. COMPANY MARKETING IN CANADA				CANADIAN COMPANY MARKETING IN UNITED STATES			
	1965/66	1968/69	1971/76	1977	1965/66	1968/69	1971/76	1977
GROUNDWOODS								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff (1)	0	0	0	0	(6.0)	(2.5)	(2.5)	(2.5)
Price (Local)	<u>N/A</u>	<u>(5.3)</u>	<u>(43.2)</u>	<u>(31.9)</u>	<u>N/A</u>	<u>5.3</u>	<u>43.2</u>	<u>31.9</u>
Aggregate	N/A	(12.3)	(43.2)	(41.9)	N/A	9.8	40.7	39.4
BOOK PAPERS								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff	(22.5)	(12.5)	(12.5)	(12.5)	(6.0)	(2.5)	(2.5)	(2.5)
Price (Local)	<u>N/A</u>	<u>23.9</u>	<u>20.2</u>	<u>30.5</u>	<u>N/A</u>	<u>(23.9)</u>	<u>(20.2)</u>	<u>(30.5)</u>
Aggregate	N/A	4.4	7.7	8.0	N/A	(19.4)	(22.7)	(23.0)
WRITING & RELATED								
Currency	(7.0)	(7.0)	0	(10.0)	7.0	7.0	0	10.0
Tariff	(22.5)	(15.0)	(15.0)	(15.0)	(15.0)	(7.5)	(7.5)	(7.5)
Price (Local)	<u>N/A</u>	<u>(3.4)</u>	<u>1.6</u>	<u>0.9</u>	<u>N/A</u>	<u>3.4</u>	<u>(1.6)</u>	<u>(0.9)</u>
Aggregate	N/A	(25.4)	(13.4)	(24.1)	N/A	2.9	(9.1)	1.6

three major variables - exchange rate, tariffs and prices - which at various times will accumulate or cancel one another out.

In Table 14, opposite, we have attempted to aggregate the price effect of the three variables in terms of what it would mean to a Canadian producer marketing in the United States or an American producer marketing in Canada. Obviously there are other cost factors, such as transportation costs, which are not included in the analysis but in terms of a comparative analysis, the data is useful.

Overall the price difference (measured in local currency) is a significant factor in groundwoods and book papers. Even discounting the currency by the exchange rate price has had to be by far the greatest influence on the difference.

The combined effect of the uncontrollables - currency and tariffs - when acting together in Canada's favour have offered formidable protection. Indeed a comparison between the 1965-66 period and 1977 shows that the degree of protection at the earlier date is not much different from that being afforded today:

	<u>1965 - 66</u>	<u>1977</u>
Groundwoods	(7.0%)	(10.0%)
Book Papers	(29.5%)	(22.5%)
Writing and Related	(29.5%)	(25.0%)

Groundwoods:

The three variables afford Canadian producers substantial (40%) advantage over American producers in the United States market; while affording as much home protection for the Canadian producer.

It is therefore not surprising that it is within this segment that Canada has made the most gains in the U.S.A. market.

Book papers:

Canadian producers face a great disadvantage in the U.S.A. book paper market mainly because of the lower U.S.A. prices.

U.S.A. producers have capitalized on the slight advantage they have in the Canadian market.

Printing and Writing Papers:

This is one of the segments most sensitive to tariff and exchange rates since price differences in local currencies have not been that much different between Canada and the United States.

The 15% tariff and 10% currency disadvantage to U.S.A. importers provides most of the protection for the industry.

On the other hand Canada now has a more favoured position towards the U.S.A. market given the lower Canadian dollar and rate of only 7.5%.

DISTRIBUTION CHANNELS

Historic Development

Up to the mid-sixties nearly all printing and writing papers were sold through independent merchants with some going directly to end-users. Then at the turn of the decade, when the industry became threatened with increasing imports the industry began to integrate forward into paper merchants.

This forward integration to the extent of about 6.5% of demand by 1975 was apparently an attempt to gain greater hold of the markets for the purposes of rationalization and the control of imports.

Current Structure of Distribution

Figure 5, opposite, describes the basic distribution channels as described to us by merchants. About 20% of the market is controlled by independents who act for both importers and domestic producers. They handle the same product range as the captive merchants and are generally similar in their method of operation.

Company controlled merchants are the most powerful block in the channel accounting for 65% of demand. These merchants, while ostensibly free to obtain paper from whatever source they choose, are likely to be heavily guided from owner producers. Detailed ownership relationships are described in the section on companies.

