## A STUDY OF THE

A STUDY OF THE
CANADIAN BUSINESS FORMS PRINTING INDUSTRY
INDUSTRY, SCIENCE AND TECHNOLOGY CANADA LIBRARY

# Leisure Products Division <br> Service Industries and Consumer Goods Branch Industry, Science and Technology Canada Ottawa, Ontario 

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## A STUDY OF <br> THE CANADIAN BUSINESS FORMS PRINTING INDUSTRY

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## A STUDY OF

## THE CANADIAN BUSINESS FORMS PRINTING INDUSTRY

## 1. Definition of Industry and Product

The industry is composed of establishments primarily engaged in printing, by any process, forms for use in the operation of a business, in single and multiple sets, including carbonized or interleaved with carbon or otherwise processed for multiple reproduction. Also included is the printing of business and accounting records, such as cheque books, ledger books, receipt books and sales checkbooks.

Integrated business forms printing facilities in organizations such as publishers, insurance companies and governments, commonly referred to as "in-house" or "in-plant" printing, are excluded.

The business forms printing industry is classified by statistics Canada under Standard Industrial Classification (SIC) code 2811. The industry is an integral part of sIC 281 - Commercial Printing Industries, which in turn is a sub-group of sIC 28 - Printing, Publishing and Allied Industries. While a certain degree of interdependence exists between these industries, there are notable differences in their structures and operations.

Business forms are divided by Statistics Canada into three basic categories, continuous forms to be handwritten, continuous forms to be machine written, and individual gummed sets and snap-out sets. With the exception of blank computer continuous forms, business forms contain printed matter which require the insertion of additional information to complete. Business forms are used for a wide variety of purposes such as counter register slips, order forms, invoices, statements, cheque forms, bills of lading, receipts, taxation slips and assessment forms.

## 2. Production Processes

The basic function of this industry is to design and print business forms and related products. Printing essentially involves the reproduction of images contained on a printing plate or other media onto paper or other substrates. Business forms printing runs in Canada can range from as low as 500 to over a million forms. Lithography (also called wet offset) is the principal method used for printing business forms. Lithography is an indirect printing method, whereby images from inked planographic plates are first transferred by contact to a rubber blanket and then "offset" onto paper or other materials.

Lithography is also the principal printing method used by the commercial printing industries sector in Canada and in most developed countries. The popularity of lithography among commercial printers comes from its ability to produce a wide range of products efficiently.

Before any imagery, textual or pictorial, can be printed by lithography it must first be incorporated in a printing plate, which subsequently will be mounted on a printing press. Furthermore, the text and illustrations to be reproduced must be prepared to graphic arts quality.

Today, text is usually composed via photo-composing machines and other electronic composition techniques, such as computers and desktop publishing systems. Pictures need to be screened to produce halftone transparencies that will show the fine details, shadows, highlights, and tonal values of the original pictures when printed. The halftoning is accomplished by making a duplicate of the original negative through an optical screen that breaks up the picture into an array of dots. The resulting pattern can be made so fine that it looks like a continuous image with varied shadings between light and dark.

When the work to be printed involves process colour, it is first necessary to make colour separations. The picture is viewed through a series of filters that produce a set of continuous tone transparencies for red (magenta), blue (cyan) and yellow, the primary colours that in combination can produce the full range of other colours. A black transparency is also made. All four transparencies are then screened to make halftone transparencies.

Text and illustration transparencies are assembled together on a plastic flat, also called a layout, in the array in which they are to be printed. In the case of lithography, the completed flat and a blank printing plate, coated with a light sensitive material, are placed in a vacuum frame, between a rubber mat and a glass top. By shining an ultra-violet light through the transparencies, the image on the transparencies is exposed on the plate. The final result is a plate with an image area that is receptive to ink and repellent to water and a non-image area that is water receptive and ink repellent.

In addition to offset printing presses, business forms printers sometimes utilize non-impact printing techniques such as ink-jet and laser, to add smali amounts of variable information to business forms. But because of lower print quality, these techniques do not lend themselves to printing large amounts of fixed information.

Other manufacturing operations may include hole punching, cross and vertical perforating, numbering, slitting and collating. The collator not only brings together the various parts of the
business form, but also incorporates the means of holding them together. One method involves the use of glues. Another method is by punching through the paper and using the fibers of the paper to hold the parts in place.

The production processes used by the business forms printing industry do not give rise to serious pollution or job related health problems. Nonetheless, the industry has to comply with increasingly stringent federal, provincial and local regulations concerning clean air, waste disposal and worker safety.
3. Commercial Shipments of Business Forms

### 3.1 Current State

Total commercial shipments ${ }^{1}$ of business forms in Canada were estimated at $\$ 875$ million in 1989. Approximately 96 percent of this total, or $\$ 840$ million, originated from establishments classified by Statistics Canada under SIC 2811 - Business Forms Printing Industry. Roughly $\$ 35$ million worth of business forms, or 4 percent of total shipments in 1989, originated from printing plants that print business forms as a secondary activity. These plants are found under SIC 2819 - Other commercial Printing Industries.

### 3.2 Historical Background

In response to generally favourable market conditions, Canadian commercial shipments of business forms achieved a solid record of expansion during the period 1977-89. As indicated in Table 1, commercial shipments grew from $\$ 243.6$ million in 1977 to an estimated $\$ 875$ million in 1989 , an average annual growth rate of 11.4 percent. Growth by year varied from a high of 21.8 percent in 1980 to a low of 3.1 percent in 1983. The rapid growth in the 1970 s reflects in large measure the explosion in record-keeping demanded of businesses of all sizes, whether imposed by governments or necessitated by management's needs for improved informational control. While this factor continued to prevail in the 1980s, it was overshadowed by the increasing use of computers, which spurred demand for continuous forms.

Growth in real terms (i.e. constant dollars) of commercial shipments of business forms cannot be provided because of the lack of adequate price indices for this product line. However, it is generally believed that the rate of growth in deflated dollars has declined in recent years due primarily to growing substitution of paper-based business forms by electronic systems

[^0] forms.
of storing and transmitting information and to a lesser extent to increasing in-house production by major forms users.

## TABLE 1

## COMMERCIAL SHIPMENTS

| Year | Continuous Forms Handwritten | Continuous <br> Forms <br> Machine Written | Gummed / <br> Snap-out <br> sets | Total | Annual <br> Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | -(\$000) |  |  | (\%) |
| 1977 | 11,508 | 132,787 | 99,353 | 243,648 |  |
| 1978 | 8,748 | 161,317 | 109,374 | 279,439 | 14.7 |
| 1979 | 9,799 | 193,741 | 130,499 | 334,039 | 19.5 |
| 1980 | 10,093 | 224,215 | 172,386 | 406,694 | 21.8 |
| 1981 | 17,564 | 266,746 | 193,379 | 477,689 | 17.5 |
| 1982 | 18,304 | 296,022 | 194,388 | 508,714. | 6.5 |
| 1983 | 22,374 | 306,433 | 195,874 | 524,681 | 3.1 |
| 1984 | 17,693 | 352,030 | 194,029 | 563,752 | 7.5 |
| 1985 | 22,203 | 398,514 | 196,498 | 617,215 | 9.5 |
| 1986 | 27,084 | 441,858 | 201,776 | 670,718 | 8.7 |
| 1987 | N/A | N/A | N/A | 730,000 | 8.8 |
| 1988 | N/A | N/A | N/A | 825,000 | 13.0 |
| 1989. | N/A | N/A | N/A | 875,000 | 6.1 |

SOURCE: Statistics Canada Catalogue No.36-203 and 36-251 and Divisional estimates.

As demonstrated in Table 2, continuous forms to be machine written is by far the dominant category of business forms printed in Canada. It has increased its share of total shipments from 54.5 percent in 1977 to 65.9 percent in 1986 , the latest year for which product statistics are available. Business forms can be further divided between custom (made to the specifications of individual customers) and stock. It is estimated that custom forms accounted for roughly 55 percent of commercial shipments of business forms in 1989.

## TABLE 2

## COMMERCIAL SHIPMENTS

| Continuous <br> Forms | Continuous <br> Forms <br> Handwritten | Gummed/ <br> Machine Fritten | Snap-out <br> Sets |
| :--- | :--- | :--- | :--- |

SOURCE: The figures have been calculated using data from Statistics Canada Catalogue No. 36-203 and 36-251.

The number of parts in a typical business form has been reduced from six to eight parts in the seventies to an average of three parts in the 1980 s . Much of the growth in business forms shipments in recent years has been in the area of one-part forms. In the area of multi-part forms, there has been increasing use of carbonless forms at the expense of carbon interleaved forms. It is estimated that carbonless forms now account for roughly 50 percent of all multi-part forms, versus 25 percent a decade ago. Finally, it is understood that the average print run length for business forms has been reduced significantly over the past 10 years.

During the period 1977-86, the growth in shipments of business forms in Canada compared favourably with that of most major commercial printed product lines, as shown in Table 3 .

TABLE 3
AVERAGE ANNUAL GROWTH RATE - 1977/86

| Printed advertising matter | $15.2 \%$ |
| :--- | :--- |
| Printed labels | $12.8 \%$ |
| Decalcomania transfers | $12.8 \%$ |
| Greeting cards | $12.7 \%$ |
| Business forms | $12.1 \%$ |

SOURCE: The figures have been calculated using data from Statistics Canada Catalogue NO. 36-203 and 36-251.