About 15% of the market goes directly from producer to end-user. This direct shipping is to large printing paper users, converters (e.g. envelope manufacturers) and business users such as Xerox, who are actually performing a merchant function.

Whether the extent of integration assisted the producers in actually controlling the market is arguable. Customers will often

specify their needs down to the producer, thus severely restricting the merchants choice of supply.

However, there are cases where the captive merchants do have an advantage in periods of shortages. In these cases the producers will naturally supply their captive merchants before the independents. In the current environment where there is a shortage of coated paper one independent merchant has been refused supplies from a Canadian producer for the above reason.

U.S. Distribution

This topic was not specifically investigated. However, it is understood that approximately 80% of printing and writing paper production is sold either directly by the mills or through captive merchants. The proportion of direct mill sales is higher in the United States than Canada. Apparently the U.S. mills control their captive merchants much more closely than do Canadian mills.

THE STRENGTHS AND WEAKNESS OF THE INDUSTRY

Basic Nature of the Industry

The Canadian printing and writing paper industry is characterized by the following:

- Capacity historically greatly (40%) in excess of domestic demand.
- Production having experienced sustained growth (except for 1975).
- Operating rates of 90% or lower generally.

- Demand expanding at a reasonable rate (5%) but historically remaining only 60-62% of capacity.
- Dependency on exports (which account for more than one-third of production) especially in printing papers.
- "Threatened" by the increasing imports (from the U.S.) from 1971 amounting to 24% in 1975.
- Price advantages over the United States in some grades (groundwoods) but at a disadvantage in others (book papers).

Strengths and Opportunities
Of The Industry

The major strength of the industry lies in its domestic market which is:

- Growing at a reasonable rate.
- Protected, in the less competitive grades, by import tariffs (and lately by a favourable exchange rate).

Historically, the industry has experienced success in the export market particularly in the United States groundwood segment.

With the lower Canadian dollar, we see the added protection affording the industry time to organize for greater penetration of its home market. The industry could attempt to regain some of the 25% share of the home market lost to imports. This may require some sacrifices in short term return but could reap benefits from cost reductions obtained from longer production runs.

There may also be scope for rationalization either through a natural process or by government assistance to assist in this process.

Canada also faces the distinct opportunity of further penetrating the United States groundwood paper market. It is clear from the historic performance of the industry in that 13% of the segment is already held by Canada that further inroads may be possible. This is particularly so in view of the lack of forecasted expansion in the United States in a market growing at about 3.3% per annum.

Export losses in some of the other traditional markets - United Kingdom, South Africa and Australia - may be made up by exports to other developing nations. The printing and writing industry is often the last to be considered by these nations so that in the current and medium term, it could offer potential. (This aspect was not specifically researched as part of this study however).

Weakness and Threats of the Industry

Significant weaknesses of the industry include:

- A low regional/national balance and therefore heavy reliance on exports to maintain operating rates.
- Poor industry operating rate historically and projected.
- Apparently higher cost through short runs (higher downtime), labour, material, taxes, and environmental control, compared to the United States.
- Increased competition from imports from the U.S.A. despite the considerable protection afforded by import duties and the lower Canadian dollar.

The major threat facing the industry appears to be in foreign trade. In exports, Canada could lose ground in the writing and related segment of the United States where there appears to be a continuing excess capacity situation. However since this is the smaller portion of exports it may not be that serious.

However, much of Canada's export losses in other areas, particularly South Africa and the United Kingdom in the early to mid-seventies, may not be regained.

On the import side, Canada is faced with the possibility of a reduction in tariff on book and writing papers. Such reduction could tip the competitive scales more in favour of importers, possibly accelerating imports. This would apply most to book papers but is also dependent upon the other uncontrollable the exchange rate.

The other threat to the industry is the reportedly higher cost of production than the U.S. While it was outside our terms of reference to study this factor in detail (since the Federal Department of Industry Trade and Commerce was simultaneously conducting confidential studies) it is obviously a prime factor in determining competitiveness. A continuing poor cost competitive situation would seriously threaten the industry in the long term, both from the point of view of loss of share in the domestic market and also in the loss of the export potential on which the industry relies so heavily.

THE STRATEGIC OPTIONS AVAILABLE

In this section we discuss some of the more important options open to the industry. None of them are mutually exclusive, and will be discussed in general terms since they will need considerably more study before they could be evaluated.

PASSIVE OPTION:

Maintenance of the Status Quo

The industry has some breathing space in view of the weak Canadian dollar and the projected improvement in the printing and writing foreign trade balance. This could maintain the industry at least in its current state, if not considerably improved, for three or four years. This is provided that the supply-demand situation does not radically change during this period (for example by the entry of new competition).

In the status quo case we expect to see improvements in exports to the United States (notably in groundwoods) and even to the offshore nations where currencies have strengthened significantly against the Canadian dollar.

Imports to Canada will likely moderately subside (provided inflationary pressures on Canadian output will improve against the United States yardstick).

With demand returning to more normal levels and production possibly increasing at an even faster rate than demand, operating rates should improve, and with it hopefully profits.

In the longer range we could foresee several plants running into trouble through lack of sufficient profitability to maintain viable operations. This will likely be a reality if the Canadian dollar strengthens and/or tariffs are significantly reduced from the book and writing imports.

OFFENSIVE STRATEGIES:

Exploit the Competitive Advantage In Printing Groundwoods

Canada has historically been very competitive in groundwood printing papers having captured a 13% share of the United States market by 1975. With increasing dependence of the United States on Canada for this grade of paper, it appears a natural product for Canadian producers.

Unfortunately, the groundwood segment of the existing printing and writing industry could soon have capacity limitations. Future required production to maintain penetration of the U.S. market could be met by the newsprint industry. However, consideration could be given to converting some of the (poorly utilized) book and writing capacity although we suspect that the cost of this would be prohibitive.

Development of Speciality Paper Markets

The movement into the high value speciality papers (such as technical, rag, filter and other thin papers) could prove beneficial to the industry burdened with high production costs. Provided domestic and foreign markets are proven to have the potential there is scope for some rationalization of the industry.¹

-
- 1 - Rolland specializing in technical papers at Mt. Rolland and St. Jerome
 - Domtar concentrating on rag and sulphite papers at Cornwall and Beauharnois.
 - Eddy could specialize in parchment wrapping.
 - Abitibi could produce publication grades and enamel papers.

This would be a significant strategic move possibly requiring considerable reorganization of the marketing thrust of present producers.

Exploit Potential in
Non-Traditional Markets

The printing and writing paper industry is usually one of the last to be self-sufficient in developing nations. Some emphasis could be placed on investigating Canada's competitiveness in these non-traditional markets.

DEFENSIVE STRATEGIES:

Reduction in Canadian Capacity

Canadian capacity far exceeds national demand for printing and writing grades of paper. To lessen the industry's dependence on exports for maintaining operating rates a reduction in capacity may be desirable.

This may happen anyway. For example E.B. Eddy's withdrawal would reduce capacity by 14% and the closure of Domtar's Windsor mill would increase this to 21%.

Improved operating rates are the key to the industry's long term health and, while mill closures are distasteful in many respects, they should still be regarded as a possible option.

Restricting Imports

The maintenance of high import duties, particularly for the writing and related grades, and/or other import restrictions would provide some continued protection for selected segments of the industry.

In view of the current atmosphere where world tariffs and other international trade restrictions are being reduced it would appear a less feasible option.

While a reduction in tariffs may suppress some of the controllable facets of inflationary pressures on the industry such as labour, a positive factor in an industry not competitive with its major trading partner, it may also hasten the exit of the weaker mills.

Maintenance of high tariff protection in our view is likely to assist the industry best if it is done in parallel with positive improvements to efficiency. Thus tariff barriers may not be effective as a long range defensive strategy.

Rationalization of the Industry by Agreement

Most of the above options represent a degree of rationalization or specialization. Consideration could be given to working out an agreed strategy for rationalization between government and industry.

Such a strategy would aim at providing each producer with the necessary instruments to specialize in a particular product segment thus providing sufficient domestic demand to operate efficiently.

This option would require the cooperation of industry (possibly under the threat of reduced tariffs) and a government guarantee of freedom from prosecution under anti-trust laws.

ACTION REQUIRED TO EVALUATE THE OPTIONS

This study has succeeded in identifying the major strengths, weaknesses and options for the printing and writing paper industry, in an overview fashion. It was not part of the terms to evaluate the options or recommend a course of action.

Progress towards the evaluation of the options will require government policy input before they can be detailed. However, such progress would likely generally involve some of the following activity:

1. Cost Competitiveness: Since the industry relies on foreign markets to maintain operating rates, its cost competitiveness with its foreign producers is important. It is therefore crucial that the findings of the ITC studies on cost comparison be integrated with the findings of the report so that the problems facing the industry can be placed in proper perspective.
2. Industry Prospects: This report was essentially a mapping out of historical development of the industry with a snapshot for 1977. A meaningful evaluation of options is technically future oriented. While some broad comments were made on outlooks these were not in the depth required for an assessment of the industries prospects, especially in the long range. Further research could address this issue.
3. Study Detail: An overview study of this type necessarily lacks the detail (with respect for example to product/market segmentation and shares, pulp/paper producer postures and plans etc) essential to the evaluation of

options; particularly since a major issue facing the industry is rationalization among a few producers. Considerable detailed marketing analysis is required with respect to both the home market, and existing or prospective export markets.