## 4. Industry structures

4.1

## Overview

It is estimated that in 1989, the Canadian business forms printing industry comprised about 130 distinct corporate
organizations that controlled 195 establishments, and which employed 11,000 people on a permanent basis. Industry shipments of goods of own manufacture were valued at roughly $\$ 1.13$ billion, of which about $\$ 840$ million or about 75 percent of the total consisted of business forms. In addition, the industry generated roughly $\$ 80$ million in 1989 from reselling goods manufactured by others, notably small forms handling equipment.

The industry prints numerous products. Continuous forms to be machine written represented the single largest product group in 1986, the latest year for which product line statistics are available, accounting for slightly over 50 percent of industry output, as demonstrated in Table 4. In addition to business forms, the industry produces several secondary products, notably labels and advertising matter.

TABLE 4
INDUSTRY SHIPMENTS BY PRODUCT LINE - 1986

|  | (\$000) | (\%) |
| :---: | :---: | :---: |
| Continuous forms to be machine written | 431,651 | 52.6 |
| Individual gummed/snap-out sets | 185,042 | 22.5 |
| Bonds, bills of exchange; cheques, drafts and similar matter | 45,844 | 5.6 |
| Continuous forms to be handwritten | 26,242 | 3.2 |
| Labels | 13,283 | 1.6 |
| Sales checkbooks | 10,000 | 1.2 |
| Ledger and account books | 10,000 | 1.2 |
| Other business and accounting records | 23,541 | 2.9 |
| Advertising matter | 3,783 | 0.5 |
| Business cards | 1,299 | 0.2 |
| Other products and services | 70,164 | 8.5 |
| TOTAL | 820,849 | 100.0 |

Source: Statistics Canada Catalogue No. 36-251 and Divisional estimates.

It is generally accepted that 1990 was a poor year for the industry, due in large measure to the overall moderation in the country's economic growth. Industry shipments are forecasted at roughly $\$ 1.2$ billion, an increase of about 5 percent over 1989. However, profitability was affected adversely by the industry's inability to pass on fully, higher production costs (notably paper price increases) to customers due to fierce competition in the marketplace. Industry business attitudes are becoming more and more cautious.

### 4.2 Size of Plants

In 1988, the latest year for which statistics are available for all manufacturing industries, the average business forms printing establishment reported annual sales of goods of own manufacture of $\$ 5.6$ million, compared to annual sales averages of $\$ 1.7$ million in the other commercial printing industries sector and $\$ 7.4$ million in the overall manufacturing sector in Canada. The typical business forms printing plant employed 55 people in 1988 , versus averages of 18 people in the other commercial printing industries sector and 48 people in the overall manufacturing sector.

There are no major barriers to entry into the business forms printing industry at the small scale level. A small operation can be established with a capital investment of as little as $\$ 250,000$. As outlined in Table 5 , plants employing fewer than 20 people each represented 56.1 percent of all establishments in Canada in 1987 (the latest year for which statistics are available), but accounted for only 7.5 percent of industry employment and 6.1 percent of industry shipments. By the same token, there were 25 plants with at least 100 employees, 13.9 percent of the total number of establishments, and they shared 66.2 percent of total employment and 55.3 percent of all shipments. Of these 25 plants, eight were located in Quebec, 16 in Ontario and one in British Columbia. There have been no indications of major changes in the establishment size pattern of the business forms printing industry in 1988-89.

TABLE 5
DISTRIBUTION OF INDUSTRY BY ESTABLISHMENT SIZE, 1987

| Employees | Establishment |  | Employment |  | Shipments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (no.) | (no.) | (\%) | (no.) | (\%) | (\$000) | (\%) |
| Less than 10 | 71 | 39.4 | 295 | 3.1 | 24,060 | 2.7 |
| 10 to 19 | 30 | 16.7 | 413 | 4.4 | 31,101 | 3.4 |
| 20 to 49 | 33 | 18.3 | 1,063 | 11.2 | 127,057 | 14.0 |
| 50 to 99 | 21 | 11.7 | 1,440 | 15.2 | 223,385 | 24.6 |
| 100 to 199 | 17 | 9.4 | 2,369 | 25.0 | 223,255 | 24.6 |
| 200 or more | 8 | 4.5 | 3,911 | 41.2 | 278,304 | 30.7 |
| total | 180 | 100.0 | 9,491 | 100.0 | 907,163 | 100.0 |

SOURCE: Statistics Canada unpublished data and Catalogue No. 31-203.

In addition to printing activities, most of the larger establishments are engaged in developing information management systems to meet individual clients needs.

Large establishments are more dominant in the business forms printing industry than in the other commercial printing industries sector, but less dominant than in the overall manufacturing sector. In 1986, the latest year for which statistics are available for all manufacturing industries, establishments employing at least 100 people together accounted for 51.3 percent of industry shipments in the business forms printing industry, compared to 47.1 percent in the other commercial printing industries sector and 73.1 percent in overall manufacturing.

### 4.3 Size of Firms

The Canadian business forms printing industry is highly concentrated at the company level. In 1989, the four largest corporate organizations accounted for an estimated four-fifths of industry shipments, as depicted in Table 6.

INDUSTRY CONCENTRATION - 1989

## Organization

$$
\text { Moore } 31
$$

\% of Industry shipments

Crain-Drummond
Crain-Drumond 23
Maclean Hunter
14
Southam 12
TOTAL
80

## SOURCE: Divisional estimates.

Moore Corporation Limited is engaged in manufacturing business forms (about 85 percent of the corporation's sales), forms handling equipment, custom packaging products and direct mail advertising materials and in providing software and data base management. It is the world's largest printer of business forms. Moore operates in over 50 countries, has about 140 manufacturing plants, including 10 in Canada (Beauceville, Cowansville, Fergus, Kemptville, Oshawa, Toronto, Trenton, Winnipeg, Red Deer and vancouver). It employs roughly 26,000 people around the world, including about 2,900 in Canada. In 1989, it recorded sales of US\$2.7 billion (C\$3.1 billion). Sales were distributed as follows: US-62 percent, Europe-15 percent, Canada-10 percent and other countries-13 percent. The company is controlled by Canadian interests. Moore is one of the few business forms printers in the world that manufactures its own carbonless paper.
R.L. Crain Inc. and Drummond Business Forms Limited are engaged in printing business forms and related goods. Together, they operate 11 plants in Canada (Moncton, Drummondville, Laval, Hull,

Ottawa, Orangeville, Brockville, Toronto, Brampton, Medicine Hat and Vancouver). Sales reached an estimated $\$ 200$ million in 1989. Crain and Drummond are wholly owned subsidiaries of Uarco Inc. of Barrington, U.S., which in turn is controlled by settsu Corporation of Japan. The latter firm is primarily engaged in producing paperboard and corrugated shipping containers in Japan, Brunei, The Netherlands and the United States. settsu reported sales of US $\$ 621.9$ million ( $\mathbf{C} \$ 736.5 \mathrm{million}$ ) in 1989.

Maclean Hunter Limited is a Canadian-controlled diversified communications company primarily engaged in publishing consumer magazines and periodicals, radio and television broadcasting, cable television, commercial printing, book distribution and in organizing consumer and trade shows. Revenues reached \$1.4 billion in 1989. It has ten business forms printing plants in Canada (Greenfield Park, Mississauga, North York, Brampton, Niagara Falls, Winnipeg, Regina, Calgary, Edmonton and Vancouver) and four plants in the United states (Brewster, NY, Fort Smith, Ark., Miami, Fla. and Chicago, Ill.). Sales of business forms and related products reached an estimated $\$ 250$ million in 1989 .

Southam Inc. is primarily engaged in publishing daily and weekly newspapers and business periodicals, in commercial printing; in organizing trade shows and in book retailing. Revenues totalled $\$ 1.7$ billion in 1989. Southam is controlled by Canadian interests. Southam has eleven business forms printing plants in Canada (Brossard, Granby, St. Hyacinthe, Candiac, Dorval, Rexdale, two in Mississauga, Regina, Edmonton and Victoria) and one plant in the United States (Cincinnati, Ohio). It is estimated that corporate sales of business forms and related products reached $\$ 200$ million in 1989.

### 4.4 Regional Distribution

The business forms printing industry is heavily concentrated in Ontario and Quebec. These two provinces together accounted for 73.0 percent of all plants in $1988,81.5$ percent of total employment and 83.6 percent of all shipments, as shown in Table 7. These two provinces include major business forms users: the federal government, the two largest provincial governments and the head offices of most major Canadian manufacturing and services companies.

TABLE 7

## REGIONAL DISTRIBUTION - 1988

| Establishment |  | Employment |  | Shipments |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (no.) | (\%) | (no.) | (\%) | (\$000) | (\%) |
| 4(1) | 2.1 | 158 | 1.5 | 12,040 | 1.1 |
| 58 | 30.7 | 2,914 | 27.8 | 314,599 | 29.6 |
| 80 | 42.3 | 5,639 | 53.7 | 573,605 | 54.0 |
| 33 (2) | 17.5 | 1,206 | 11.5 | 106,898 | 10.1 |
| 14 | 7.4 | 579 | 5.5 | 55,606 | 5.2 |
| 189 | 100.0 | 10,496 | 100.0 | 1,062,748 | 100.0 |

SOURCE: Statistics Canada unpublished data.
NOTES: (1) Three in Nova Scotia and one in New Brunswick.
(2) Nine in Manitoba, six in Saskatchewan and 18 in Alberta.

The business forms printing industry is more concentrated in central Canada than the other commercial printing industries sector and the overall manufacturing sector. In 1988, 83.6 percent of the total output of the business forms printing industry originated from establishments in Ontario and quebec, versus 81.5 percent for the other commercial printing industries sector and 77.6 percent for the overall manufacturing sector.

The business forms printing industry tends to be concentrated in the areas of high population density. Proximity to market is the prime factor influencing the location of business forms printing plants. As depicted in Table 8, plants located in the Toronto and Montreal metropolitan areas alone accounted for about onethird of industry shipments in 1986, the latest year for which statistics are availble.

INDUSTRY DISTRIBUTION BY CENSUS METROPOLITAN AREA - 1986

|  | Establishment |  | Employment |  | Shipments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (no.) | (\%) | (no.) | (\%) | (\$000) | (\%) |
| Toronto | 44 | 22.3 | 2,123 | 23.5 | 216,590 | 26.4 |
| Montreal | 34 | 17.3 | 984 | 10.9 | 87,783 | 10.7 |
| Vancouver | 11 | 5.6 | 431 | 4.8 | 44,238 | 5.4 |
| Edmonton | 8 | 4.1 | 198 | 2.2 | 25,846 | 3.1 |
| Calgary | 6 | 3.0 | 170 | 1.9 | 16,000 | 1.9 |
| London | 5 | 2.5 | 79 | 0.9 | 7,347 | 0.9 |
| Hamilton | 3 | 1.5 | 10 | 0.1 | 809 | 0.1 |
| Rest of Canada | 86 | 43.7 | 5,021 | 55.7 | 422,236 | 51.4 |
| TOTAL | 197 | 100.0 | 9,016 | 100.0 | 820,849 | 100.0 |

SOURCE: Statistics Canada Catalogue No. 31-209 and Divisional estimates.

### 4.5 Ownership and Control

The business forms printing industry is primarily Canadian-owned. It is estimated that about 8 percent of the establishments in $1989^{2}$ were controlled by foreign interests and collectively they accounted for about 30 percent of industry shipments. In comparison, about 15 percent of all shipments of the other commercial printing industries sector in Canada and about half of all. shipments of the overall manufacturing sector originate from foreign-controlled firms.

On the other hand, three Canadian-owned firms (Moore, Maclean Hunter and Southam) have business forms printing plants abroad. Their subsidiaries in the United States together account for an estimated 20 percent of the shipments of the U.S. business forms printing industry.

### 4.6 Specialization

The business forms printing industry is highly specialized. The ratio of primary products (business forms and business and accounting records) to the total of both secondary and primary products shipped by establishments in the industry was 83.7 percent in 1986, as demonstrated in Table 9. The specialization ratio has declined somewhat in the last few years. Because business forms are becoming a mature product, manufacturers are increasingly diversifying into other printed products, notably labels and advertising matter for the direct mail sector.

## TABLE 9

## SPECIALIZATION RATIO-\%

| 1983 | 87.7 |
| ---: | ---: |
| 1984 | 86.1 |
| 1985 | 85.1 |
| 1986 | 83.7 |
| 1987 | N/A |

SOURCE: The figures have been calculated using data from Statistics Canada Catalogue NO. 36-203 and 36-251.

One group of business forms printers specializes in serving only dealers/brokers (also called distributors). These firms are commonly referred to as "trade" forms printers. These printers usually do not have their own direct sales force. Many of these trade printers are owned by conventional business forms manufacturers. For example, Multiple Business Forms Canada Inc., the largest trade supplier in Canada, is a wholly owned subsidiary of Southam Inc.

## 5. Industry Performance

Business forms printing is an old industry. Canada's first plant was opened in Toronto in 1882 by Samuel J. Moore, the founder of Moore Corporation.

During the period 1983-89, the Canadian industry achieved a solid record of expansion. As shown in Table 10 , industry employment expanded from 8,467 in 1983 to 11,000 in 1989, an average annual growth rate of 4.6 percent. Industry shipments, in terms of current dollars, grew from $\$ 628$ million to $\$ 1.13$ billion, a growth rate of 10.3 percent annually.

TABLE 10

## INDUSTRY EMPLOYMENT AND SHIPMENTS

|  | EMPLOYMENT |  | SHIPMENTS |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (no.) | (\% change) | (\$000) | (\% change) |
| 1983 | 8,467 |  | 627,997 |  |
| 1984 | 8,150 | -3.7 | 676,546 | 7.7 |
| 1985 | 8,295 | 1.8 | 730,648 | 8.0 |
| 1986 | 9,016 | 8.7 | 820,849 | 12.4 |
| 1987 | 9,491 | 5.3 | 907,163 | 10.5 |
| 1988 | 10,496 | 10.6 | 1,062,748 | 17.2 |
| 1989 | 11,000 | 4.8 | 1,125,000 | 5.9 |

SOURCE: Statistics Canada unpublished data and Catalogue No. 36-203 and 36-251 and Divisional estimates.

In terms of industry shipments, business forms printers in British Columbia recorded the highest annual growth rate, i.e. 15.4 percent (that is from $\$ 27.5$ million to $\$ 55.6$ million) during the period 1983-88 (the latest year for which regional statistics are available), followed by Ontario (14.1 percent or from $\$ 298.1$ million to $\$ 573.6$ million), the Prairies ( 9.3 percent or from $\$ 68.6$ million to $\$ 106.9$ million) and Quebec ( 6.8 percent or from $\$ 227.0$ milion to $\$ 314.6$ million).

During the period 1983-87, large establishments (those employing at least 100 people) increased their share of industry shipments from 52.8 percent to 55.3 percent. In contrast, the share taken by small establishments (those employing fewer than 20 people) declined from 7.9 percent in 1983 to 6.1 percent in 1987. Industry concentration at both the establishment and the company levels has continued to increase in 1988-89. For example, Settsu, through its Drummond Business Forms subsidiary, acquired R.L. Crain in 1989. Maclean Hunter acquired Lawson Business Forms and Vancouver Business Forms in 1988. Southam acquired ABF Business Forms in 1989.

With an annual growth rate in industry shipments of 10.3 percent, the business forms printing industry performed better, during the period 1983-89, than the overall manufacturing sector which recorded an average annual growth rate of 7.0 percent and the country's gross domestic product ( 8.2 percent), but expanded at a slower rate than the other commercial printing industries sector (10.6 percent).

## 6. Domestic Market Structures

### 6.1 Market Size

As depicted in Table 11, the apparent Canadian market for business forms expanded from $\$ 527.5$ million in 1983 to an estimated $\$ 880.3$ million in 1989 , an average annual growth rate of 8.9 percent. Growth by year varied from a high of 12.7 percent in 1988 to a low of 6.4 percent in 1989 . Growth in real terms (i.e. constant dollars) cannot be provided because of the lack of adequate price indices. The consumption of business forms by publishers, insurance companies and other organizations making their own forms is not included in the above data.

TABLE 11
APPARENT CANADIAN MARKET FOR BUSINESS FORMS
Market size Annual Change (\$million)

## (\%)

1983
1984
1985
1986
1987
1988
1989
527.5
$567.8 \quad 7.6$
$621.9 \quad 9.5$
$672.8 \quad 8.2$
$734.0 \quad 9.1$
827.512 .7
880.36 .4

SOURCE: The figures have been calculated using data from Statistics Canađa Catalogue No. 31-203, 36-203, 36-251, 65-004 and 65-007 and Divisional estimates.

There is no pronounced cyclical or seasonal patterns in business forms demand.

### 6.2 Marketing Practices

Business forms are used in virtually every aspect of corporate life. They are used for billing, collecting, delivery, sales, production, stock keeping, accounting, payroll, purchasing and for many other business operations. Business forms are consumed by a large and diversified customer base, ranging from large companies with sophisticated data processing systems to small retail stores with manual filing systems. It is estimated that about 75 percent of the value of business forms consumed in Canada are used in computer applications.

The typical business forms printing plant concentrates in servicing its regional market only. Most business forms printers employ direct field sales forces to reach large industrial clients. Smaller users are generally reached through intermediaries, such as distributors and retail stationery stores. Distributors account for an estimated 10 percent of the business forms market in Canada. In the past few years, the larger business forms manufacturers have emphasized mail-order catalogues and telephone marketing to reach the small users. It is estimated that the business forms printing industry spends about 1 percent of total sales dollar on advertising, mostly through company circulars and brochures, and through advertisements in specialized business publications.

Since there is little room for significant product differentiation in the area of stock business forms, price tends to be the overriding marketing factor. In contrast, custom business forms vary ad infinitum in terms of shape, size and use.

Consequently, factors such as design capability and quality become prime marketing requirements of printers of custom business forms.

## 7. International Trade

### 7.1 Canadian Exports

statistics Canada started publishing separate export data for business forms in 1988 only. The following table provides estimates for the 1983-87 period and actual numbers for later years.