STATISTICAL TABLES

APPENDIX

APPENDIX A

CANADIAN PRINTING AND WRITING PAPER DEMAND

(groundwood (1) based papers as a percentage of)

<u>(M short tons)</u>	<u>Canadian⁽¹⁾ Demand</u>	<u>Groundwood(1) Based</u>	<u>Groundwood Total %</u>
1965	440	55	12.5
1966	490	57	11.6
1967	490	60	<u>12.2</u>
1968	540	138	25.5
1969	540	119	22.0
1970	600	153	25.5
1971	620	165	26.6
1972	640	101	15.8
1973	720	89	12.4
1974	840	301	35.8
1975	630	282	44.8
1976	830	E440	53.0
1977	860	N/A	N/A

(1) Groundwood based papers contain more than 50% groundwood, according to CPPA Canadian definition (25% in the USA).

(2) Assumes 60% of printing and writings imports are groundwood.

Peat, Marwick and Partners

MARKET DATA SHEET FOR PRINTING AND WRITING PAPERS (2)
(M tons)

DATA SHEET 1

Year	APPARENT CONSUMPTION (1)			CANADA					UNITED STATES				
	North America	Canada	U.S.A.	Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
1960	N/A	366	N/A	427	413	14	61	438	N/A	7,126	N/A	N/A	N/A
1961	"	381	"	446	434	14	67	465	"	7,375	"	"	"
1962	"	382	"	457	445	12	75	485	"	7,809	"	"	"
1963	"	401	"	483	471	13	83	492	"	8,188	"	"	"
1964	"	409	"	514	502	19	113	578	"	8,673	"	"	"
1965	9,793	437	9,356	554	547	21	131	615	9,141	9,343	125	112	N/A
1966	10,853	484	10,369	670	633	24	171	807	10,099	10,323	161	115	10,731
1967	10,699	485	10,214	666	639	29	183	767	10,032	10,127	198	111	11,209
1968	11,133	544	10,589	694	678	29	163	872	10,647	10,539	193	143	11,649
1969	11,836	541	11,295	782	746	39	244	938	11,245	11,199	264	168	12,224
1970	11,694	598	11,096	926	895	42	339	1,101	11,073	10,958	319	181	12,219
1971	11,913	623	11,290	951	923	46	346	1,200	11,167	11,182	307	199	12,575
1972	12,948	641	12,307	993	969	65	393	1,246	12,254	12,244	272	209	13,267
1973	14,184	723	13,461	1,008	1,002	85	364	1,297	13,372	13,409	312	260	13,659
1974	14,229	836	13,393	1,192	1,160	117	429	1,269	13,539	13,473	334	414	14,128
1975	11,428	640	10,788	768	763	190	308	1,297	11,192	10,976	217	405	14,725
1976	13,894	E830	13,064	N/A	960	242	369	1,374	13,258	13,149	340	425	14,497
1977	N/A	E860	N/A	-	1,216	E150	500	1,390	N/A	N/A	N/A	N/A	15,006

(1) Apparent consumption equals (Shipments plus imports minus exports).
Where shipments are not available, production can be substituted.

(2) Printing and Writing; equals aggregate of Printing Summary; Writing
and Related Summary (i.e. Data Sheet 2 and 3)

Source: Statistics Canada, CPPA and Apl. See subgroups sheet for details.
(i.e. Data Sheet 2 and 3)

MARKET DATA SHEET FOR PRINTING SUMMARY (2)
(M tons)

DATA SHEET 2

Year	APPARENT CONSUMPTION (1)				CANADA					UNITED STATES				
	North America		Canada	U.S.A.	Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
	Year	U.S.A.	Canada	U.S.A.	Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
1960	N/A	193	N/A	240	239	7	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1961	"	198	"	245	242	7	50	"	4,701	"	"	"	"	"
1962	"	197	"	244	242	6	51	"	N/A	"	"	"	"	"
1963	"	206	"	260	256	8	58	"	"	"	"	"	"	"
1964	"	186	"	254	255	8	78	"	5,585	"	"	"	"	"
1965	6,334	186	6,148	278	278	8	100	"	5,974	6,100	111	63	"	"
1966	7,030	200	6,830	341	333	8	141	"	6,623	6,743	147	60	"	"
1967	6,847	198	6,649	341	339	15	156	"	6,539	6,527	182	60	"	"
1968	7,159	267	6,892	382	387	15	135	"	6,905	6,790	176	74	"	"
1969	7,550	239	7,311	424	415	20	196	"	7,209	7,146	251	86	"	"
1970	7,465	256	7,209	516	509	20	273	"	7,138	6,996	307	94	"	"
1971	7,535	257	7,278	527	515	26	284	"	7,194	7,078	297	87	"	"
1972	8,061	240	7,821	538	533	39	332	"	7,864	7,677	259	115	"	"
1973	8,605	284	8,321	495	498	39	253	"	8,345	8,179	281	139	"	"
1974	8,411	365	8,046	665	654	44	333	"	8,238	7,992	305	251	"	"
1975	7,006	288	6,718	438	447	108	267	"	7,012	6,747	203	232	"	"
1976	8,677	340	8,337	-	-	146	321	"	8,495	8,233	323	219	"	"
1977	-	-	N/A	-	-	-	-	"	N/A	N/A	N/A	N/A	"	"

(1) Apparent consumption equals (Shipments plus imports minus exports).

Where shipments are not available, production can be substituted.

(2) Printing Summary equals Groundwood uncoated; coated printing; book papers uncoated.

Sources: Canada:

Production - Statistics Canada 36-204 Groundwood and printing specialities plus book papers (including some non 50% groundwoods).

Shipments - Statistics Canada 36-204

Imports - Statistics Canada 65-203 for details codes see sub-groups data sheets 3 through 5.

Exports - Statistics Canada 65-202 for details codes see sub-groups data sheets 3 through 5.

Capacity - CPPA Reference Tables

United States:

API Statistics for paper and paperboard, 1977.

MARKET DATA SHEET FOR WRITING AND RELATED SUMMARY (2)
(M Tons)

DATA SHEET 3

Year	APPARENT CONSUMPTION (1)				CANADA					UNITED STATES				
	North			Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity	
	America	Canada	U.S.A.											
1960	N/A	172	N/A	187	174	7	9	N/A	N/A	N/A	N/A	N/A	N/A	
1961	"	180	"	201	192	7	17	"	2,456	"	"	"	"	
1962	"	183	"	213	203	6	23	"	N/A	"	"	"	"	
1963	"	192	"	223	215	5	25	"	"	"	"	"	"	
1964	"	220	"	260	247	11	35	"	"	"	"	"	"	
1965	3,460	251	3,209	276	269	14	31	"	3,167	3,243	14	49	"	
1966	3,822	284	3,538	329	300	15	30	"	3,744	3,581	14	55	"	
1967	3,855	287	3,568	325	300	15	27	"	3,493	3,600	16	51	"	
1968	3,970	277	3,693	312	291	15	28	"	3,740	3,749	17	69	"	
1969	4,282	302	3,980	358	331	20	48	"	4,036	4,053	13	82	"	
1970	4,231	342	3,889	410	386	24	66	"	3,934	3,962	12	87	"	
1971	4,378	366	4,012	424	408	22	62	"	3,972	4,105	10	102	"	
1972	3,887	401	4,486	455	436	29	61	"	4,391	4,568	13	94	"	
1973	5,579	439	5,140	513	504	49	111	"	5,026	5,231	31	121	"	
1974	5,818	471	5,347	527	506	63	96	"	5,287	5,480	29	163	"	
1975	4,422	352	4,070	330	316	82	41	"	4,180	4,230	14	173	"	
1976	5,218	490	4,728	N/A	N/A	96	48	"	4,762	4,917	17	206	"	
1977	N/A	N/A	N/A	"	"	N/A	N/A	"	N/A	N/A	N/A	N/A	"	

- (1) Apparent consumption equals (Shipments plus imports minus exports).
Where shipments are not available, production can be substituted.
- (2) Writing and related summary equals writing papers from Chemical wood pulp plus other fine paper (including cotton fibre; cover and text; thin paper; bristols)

Sources: Canada:

- Production - Statistics Canada 36-204 Fine paper plus tissue papers other than sanitary (i.e. thin papers)
- Shipments - Statistics Canada 36-204 Fine paper plus tissue papers other than sanitary (i.e. thin papers)
- Imports - Statistics Canada 65-203 for details codes see sub-groups data sheets 7 through 9.
- Exports - Statistics Canada 65-202 for details codes see sub-groups data sheets 7 through 9.
- Capacity - CPPA Reference Tables

United States:

API Statistics for paper and paperboard, 1977.