## TABLE 12

CANADIAN EXPORTS OF BUSINESS FORMS
$\frac{\text { Value }}{\text { (\$million) }} \quad \frac{\text { Annual Change }}{(\%)}$

| 1983 | 1.0 |  |
| :--- | :--- | ---: |
| 1984 | 1.0 | --- |
| 1985 | 1.1 | 10.0 |
| 1986 | 2.4 | 118.2 |
| 1987 | 1.6 | -33.3 |
| 1988 | 1.3 | -18.8 |
| 1989 | 0.6 | -53.8 |

SOURCE: Statistics Canada Catalogue No. 65-004 and Divisional estimates.

Exports of business forms grew at a slower rate than domestic production, as their share of output declined from an estimated 0.19 percent in 1983 to 0.07 percent in 1989 . In comparison, the overall commercial printing industries sector recorded export orientation ratios of 2.2 percent in 1983 and an estimated 3.2 percent in 1989.

Canadian exports of business forms during the period January to October 1990 reached $\$ 1.3$ million, an increase of 134 percent over the corresponding period of 1989.

As shown in Table 13, Canada's export trade in business forms is conducted primarily with the united states, which took roughly 70 percent of Canada's export shipments in 1989, down from about 85 percent in 1988.

TABLE 13
CANADIAN EXPORTS OF BUSINESS FORMS BY COUNTRY


SOUCE: Statistics Canada Catalogue No. 65-202.
The bulk of canadian exports originates from ontario, as demonstrated in Table 14. It is generally believed that a small number of firms accounts for the bulk of Canadian exports.

## TABLE 14

CANADIAN EXPORTS OF BUSINESS FORMS BY PROVINCE OF ORIGIN-1989 Quebec Ontario Manitoba Alberta All Provinces


SOURCE: Statistics Canada unpublished data.
As indicated previously, the business forms printing industry produces numerous secondary products. The following table provides Canadian export statistics for some of these products. These statistics would include export shipments by companies not classified to the business forms printing industry. It is not possible at this time to determine the share of exports originating from business forms printers.

## TABLE 15

## CANADIAN EXPORTS OF SELECTED PRINTED PRODUCTS



| Registers, account books, note books, order books, letter pads, memo pads, diaries and similar articles | 1,985 | 1,448 | 2,962 |
| :---: | :---: | :---: | :---: |
| Printed paper labels | 23,454 | 25,443 | 26,350 |
| Stamps, cheque forms, banknotes, bond certificates and similar documents of title | 41,569 | 6,926 | 6,064 |
| Trade advertising material, commercial catalogues and the like | 45,023 | 37,239 | 47,288 |
| SOURCE: Statistics Canada Catalogue No. 65-004. |  |  |  |
| 7.2 Canadian Imports |  |  |  |
| Here again, Statistics Canada started to publish separate data |  |  |  |
| for business forms in 1988 only. As depicted in Table 16, |  |  |  |
| imports of business forms into Canada increased from an estimat |  |  |  |
| \$3.8 million in 1983 to $\$ 5.9$ million in 1989 , an average annual |  |  |  |
|  |  |  |  |

TABLE 16
CANADIAN IMPORTS OF BUSINESS FORMS
$\frac{\text { Value }}{(\text { \$million })} \quad \frac{\text { Annual Change }}{(\%)}$

1983
1984
1985
1986
1987
1988
1989
3.8
$5.0 \quad 31.6$
5.8
4.5
5.6
3.8
5.9
16.0
-22. 4
24.4
-32.1
55.3

SOURCE: Statistics Canada Catalogue No. 65-007 and Divisional estimates.

Imports of business forms expanded at a slower rate than domestic production, as their share of the apparent Canadian market declined from 0.72 percent in 1983 to an estimated 0.67 percent in 1989. In comparison, the import penetration ratios for the overall commercial printed products market stood at 7.3 percent in 1983 and an estimated 6.4 percent in 1989.

Overall, Canada's trade imbalance in business forms (i.e. the difference between exports and imports) has grown from $\$ 2.8$ million in 1983 to $\$ 5.3$ million in 1989.

Imports of business forms into Canada during the period January to October 1990 reached $\$ 5.9$ million, an increase of 22 percent over the corresponding period of 1989.

The United States is by far the largest supplier of business forms to Canada, as demonstrated in Table 17. Its share of all imports exceeded 90 percent in both 1988 and 1989. Freight costs provide an important element of protection against imports from overseas countries. With the first tariff cut in January 1989 under the Canada-U.S. Free Trade Agreement, some large U.S. business forms printers have, for the first time, started to solicit business in canada. The huge amount of publicity that accompanied the negotiation of the Free Trade Agreement has sensitized the U.S. industry to the potential market within Canada. This trend has continued in 1990. Imports of business forms into Canada from the United States reached $\$ 5.8$ million during the period January to October 1990, an increase of 24.1 percent over the corresponding period of 1989.

TABLE 17
CANADIAN IMPORTS OF BUSINESS FORMS BY COUNTRY

| United States | 3,509 | 92.8 | 5,67.7 | 97.0 |
| :---: | :---: | :---: | :---: | :---: |
| United Kingdom | 12 | 0.3 | 30 | 0.5 |
| France | 5 | 0.1 | 3 | 0.1 |
| West Germany | 87 | 2.3 | 14 | 0.2 |
| Italy | 1 | -- | -- | -- |
| Netherlands | 46 | 1.2 | 17 | 0.3 |
| Hong Kong | 55 | 1.5 | 36 | 6.2 |
| Japan | 52 | 1.4 | 25 | 4.2 |
| South Korea | -- | -- | 4 | 0.1 |
| Taiwan | 1 | -- | -- | -- |
| Australia | - | -- | 1 | -- |
| total | 3,781 | 100.0 | 5,923 | 100.0 |

SOURCE: Statistics Canada Catalogue No. 65-203.

The following table outlines Canadian imports for some of the secondary products produced by business forms printers.

TABLE 18
CANADIAN IMPORTS OF SELECTED PRINTED PRODUCTS
Jan. to
$1988 \quad\left(\frac{1989}{\$ 000)} \quad\right.$ Oct. 1990

Registers, account books, note books, order books, letter pads memo pads, diaries and similar articles

| 23,529 | 28,284 | 26,812 |
| ---: | ---: | ---: |
| 26,282 | 28,964 | 24,686 |

Printed paper labels
26,282
28,964
24,686
Stamps, cheque forms, banknotes, bond certificates and similar documents of title

$$
2,494
$$

2,620
3,676
Trade advertising material, commercial catalogues and the like

$$
92,400
$$

$$
130,086
$$

$$
108,923
$$

SOURCE: Statistics Canada Catalogue No. 65-007.
8. Barriers to International Trade

### 8.1 Tariffs

Annexes $A, B$ and $C$ describe the tariff items which cover business forms and related products in Canada, the United States and the European Community along with the duty rates applicable in 1989, 1990 and 1991. Under the canada-U.S. Free Trade Agreement, the tariffs on business forms and other printed matter will be eliminated in five equal annual stages starting on January 1, 1989 .

### 8.2 Non-Tariff Barriers

Government procurement practices are the principal non-tariff barrier affecting Canada's trade in business forms. The federal government alone purchased $\$ 33$ million worth of business forms in fiscal year 1988-89. It is estimated that governments absorb about 10 percent of commercial sales of business forms in canada. Governments at all levels in Canada, like in most developed countries, have adopted print purchasing policies that give preferential treatment to local suppliers. Printing is not covered by the General Agreement on Tariffs and Trade (GATT) Code
on Government Procurement nor by the Government Procurement Provisions of the Canada-U.S. Free Trade Agreement.

Both Canada and the United States require that most printed paper products imported into the country be marked so as to indicate the country of origin. These marking requirements are not affected by the Free Trade Agreement. Over the years, several Canadian printers have reported to have lost potential sales in the United States, because of the marking requirements. In contrast, the Canadian marking requirements have never been identified as a trade irritant by U.S. exporters.

## 9. Relative Production Costs

9.1 Raw Materials and Energy

In 1988, the business forms printing industry in Canada spent $\$ 452.3$ million for raw materials and supplies, representing 42.6 percent of its value of shipments of goods of own manufacture. This compares to averages of 49.1 percent for the other commercial printing industries sector and 54.6 percent for the overall manufacturing sector. Over the period 1983-88, the proportion of the value of shipments accounted for by raw materials and supplies has declined in the overall manufacturing sector but has increased in the printing area, as demonstrated in Table 19.

TABLE 19
RAW MATERIALS AND SUPPLIES
AS \% OF SHIPMENTS (1)

| Industry | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business forms printing | 41.6 | 41.7 | 40.5 | 40.2 | 40.9 | 42.6 |
| Other commercial printing | 43.3 | 44.5 | 45.1 | 46.5 | 47.2 | 49. |
| All manufacturing | 58.9 | 59.6 | 58.6 | 56.6 | 54.6 | 54.6 |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251.
NOTE: (1) Shipments of goods of own manufacture.
The major materials used by business forms printers in 1987 (the latest year for which statistics are available) were fine papers (about $\$ 210$ million), carbonless paper (about $\$ 35$ million), carbon paper (about $\$ 30$ million), groundwood printing paper (about \$5 million) and printing inks (about \$4 million). The principal grade of fine paper used is uncoated bond paper.