MARKET DATA SHEET FOR GROUNDWOOD UNCOATED PAPERS (2)
(M tons)

DATA SHEET 4

<u>APPARENT CONSUMPTION (1)</u>			<u>CANADA</u>					<u>UNITED STATES</u>				
North			Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
Year	America	Canada U.S.A.										
1960		N/A	N/A	N/A	1	-	N/A	N/A	N/A	N/A	N/A	N/A
1961		"	"	"	1	37	"	"	"	"	"	"
1962		"	"	"	1	44	"	"	"	"	"	"
1963		"	"	"	1	53	"	"	"	"	"	"
1964		"	"	"	1	72	"	995	"	73	13	"
1965		1,156	"	"	N/A	87	"	1,038	EI,060	99	3	"
1966		1,220	"	"	2	130	"	1,158	1,088	133	4	1,165
1967		1,160	"	"	2	117	"	1,163	1,020	148	4	1,252
1968		1,220	"	"	2	51	"	1,187	1,089	137	8	1,272
1969		1,290	"	"	3	126	"	1,208	1,089	204	6	1,296
1970		1,300	"	"	3	188	"	1,217	1,072	234	7	1,230
1971		1,230	"	"	6	200	"	1,186	1,069	167	10	1,363
1972		1,230	"	"	10	274	"	1,308	1,099	149	18	1,442
1973		1,250	"	"	8	223	"	1,415	1,148	130	30	1,403
1974		1,230	"	"	12	268	"	1,411	1,165	117	53	1,280
1975		1,120	"	"	34	192	"	1,293	1,106	88	75	1,329
1976		1,350	"	"	N/A	182	"	1,459	1,279	142	71	1,341
1977		N/A	"	"	"	N/A	"	N/A	N/A	N/A	N/A	1,345

(1) Apparent consumption equals (Shipments plus imports minus exports).

Where shipments are not available, production can be substituted.

(2) Groundwood uncoated equals 50% or more groundwood content in Canada; and 25% or more in the United States. Subgroups are publishing and printing; converting.

Sources: Canada:

Imports - Statistics Canada 35181 (1960-64) Book paper for mg, news, periodicals under 197A; after 1964. U.S. FT610 code 26212 00 (Note: These represent only U.S. exports of "uncoated groundwood" to Canada).

Exports - Statistics Canada 65-202 code 35149/15/16 i.e. groundwood printing and speciality nes/hanging paper, base stock for coated printing.

United States:

API Statistics for paper and paperboard, 1977.

DATA SHEET 5

MARKET DATA SHEET FOR COATED PRINTING PAPER (2)
(M tons)

APPARENT CONSUMPTION (1)			CANADA					UNITED STATES				
North			Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
Year	America	Canada U.S.A.										
1960		N/A	N/A	N/A	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1961		"	"	"	3	"	"	"	"	"	"	"
1962		"	"	"	3	"	"	"	"	"	"	"
1963		"	"	"	3	"	"	"	"	"	"	"
1964		"	"	"	2	"	"	2,620	"	"	37	"
1965		2,831	"	"	N/A	"	"	2,826	2,880	"	49	"
1966		3,040	"	"	15	"	"	3,102	3,088	"	49	3,329
1967		3,040	"	"	11	"	"	3,086	3,086	"	47	3,452
1968		3,080	"	"	11	"	"	3,134	3,138	"	57	3,539
1969		3,280	"	"	14	1	"	3,348	3,349	"	70	3,732
1970		3,200	"	"	14	1	"	3,278	3,278	"	75	3,700
1971		3,160	"	"	17	-	"	3,251	3,233	"	72	3,778
1972		3,450	"	"	23	N/A	"	3,546	3,527	"	76	3,866
1973		3,740	"	"	26	"	"	3,830	3,825	"	81	4,045
1974		3,720	"	"	36	"	"	3,974	3,822	"	99	4,075
1975		3,070	"	"	51	2	"	3,318	3,194	"	123	4,065
1976		3,870	"	"	N/A	N/A	"	4,063	3,981	"	107	4,156
1977		N/A	"	"	"	"	"	N/A	N/A	N/A	N/A	4,166

- (1) Apparent consumption equals (Shipments plus imports minus exports).
Where shipments are not available, production can be substituted.
- (2) Coated printing equals coated papers.

Sources: Canada:

- Imports: - Statistics Canada 65-203 code 35184 Coated groundwood up to 1964; than U.S. FT610 code 26213c 00
(Note: These represent only U.S. exports to Canada of Coated printings writing papers).
- Exports: - U.S. FT246 code 2547500 and 2548000 i.e. gummed, impregnated and or coated; paper impregnated, coated.

United States:

API Statistics for paper and paperboard, 1977.

DATA SHEET 6

MARKET DATA SHEET FOR BOOK PAPERS UNCOATED (2)
(M tons)

Year	APPARENT CONSUMPTION (1)			CANADA					UNITED STATES				
	North America	Canada	U.S.A.	Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
1960		N/A		N/A	N/A	2	52	N/A	N/A	N/A	N/A	N/A	N/A
1961		"		"	"	3	13	"	"	"	"	"	"
1962		"		"	"	2	8	"	"	"	"	"	"
1963		"		"	"	2	5	"	"	"	"	"	"
1964		"		"	"	5	5	"	1,969	"	"	18	"
1965		2,161		"	"		13	"	2,110	2,160	11	10	"
1966		2,574		"	"	1	11	"	2,363	2,567	14	7	"
1967		2,447		"	"	2	39	"	2,290	2,421	34	8	"
1968		2,594		"	"	2	84	"	2,585	2,564	39	9	"
1969		2,747		"	"	3	69	"	2,654	2,709	47	9	"
1970		2,708		"	"	3	85	"	2,646	2,646	73	11	"
1971		2,891		"	"	3	84	"	2,757	2,776	130	15	"
1972		3,139		"	"	6	58	"	3,010	3,051	110	22	"
1973		3,328		"	"	5	30	"	3,116	3,206	151	29	"
1974		3,095		"	"	6	65	"	2,853	3,006	188	99	"
1975		2,527		"	"	11	73	"	2,400	2,447	115	35	"
1976		3,112		"	"	N/A	139	"	2,973	2,973	181	42	"
1977		N/A		"	"	"	N/A	"	N/A	N/A	N/A	N/A	"

(1) Apparent consumption equals (Shipments plus imports minus exports).

Where shipments are not available, production can be substituted.

(2) Book papers uncoated includes groundwood and non-groundwood of book papers is MF/EF; offset; envelope (including, in U.S. shipment data bleached and brown Kraft envelope); tabulating and others.

Sources: Canada:

Imports: - U.S. FT610 code 26213c 00 (Note: These represent only U.S. exports to Canada of uncoated book papers)

Exports: - Statistics Canada 65-202 Code 35199, Book paper NES up to 1964, thereafter paper for printing uses (including coated; known to be small)

United States:

API Statistics for paper and paperboard, 1977.

DATA SHEET 7

MARKET DATA SHEET FOR WRITING PAPERS (2)
(M tons)

APPARENT CONSUMPTION (1)			CANADA					UNITED STATES					
North													
Year	America	Canada	U.S.A.	Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
1960				N/A	N/A	-	9	N/A	1,790	N/A	N/A	N/A	N/A
1961				"	"	-	16	"	"	"	"	"	"
1962				"	"	-	19	"	"	"	"	"	"
1963				"	"	-	22	"	"	"	"	"	"
1964				"	"	4	29	"	"	"	"	"	"
1965			1,735	"	"	5	28	"	2,297	1,750	4	19	"
1966			1,910	"	"	6	28	"	1,972	1,931	4	24	"
1967			1,950	"	"	7	26	"	1,933	1,964	3	20	"
1968			2,040	"	"	6	27	"	2,143	2,062	4	22	"
1969			2,280	"	"	11	47	"	2,375	2,307	3	26	"
1970			2,264	"	"	13	57	"	2,338	2,289	3	28	"
1971			2,409	"	"	11	52	"	2,409	2,435	2	28	"
1972			2,732	"	"	12	48	"	2,694	2,753	6	27	"
1973			3,265	"	"	15	97	"	3,127	3,286	14	35	"
1974			3,524	"	"	20	85	"	3,401	3,573	8	57	"
1975			2,645	"	"	35	37	"	2,683	2,734	4	95	"
1976			3,194	"	"	49	42	"	3,094	3,294	4	104	"
1977			N/A	"	"	N/A	N/A	"	N/A	N/A	N/A	N/A	"

- (1) Apparent consumption equals (Shipments plus imports minus exports).
Where shipments are not available, production can be substituted.
- (2) Writing papers equals chemical wood pulp writing papers, i.e. bond and writing; form bond; ledger; mimeograph; duplicator; manifold; paperette and wedding; opaque circular; other.