The use of carbonless paper by the business forms printing industry has grown rapidly in the last decade, although demand has grown at a slower rate in 1989-90. Carbonless paper is used to provide copies of documents without the use of carbon paper. In a carbonless multi-part form, the back of the top sheet is coated with capsules containing a forming dye. The front of the sheet below is coated with a reactive coating. If more than one copy is required, both the front and back of the inner sheets are coated. When pressure is applied to the top sheet, the capsules are broken releasing the forming dye which reacts with the reactive coating, thereby creating an image. While carbon paper offers a clearer image and is usually less expensive, carbonless paper is cleaner to use and therefore much more popular with the people who use the form.

Table 20 gives producer price indexes for some of the raw materials and supplies used by business forms printers. As demonstrated, the price indexes for most of these materials increased at a faster rate than the all manufactured goods price index during the period 1983-89.

TABLE 20
PRODUCER PRICE INDEXES

1983
1984
1985
1986
1987
1988
1989
SOURCE: Statistics Canada Catalogue No. 62-011.
NOTE: (1) For domestic consumption.
Most of the materials required by the Canadian business forms printing industry are produced in Canada and no critical sourcing difficulties or delays have been experienced by the industry over the past few years. However, some grades and sizes of Canadian paper at times have been in tight supply, forcing the business forms printing industry to import part of its requirement, primarily from the United states. Where applicable, Canadian tariffs on paper imported from the United States ranged from 5.2 percent to 7.3 percent in 1989 while printing inks were subject to a tariff of 10 percent. Under the Canada-U.S. Free Trade

Agreement, these tariffs will be phased-out by January 1, 1993. Elimination of tariffs on the importation of materials is expected to have a beneficial impact on the level of international competitiveness of the canadian business forms printing industry.

The Canadian business forms printing industry is a small energy consumer. As a percentage of value of shipments of goods of own manufacture, the industry's fuel and electricity costs were 0.71 percent in 1988. This compares to 1.21 percent for the other commercial printing industries sector and 2.65 percent for the overall manufacturing sector. Table 21 shows that the proportion of the value of shipments accounted for by fuel and electricity, over the period 1983-88, has declined in the business forms printing industry and all manufacturing industries, but has increased in the other commercial printing industries sector.

TABLE 21

## FUEL AND ELECTRICITY <br> AS \% OF SHIPMENTS (1)

| Industry | $\underline{1983}$ | $\underline{1984}$ | $\underline{1985}$ | $\underline{1986}$ | $\underline{1987}$ | $\underline{1988}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Business forms printing | 0.76 | 0.74 | 0.71 | 0.70 | 0.66 | 0.71 |
| Other commercial printing | 1.07 | 1.12 | 1.14 | 1.09 | 1.12 | 1.21 |
| All manufacturing | 3.26 | 3.15 | 2.98 | 2.76 | 2.61 | 2.65 |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251.
NOTE: (1) Shipments of goods of own manufacture.
In terms of energy costs, the business forms printing industry, like the other commercial printing industries, is also affected indirectly through its purchases of printing inks (a petroleumderived material in most instances) and paper. The paper manufacturing industry ranks as one of the largest energy users among manufacturing industries.

### 9.2 Employment

The business forms printing industry in Canada employed 10,496 people in 1988, the latest year for which official statistics are available. Production and related workers accounted for 62.2 percent of total employment in this industry, compared to 84.1 percent for the other commercial printing industries sector in 1988 and 74.7 percent for the overall manufacturing sector in 1986. The proportion of production and related workers to total employment has been increasing in the three manufacturing groups, as shown in Table 22.

## TABLE 22

## PRODUCTION AND RELATED WORKERS <br> AS \% OF TOTAL EMPLOYMENT

| Industry | 1983 |  | 1984 |  | 1985 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | 1986 |  | 1987 | 1988 |
| Business forms printing | 57.3 | 57.9 | 59.6 | 60.6 |  | 60.5 |
| Other commercial printing | 78.1 | 77.2 | 83.1 | 82.6 | 84.0 | 84.1 |
| All manufacturing | 71.4 | 72.1 | 73.9 | 74.7 | N/A | N/A |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251.

As shown in Table 23 , only 27.5 percent of the production and related jobs in the Canadian business forms printing industry in 1.986 were occupied by women, compared to 30.9 percent in the other commercial printing industries sector and 24.6 percent in the overall manufacturing sector. The proportion of female workers to total production and related workers has been increasing in the three manufacturing groups.

TABLE 23
FEMALE WORKERS
AS \% OF TOTAL WORKERS

| Industry | 1983 | 1984 | 1985 | 1986 | 1987 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Business forms printing | 23.3 | 23.7 | 24.9 | 27.5 | N/A |
| Other commercial printing | 29.4 | 29.8 | 31.7 | 30.9 | N/A |
| All manufacturing | 24.5 | 24.6 | 24.7 | 24.6 | N/A |

SOURCE: The figures have been calculated using data from statistics Canada Catalogue.No. 31-203, 36-203 and 36-251.

Business forms printing is less labour intensive than general commercial printing and manufacturing in general. Wages represented 29.0 percent of the manufacturing value added of business forms printing in 1988 , versus 49.3 percent for the other commercial printing industries sector and 32.2 percent for the overall manufacturing sector. As demonstrated in Table 24, labour intensity rates have remained at about the same level in the business forms printing industry during the period 1983-88, have declined in the overall manufacturing sector, and have increased in the other commercial printing industries sector.

TABLE 24
WAGES AS \% OF MANUFACTURING VALUE ADDED

| Industry | $\underline{1983}$ | $\underline{1984}$ | $\underline{1985}$ | $\underline{1986}$ | $\underline{1987}$ | 1988 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Business forms printing | 29.1 | 27.8 | 28.1 | 29.0 | 28.0 | 29.0 |
| Other commercial printing | 45.3 | 41.1 | 44.7 | 45.3 | 47.3 | 49.3 |
| All manufacturing | 33.5 | 31.9 | 32.4 | 32.3 | 31.2 | 32.2 |

SOURCE: The figures have been calculated using unpublished data. from statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251, and Divisional estimates.

Both the business forms printing industry and the other commercial printing industries sector provide a higher wage structure than all manufacturing. This reflects in large measure the high skill requirements of many jobs in the printing field. Hourly earnings averaged $\$ 13.53$ for business forms printing in 1988 versus $\$ 13.74$ for the other commercial printing industries sector and $\$ 12.84$ for the overall manufacturing sector in Canada. Hourly earnings increased at a faster rate in the business forms printing industry than in the other two manufacturing groups, during the period 1983-86, however, this situation changed dramatically in 1987-88, as depicted in Table 25.

## TABLE 25

## ANNUAL AVERAGE HOURLY EARNINGS

| Business | Other | Al1 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Forms (BF) | Printing( $O P$ ) | Manufacturing (AM) | BF/OP | BF/AM |
| (\$) | (\$) | (\$) | (\%) | (\%) |
| 11.07 | 10.89 | 10.49 | 101.7 | 105.5 |
| 11.60 | 11.49 | 10.95 | 101.0 | 105.9 |
| 12.58 | 12.16 | 11.36 | 103.5 | 110.7 |
| 13.22 | 12.21 | 11.60 | 108.3 | 114.0 |
| N/A | N/A | N/A | N/A | N/A |
| 13.53 | 13.74 | 12.84 | 98.5 | 105.4 |

Source: The figures have been calculated using data from Statistics Canada Catalogue No. 31-203, 36-203 and 36-251.

As is common for most manufacturing industries, earnings in the business forms printing industry tend to be higher in large population centres than in smaller centres. In addition, earnings tend to increase with the size of the printing establishment.

In the last few years, labour supply has not been a critical problem for the Canadian business forms printing industry. In general, the industry has been able to attract workers in sufficient quantity. A shortage of skilled employees developed in 1989, particularly in Toronto, but was alleviated by mid-1990. Historically, firms in smaller population centres have had difficulty in keeping their best employees since they tend to join firms in larger centres paying higher wages. Finally, turnover has been relatively high for certain lower-skilled occupations.

The major vehicle for acquiring trade skills in the business forms printing industry, like in the other commercial printing industries, is still on-the-job training provided by management, unions and suppliers of machinery and equipment. In addition, a number of Canadian technical and high schools, community colleges and universities provide courses in various aspects of graphic arts.

### 9.3 Productivity of Labour

Labour productivity, expressed as manufacturing value added per production worker, is relatively high in the business forms printing industry. It stood at $\$ 93,722$, compared to only $\$ 56,283$ for the other commercial printing industries sector in 1988 and $\$ 75,808$ for the overall manufacturing sector in 1986. As shown in Table 26, labour productivity has been increasing at a faster rate in the business forms printing industry than in the other commercial printing industries sector and in the overall manufacturing sector.

## TABLE 26

## MANUFACTURING VALUE ADDED PER PRODUCTION WORKER

Business Other All
Forms(BF) Printing(OP) Manufacturing(AM) BF/OP BF/AM
(\$)
(\$)
47,944
54,563
52,584
54,473
N/A
56,283
(\$)
64,406
71,512
73,462
75,808
N/A
N/A
(\%)
154.9115 .3
$152.9 \quad 116.6$
167.4119 .8
$165.0 \quad 118.6$
N/A
N/A
166.5

N/A

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251, and Divisional estimates.

## 10. Management Sophistication

As a general rule, the level of management sophistication in the business forms printing industry, like most industries, increases with the size of the firm. In most instances, larger firms tend to employ more effective management systems. Small firms tend to be owned by entrepreneurs with printing or direct selling backgrounds and less expertise in other functions. The size of these firms restricts the extent to which a full-fledged management team can be financially justified.

## 11. Trade Organizations

The two major trade organizations that serve this field are the Canadian Business Forms Association and the Canadian Business Forms Distributors Association.

The Canadian Business Forms Association represents business forms printers and their related suppliers of goods and services. currently, it has about 20 manufacturer members and about 25 supplier members. The manufacturers it represents account for about three-fourths of commercial shipments of business forms in Canada. The association was established in 1972. It operates as a special section of the Canadian Printing Industries Association, the national association of commercial printers and related companies in Canada.

The Canadian Business Forms Distributors Association represents about 100 independent distributors. It was established in 1979.

## 12. Role of Governments in Canada

Governments in Canada have not developed special assistance programs for the business forms printing industry nor for other commercial printing industries. Horizontal policies related to taxation, tariffs, public procurement, postal distribution and copyright are the government measures that have had the strongest direct influence on the business forms printing industry in Canada.

Government departments and agencies at all levels, federal, provincial and municipal, are major users of business forms. The following table shows purchases of business forms made by the Department of Supply and Services on behalf of the federal government in the last few years.

## TABLE 27

## FEDERAL GOVERNMENT PROCUREMENT

| Fiscal Year | Continuous Forms | Snap-out Sets | Total |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| $1985-86$ | - | 15,480 | 10,553 |

## SOURCE: AlphàLINR

A portion of the output of the business forms printing industry is ultimately distributed through the postal system. Consequently, changes in postal rates and regulations and mail disruptions have an influence on this industry.

Many of the products manufactured by the business forms printing industry are subject to provisions of the Canadian Copyright Act, which originally came into force in 1924. As the Act had become obsolete and no longer provided adequate protection to those engaged in a creative process, a first series of major revisions was made in 1988 to address primarily the concerns of the creator. This phase of copyright reform had little impact on the business forms printing industry. A second series of amendments is expected to be introduced in the House of Commons in the near future. The second phase of copyright reform may deal with the possibility of extending copyright protection to blank forms, a move that would restrict the long-standing practice in the Canadian business forms printing industry of copying blank forms that have been developed by competitors.

## 13. Canada-United States Comparisons

### 13.1 Overview

For the purpose of this document, international comparison has been limited to the United States because of the similarity in Canadian and American business conditions. In addition, the United states is by far canada's largest trading partner in business forms.

According to the International Business Forms Industries Inc. ${ }^{3}$, sales of business forms and related products in the united states reached US\$7.1 billion ( $\mathbf{C} \$ 8.4$ billion) in 1989. Custom continuous forms accounted for 47.1 percent of all sales, followed by stock continuous forms ( 25.1 percent), unit sets ( 22.8 percent) and pegboard and sales books (5.0 percent).

According to statistics provided by the U.S. Department of Commerce, the business forms printing industry ${ }^{4}$ in the united states comprised 847 establishments in 1987 which employed 53,000 people with shipments of goods of own manufacture of US\$7.3 billion (C\$9.7 billion). It is estimated that the 847 establishments were operated by roughly 600 corporate organizations. With approximately four and one-half times more establishments and five and one-half times more employees, U.S. industry shipments in 1987 were about eight times larger than those of its Canadian counterpart. U.S. industry shipments in 1989 are estimated at US\$7.9 billion in 1989.

In 1987, the average establishment in the U.S. business forms printing industry employed 63 people and reported sales of US\$8.6 million ( $\mathbf{C} \$ 11.4$ million), versus averages of 53 people and $C \$ 5.0$ million in the Canadian industry. The U.S. industry, like the Canadian industry, is also dominated by a small number of large plants. In the United States, establishments with at least 100 employees, 19.8 percent of all plants in 1987, accounted for 56.8 percent of industry employment and 62.1 percent of all shipments. In contrast, plants employing fewer than 20 people each accounted for 31.3 percent of all establishments, 4.1 percent of total employment and $\mathbf{3 . 2}$ percent of all shipments.

Business forms printing is concentrated in Pennsylvania (11.0 percent of industry shipments), California (10.5 percent), Texas ( 7.1 percent) and Illinois ( 7.0 percent). Together, these four states accounted for 35.6 percent of industry shipments in 1987, a small decline from 37.9 percent in 1983.

Between 1983 and 1987, the value of shipments, in current dollars, of the U.S. business forms printing industry expanded at an average annual growth rate of 8.7 percent, compared to 9.7 percent for its Canadian counterpart.

The following table provides "practical" capacity utilization rates for the U.S. industry during the period 1983-88.

[^1]Regretfully, similar statistics for the Canadian industry are not available.

TABLE 28
CAPACITY UTILIZATION RATE DURING THE FOURTH OUARTER

|  | $(\%)$ |
| :--- | :--- |
| 1983 | 85 |
| 1984 | 77 |
| 1985 | 79 |
| 1986 | 78 |
| 1987 | 80 |
| 1988 | 74 |

SOURCE: U.S. Department of Commerce Catalogue No. MQ-C1(87)-1.

### 13.2 Size of Plants and Firms

As in Canada, the U.S. business forms printing industry comprises a large number of small businesses; where the Americans do have an advantage however, is in the relative size of their largest establishments and firms which simply dwarf their Canadian counterparts. Canada had only 25 business forms printing plants that employed at least 100 people in 1987. These plants generated an average of C $\$ 20.1$ million in shipments in 1987 and together accounted for 55.3 percent of the canadian industry's shipments. In the united states, there were 141 establishments that employed between 100 and 249 people and an additional 28 plants that employed at least 250 people. These 169 plants reported average shipments of US $\$ 27.0$ million ( $\mathbf{C} \$ 35.8$ million) and together accounted for 62.1 percent of the U.S. industry's shipments. Small scale in Canada is primarily a reflection of the small size of the domestic market.

## TABLE 29

## DISTRIBUTION OF INDUSTRY BY ESTABLISHMENT SIZE-1987

Less than 2020 to $49 \quad 50$ to $99 \quad 100$ \& more Employees Employees Employees Employees

Establishment (\%)

| - Canada | 56.1 | 18.3 | 11.7 | 13.9 |
| :--- | :--- | :--- | :--- | :--- |
| - U.S. | 31.3 | 27.1 | 21.8 | 19.8 |
| Total Employment | $(\%)$ |  |  |  |
| - Canada | 7.5 | 11.2 | 15.2 | 66.2 |
| - U.S. | 4.1 | 14.5 | 24.4 | 56.8 |
|  |  |  |  |  |
| Shipments (\%) |  |  |  |  |
| - Canada | 6.1 | 14.0 | 24.6 | 55.3 |
| - U.S. | 3.2 | 12.0 | 22.8 | 62.1 |

SOURCE: The figures have been calculated using unpublished data from statistics Canada and data from its Catalogue No. 31-203 and data from U.S. Department of Commerce Catalogue No. MC87-1-27B.

At the company level, the Americans dominate the Canadians, with the exception of Moore, as outlined in Table 30.

## TABLE 30

## CORPORATE SALES-1989

| Canadian-Owned Firms CSmiliion | US\$million |
| :---: | :---: |
| Moore's Business Forms Div. 2,807.1 | 2,370.5 |
| Maclean Hunter's Business Forms Div. 250.0 | 211.1 |
| Southam's Business Forms Div. 200.0 | 168.9 |
| Formules d'Affaires Lancaster 38.0 | 32.1 |
| Datamark's Business Forms Div. 20.0 | 16.9 |
| Informeo 15.0 | 12.7 |
| Keystone Business Forms 14.5 | 12.3 |
| Impact Business Forms 13.5 | 11.4 |
| U.S.-Owned Firms | USSmilion |
| Standard Register's Business Forms Div. | 638.0 |
| NCR Systemedia | 500.0 |
| Reynolds \& Reynolds' Business Forms Div. | 348.9 |
| American Business Products' Business Forms Div. | 346.6 |
| Duplex Products | 326.5 |
| Wallace's Business Forms Div. | 278.9 |
| New England Business Service | 225.9 |
| SCM Allied Paper | 147.0 |

SOURCE: Company annual reports, Graphic Arts Monthly, printing Impressions, Canadian Key Business Directory, Canadian Printer, Million Dollar Directory, Moody's Directories and Divisional estimates.

Standard Register, the largest U.S.-owned firm, manufactures business forms and related printed products as well as a variety of forms handling and data systems equipment. Corporate sales reached US $\$ 708.9$ million in 1989 , with business forms accounting for 90 percent of this total. The company has 37 business forms printing plants in 23 U.S. states.