Sources: Canada:

Imports: - Statistics Canada 65-203 Code 35249; writing and reproduction paper nes.

Exports: - Statistics Canada 65-202 Code 35249; writing and reproduction paper nex.

United States:

API Statistics for paper and paperboard, 1977.

MARKET DATA SHEET FOR OTHER FINE (2)
(M tons)

DATA SHEET 8

<u>APPARENT CONSUMPTION (1)</u>			<u>CANADA</u>					<u>UNITED STATES</u>				
Year	North		Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
	America	Canada U.S.A.										
1960			N/A	N/A	7	-	N/A	1,790	N/A	N/A	N/A	N/A
1961			"	"	7	1	"	"	"	"	"	"
1962			"	"	6	4	"	"	"	"	"	"
1963			"	"	5	3	"	"	"	"	"	"
1964			"	"	7	5	"	"	"	"	"	"
1965		1,474	"	"	8	3	"	N/A	E1,493	10	29	"
1966		1,628	"	"	8	2	"	1,505	1,650	10	32	"
1967		1,618	"	"	7	1	"	1,560	1,636	13	31	"
1968		1,653	"	"	8	1	"	1,822	1,687	13	47	"
1969		1,700	"	"	8	1	"	1,660	1,746	10	56	"
1970		1,625	"	"	9	9	"	1,477	1,674	9	58	"
1971		1,603	"	"	9	10	"	1,593	1,669	8	74	"
1972		1,754	"	"	14	13	"	1,695	1,815	7	68	"
1973		1,874	"	"	31	14	"	1,899	1,944	17	87	"
1974		1,823	"	"	41	14	"	1,886	1,908	21	106	"
1975		1,426	"	"	42	4	"	1,476	1,496	10	80	"
1976		1,534	"	"	43	6	"	1,667	1,623	13	102	"
1977		N/A	"	"	-	-	"	N/A	N/A	N/A	N/A	"

(1) Apparent consumption equals (Shipments plus imports minus exports).

Where shipments are not available, production can be substituted.

(2) Other fines includes cotton fibre; cover and text; thin papers; bristols.

Sources: Canada:

Imports: - Statistics Canada 65-203 Code 35233/35/41/50/55/57/65/75/80/85/99 i.e. Manifold including onion skin; duplicating; base stock for sensitizing paper; blotting paper; filter paper; decalmonia p; cover; bristols nes;

Exports: - Statistics Canada 65-202 Code 35299; fine papers Nes.

United States:

API Statistics for paper and paperboard, 1977.

MARKET DATA SHEET FOR BRISTOLS OF OTHER FINE (2)
(M tons)

DATA SHEET 9

<u>APPARENT CONSUMPTION (1)</u>				<u>CANADA</u>					<u>UNITED STATES</u>				
North				Production	Shipments	Imports	Exports	Capacity	Production	Shipments	Imports	Exports	Capacity
Year	America	Canada	U.S.A.										
1960				N/A	N/A	-		660					
1961				"	"	-							
1962				"	"	-							
1963				"	"	-							
1964				"	"	1				0		0	
1965			N/A	"	"	1		870	N/A	0		0	N/A
1966			1,084	"	"	1	-	924	1,084				897
1967			1,081	"	"	1	N/A	981	1,081				984
1968			1,109	"	"	1	-	1,008	1,109				1,025
1969			1,129	"	"	1	-	1,047	1,129				1,047
1970			1,077	"	"	2	N/A	997	1,077	0			1,112
1971			1,083	"	"	2	-	986	1,083	1			1,189
1972			1,168	"	"	3	N/A	1,062	1,168	1			1,182
1973			1,242	"	"	3	1	1,209	1,243	1			1,179
1974			1,210	"	"	2	3	1,184	1,206	4			1,235
1975			937	"	"	5	N/A	936	936	1			1,194
1976			998	"	"	4	-	1,041	997	1			1,164
1977			N/A	"	"	-	-	N/A	N/A	N/A			1,202

(1) Apparent consumption equals (Shipments plus imports minus exports).

Where shipments are not available, production can be substituted.

(2) Bristols: i.e. tabulation index; Tab; file folder, index bristols; printing bristols; postcard; coated bristol.

Sources: Canada:

Imports: - Statistics Canada 65-203 Code 35275, 35285 i.e. bristols nes, matrix paper and board.

Exports: - U.S. FT246 code 2522000 i.e. Bristol board

United States:

API Statistics for paper and paperboard, 1977.