NCR Systemedia is a division of NCR Corp., a company engaged in manufacturing computer systems (from small personal computer systems to large mainframe processors), data communication systems and office automation systems and products. Revenues of NCR Corp. exceeded uS\$6 billion in 1989, with business forms and related products accounting for about 8 percent of corporate sales.

Reynolds \& Reynolds is involved in providing business forms and computer systems products and services. It reported sales of US\$602.1 million in 1989, of which roughly 60 percent consisted of business forms. It has 10 business forms printing plants in the United States and one plant each in Canada and Australia.

American Business Products is engaged primarily in manufacturing business forms and envelopes and in printing books. corporate
sales totalled US\$387.1 million in 1989 , with business forms generating 90 percent of sales. The company has 13 business forms printing plants in 9 U.S. states.

### 13.3 Raw Materials

Most industry selling price indices compiled by the Canadian and U.s. governments for the major raw materials consumed by printers are not directly comparable. Nonetheless, Table 31, which provides Canadian and American price indices, is useful for showing general patterns. It is interesting to note that prices for printing inks increased at a faster rate in the united States.

TABLE 31
INDUSTRY SELLING PRICE INDEX FOR JUNE

|  | 1987 | 1988 | 1989 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Canada |  |  |  |
| Printing paper (1) | 100.0 | 112.4 | 119.3 |
| Fine papers n.e.s. | 100.0 | 109.9 | 116.8 |
| Printing inks | 100.0 | 101.8 | 101.2 |
|  |  |  |  |
| U.S. |  |  |  |
| Uncoated groundwood paper | 100.0 | 105.4 | 111.9 |
| 15 pound form bond paper | 100.0 | 121.2 | 126.2 |
| One-time coated carbon paper | 100.0 | 109.0 | 109.5 |
| Printing inks | 100.0 | 103.0 | 105.2 |

SOURCE: The figures have been calculated using data from Statistics Canada Catalogue No. 62-011 and U.S. Department of Labor-Producer Price Indexes Report.
NOTE: (1) For domestic consumption.

### 13.4 Wages

In "local currency terms", average annual wages in the Canadian business forms printing industry during the period 1983-87 were higher than in the u.s. industry, as shown in Table 32. This is due largely to higher inflationary pressures in Canada. However, after currency adjustment, the Canadian industry had a lower wage structure than its U.S. counterpart during the period under review. However, with the appreciation of the Canadian dollar in 1988-89, it is believed that wage rates in Canada, on an exchange rate-adjusted basis, are now marginally higher.

## AVERAGE ANNUAL WAGES <br> OF PRODUCTION WORRERS

| Canada |  | $\frac{\text { U.S. }}{\text { (US\$) }}$ | Canada/U.S. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Unadjusted | Adjusted (1) |
| (C\$) | (US\$) |  | (\%) | (\%) |
| 21,609 | 17,534 |  | 19,029 | 113.6 | 92.1 |
| 23,198 | 17,916 | 19,187 | 120.9 | 93.4 |
| 24,704 | 18,096 | 20,588 | 120.0 | 87.9 |
| 26,040 | 18,741 | 21,818 | 119.4 | 85.9 |
| 26,139 | 19,711 | 22,116 | 118.2 | 89.1 |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 36-203 and 36-251 and data from U.S. Department of Commerce Catalogue No. Mc87-1-27B.
NOTE: (1) After currency adjustments
In 1987, the smallest wage differential was realized by establishments employing between 20 and 49 people, as indicated in Table 33. These establishments accounted for 14.0 percent of the Canadian industry's shipments in 1987. The largest differential was achieved by establishments employing less than 20 people, but these establishments accounted for only 6.1 percent of industry shipments.

TABLE 33
AVERAGE ANNUAL WAGES OF PRODUCTION WORKERS-1987

| Employees | Canada |  | $\frac{\text { U.S. }}{(U S \$)}$ | Canada/U.S. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unadjusted | Adjusted (1) |
| (no.) | (C\$) | (US\$) |  | (\%) | (\%) |
| Less than 20 | 22,026 | 16,661 |  | 19,200 | 114.7 | 86.8 |
| 20 to 49 | 26,356 | 19,876 | 20,509 | 128.5 | 96.9 |
| 50 to 99 | 26,107 | 19,689 | 21,609 | 126.7 | 91.1 |
| 100 and over | 27,079 | 20,422 | 23,047 | 117.5 | 88.6 |

SOURCE: The statistics have been calculated using unpublished data from Statistics Canada and data from U.S. Department of Commerce Catalogue No. MC87-1-27B.
NOTE: (1) Currency adjustments.
The following table provides industry-wide average annual wage statistics for selected Canadian provinces and U.S. states. It is interesting to note that the highest wages in Canada and the United States were respectively in British Columbia and California.

TABLE 34
AVERAGE ANNUAL WAGES OF PRODUCTION WORKERS-1987

|  | $(C \$)$ | (US\$) |  | (US\$) |
| :--- | :---: | ---: | :--- | ---: |
| British Columbia | 29,139 | 21,974 | California | 24,750 |
| Ontario | 26,410 | 19,916 | Ohio | 23,154 |
| Manitoba | 26,114 | 19,693 | Pennsylvania | 23,067 |
| Quebec | 25,673 | 19,360 | New York | 21,444 |
| Alberta | 24,039 | 18,128 | Illinois | 20,926 |
| Nova Scotia | 18,824 | 14,195 | Texas | 20,571 |

SOURCE: The figures have been calculated using unpublished data from statistics Canada and data from U.S. Department of Commerce Catalogue No. MC87-1-27B.

### 13.5 Productivity of Labour

As demonstrated in Table 35, labour productivity in the Canadian business forms printing industry, as measured by total value added per production weorker, is much lower than in the U.S. industry. This is no doubt explained, at least in large part, by the fact, that as a group, the large U.S. printers are much larger than their Canadian counterparts, and are able to achieve greater economies of scale. The difference in labour productivity levels is also due to the shorter printing runs in canada associated with the segmentation of the domestic market into two linguistic groups.

TABLE 35
TOTAL VALUE ADDED PER PRODUCTION WORKER

|  | Canada |  | U.S. | Canada/U.S. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unadjusted | Adjusted (1) |
|  | (C\$) | (US\$) |  | (US\$) | (\%) | (\%) |
| 1983 | 77,601 | 62,967 | 77,319 | 100.4 | 81.4 |
| 1984 | 89,531 | 69,147 | 81,939 | 109.3 | 84.4 |
| 1985 | 90,833 | 66,535 | 89,866 | 101.1 | 74.0 |
| 1986 | 94,183 | 67,787 | 96,995 | 97.1 | 69.9 |
| 1987 | 97,804 | 73,759 | 104,374 | 93.7 | 70.7 |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203, 36-203 and 36-251 and data from U.S. Department of Commerce Catalogue No. MC87-1-27B.
NOTE: (1) After currency adjustments.
The weakness in Canadian productivity is particularly evident for plants employing fewer than 20 people, as demonstrated in Table 36. These plants accounted for only 6.1 percent of the Canadian
industry's shipments in 1987. In contrast, the best performance by Canadian plants relative to U.S. plants was achieved by establishments employing between 50 and 99 people. These establishments accounted for 24.6 percent of industry shipments.

TABLE 36

## TOTAL VALUE ADDED PER PRODUCTION WORKER-1987

| Employees | Canada |  | $\frac{\text { U.S. }}{\text { (US\$) }}$ | Canada/U.S. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unadjust | just |
| (no.) | (C\$) | (US\$) |  | (\%) | (\%) |
| Less than 20 | 45,047 | 33,972 |  | 82,933 | 54.3 | 41.0 |
| 20 to 49 | 78,016 | 58,836 | 84,981 | 91.8 | 69.2 |
| 50 to 99 | 114,845 | 86,610 | 89,033 | 129.0 | 97.3 |
| 100 and over | 109,776 | 82,787 | 117,953 | 93.1 | 70.2 |

SOURCE: The figures have been calculated using unpublished data from Statistics Canada and data from its Catalogue No. 31-203 and data from U.S. Department of Commerce Catalogue No. MC87-1-27B.
NOTE: (1) After currency adjustments.

### 13.6 Management

It is generally recognized that, on an equivalent company size basis, general management characteristics in the Canadian and U.S. business forms printing industries are similar. However, the U.S. industry is generally considered to be more marketing oriented than its Canadian counterpart.

### 13.7 International Trade

The following table provides figures for U.S. exports and imports of business forms for the period 1983-89.

## TABLE 37

U.S. INTERNATIONAL TRADE IN BUSINESS FORMS

| Exports | Imports |
| :--- | ---: |
| $($ US $\$ 000)$ |  |
|  | $($ US $\$ 000)$ |
| 6,770 | 601 |
| 8,451 | 732 |
| 7,373 | 634 |
| 5,755 | 1,112 |
| 8,219 | 924 |
| 6,795 | 971 |
| 5,291 | 1,490 |
| 6,417 | 1,071 |

SOURCE: U.S. Department of Commerce Catalogue No. FT246 and FT446.

In 1989, Canada was the principal export market for U.S. business forms, absorbing 36.0 percent of $U . S$. export shipments, followed by the United Kingdom (18.7 percent), West Germany ( 4.9 percent) and singapore (4.6 percent).

Canada was also the principal source of supply in 1989, accounting for 83.4 percent of all imports of business forms into the United states, followed by West Germany ( 4.5 percent), Japan (3.8 percent) and Indonesia (1.7 percent).

In the area of business forms, U.S. printers are more export oriented and supply a larger share of their domestic market than their canadian counterparts, as demonstrated in Table 38.

TABLE 38
EXPORT ORIENTATION AND IMPORT PENETRATION


SOURCE: The figures have been calculated using data from Statistics Canada Catalogue No. 36-203, 36-251, 65-004 and 65-007 and U.S. Department of Commerce Catalogue No. MC87-1-27B, FT246 and FT446.

## 14. Technology and Innovation

### 14.1 Machinery and Equipment

The principal pieces of machinery and equipment that would be found in a fully-integrated business forms printing operation would include, desktop publishing systems, photo-composing machines, cameras, automatic plate processors, printing presses, ink-jet/laser printers, punching units, perforating equipment, numbering machines, bar coding equipment, paper cutters, folders and collators. Some of this machinery and equipment is available from Canadian suppliers, although the rest must be imported, primarily from the United States.

There are no major differences in the manufacturing technologies used by the Canadian and U.S. business forms printing industries. Reliable statistics about the level of capital expenditures by the Canadian industry are not available. For information purposes, Table 39 provides statistics on new capital expenditures by the U.S. business forms printing industry.

TABLE 39
NEW CAPITAL EXPENDITURES
US SMILLION \% OF INDUSTRY SHIPMENTS PER EMPLOYEE (\$)

| 1983 | 99.5 | 1.9 | 2,086 |
| ---: | ---: | ---: | ---: |
| 1984 | 180.9 | 2.9 | 3,363 |
| 1985 | 218.3 | 3.3 | 4,028 |
| 1986 | 212.9 | 3.0 | 3,928 |
| 1987 | 207.5 | 2.8 | 3,900 |

SOURCE: U.S. Department of Commerce Catalogue No. MC87-1-27B.

### 14.2 Research and Development

The vast majority of business forms printers, like other commercial printers, worldwide, generally relies on suppliers of materials, machinery and equipment to originate technological developments. A notable exception among Canadian-owned manufacturers of business forms is Moore which has its own $R \& D$ department, which develops proprietary printing systems.

Most of the developments introduced by machinery and equipment suppliers in the last few years have been directed at the automation of pre-printing, printing and post-printing processes and improvement in the speed and efficiency of machinery and equipment. In particular, efforts have been made to improve the forms composition systems. At one time, business forms had to be
manually designed, including lines, both vertical and horizontal. Systems are now available on the market that allow the creation of business forms on display terminals which can then be electronically transferred to a photo-composing machine that will produce a film ready for the preparation of a printing plate. These new, more sophisticated technologies are available on a worldwide basis. Most of this R\&D work is done outside Canada.

In July 1990, the business forms arm of Maclean Hunter signed a technical licencing agreement with the Standard Register company of Dayton, Ohio, the largest U.S.-owned manufacturer of business forms. The Canadian company will gain access to Standard's technology, engineering and research.

## 15. Financial Situation

Regretfully, there is a dearth of reliable information about the financial situation of the Canadian business forms printing industry. It is understood that the financial position of most companies in canada can be described as relatively healthy. However, the financial strength of some companies was strained in 1989-90 by high interest rates and slow market demand for business forms. As a general rule, large printers are doing better than medium-sized and small firms.

Table 40 shows that in Canada, firms classified to the overall commercial printing industries sector have historically performed better than the overall manufacturing sector.

## TABLE 40

## PROFIT PERFORMANCE OF CANADIAN INDUSTRIES

$$
1984 \quad 1985 \quad 1986 \quad 1987
$$

Profit before tax on total income (\%)
All commercial printing(1)

| 8.5 | 8.6 | 7.8 | 8.0 |
| :--- | :--- | :--- | :--- |
| 5.5 | 4.7 | 5.9 | 6.5 |

Profit after tax on equity (\%) (2)
$\begin{array}{llllll}\text { All commercial printing(1) } & 21.8 & 21.6 & 15.8 & 19.1\end{array}$
$\begin{array}{lllll}\text { All manufacturing } & 11.1 & 8.5 & 10.8 & 11.0\end{array}$
SOURCE: Statistics Canada Catalogue No. 61-207.
NOTES: (1) Includes business forms printing.
(2) For the purpose of this ratio, long-term amounts due to shareholders or affiliates have been added to total equity.

Table 41 provides a comparison of the profit performance of U.S. business forms printing firms and commercial lithographic printing firms for the years 1988 and 1989.

TABLE 41
PROFIT PERFORMANCE OF U.S. INDUSTRIES

| Return on | Return on | Return on Net |
| :---: | :---: | :---: |
| Sales-\%(1) | Assets $=\%$ (2) | Worth-\% (3) |
| 19881989 | 19881989 | 19881989 |

Manifold business forms (88 firms in 1988 and 210 firms in 1989)

| - upper quartile | 6.6 | 5.6 | 10.8 | 10.4 | 24.0 | 27.7 |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: |
| - median | 4.1 | 3.4 | 7.9 | 6.5 | 17.6 | 15.1 |
| - lower quartile | 2.4 | 1.2 | 4.5 | 2.3 | 11.8 | 8.9 |

Commercial lithographic printing (1,878 firms in 1988 and 2,297 firms in 1989)

| - upper quartile | 11.9 | 9.9 | 19.1 | 17.3 | 53.4 | 40.9 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| - median | 5.4 | 4.3 | 9.3 | 7.5 | 21.3 | 17.0 |
| - lower quartile | 1.8 | 1.2 | 3.2 | 1.8 | 8.0 | 4.9 |

SOURCE: Dun \& Bradstreet Credit Services.
NOTES: (1) Net profit after taxes divided by net sales.
(2) Net profit after taxes divided by total assets.
(3) Net profit after taxes divided by net worth.
16. Medium - Term Outlook
16.1 Domestic Market Trends

In the medium term, some of the forces that contributed to the growth in business forms consumption during the 1980 s are expected to moderate, while others will continue to have a positive effect.

For example, it is expected that the demand for continuous business forms which is tied to the use of computer facilities, will continue to be robust, based on projections of computer sales. This is supported by the following table which shows sales of personal computers in canada in 1989, with projections for the next five years.

## TABLE 42

## SALES AND PROJECTED SALES OF PERSONAL COMPUTERS IN CANADA

$$
\underline{1989} \quad \underline{1990} \quad \underline{1991} \quad \underline{1992} \quad \underline{1993} \quad 1994
$$

Business/professional

- units sold (000)

Home/hobby market

- units sold (000)
- annual change (\%)

Other markets

- units sold (000)
- annual change (\%)

All markets
$\begin{array}{llllllll}- \text { units sold (000) } & 712 & 807 & 898 & 995 & 1,067 & 1,177\end{array}$
$\begin{array}{lllllll}\text { - annual change (\%) -- } & 19.5 & 18.2 & 17.0 & 15.9 & 14.8\end{array}$
SOURCE: Financial Post of June 11, 1990, based on figures compiled by International Data Corp. (Canada) Ltd.

However, electronic transaction systems, computer-output microfilm systems and other non-printing methods of transmitting and storing information, will increasingly displace some types of paper-based business forms. While there will continue to be pressures from substitutes of printed paper products, it is not thought that the somcalled "paperless society" will materialize in the medium term. In general, far from disappearing, paper is actually proliferating.

In the same vein, the business forms printing industry's potential market will be increasingly eroded by in-house printing plants. Desk-top publishing make it possible for even small companies to design their own forms and reporting systems with a mini computer. Several software design companies have develop computer programs for forms design and creation and forms filling. Some of these programs are available for under $\$ 100$, although the more sophisticated programs cost more than $\$ 500$. Forms can then be printed on low-cost laser printers.

Market demand for business forms is tied closely to the performance of the overall economy. Canada's gross domestic product (GDP) in constant dollars is expected to grow at an average annual rate of 1.9 percent between 1990 and $1995^{5}$ versus
4.5 percent during the $1983-89$ period. This will have a dampening effect on demand.

The new 7 percent federal Goods and Services Tax that was introduced in 1991 is also expected to have an impact on the Canadian business forms printing industry. The industry generally believes that the paperwork associated with the administration of the new tax will be an added cost burden, particularly for small companies.

Reflecting the above factors, it is anticipated that the apparent Canadian market for business forms in deflated dollars will grow at an average annual rate of between 1.5 and 2.0 percent over the 1990-95 period. This is slightly below the estimated average growth rate projections for all printed matter. Within the business forms market, above average growth is expected for relatively short print runs of one-part continuous forms.

### 16.2 International Market Trends

It is generally believed that import pressures from the United States will increase under the Canada-U.S. Free Trade Agreement. The relatively low value of the Canadian dollar in comparison to that of the United States in the mid-1980s has helped to partially offset generally higher manufacturing costs in Canada. An increase in the value of the Canadian dollar vis-a-vis the U.S. dollar would worsen the competitive position of Canadian business forms printers.

### 16.3 Production Trends

Trends in business forms printing technologies over the medium term are expected to be evolutionary rather than revolutionary. In particular, electronics and computers will continue to make rapid inroads into printing plants of all sizes to improve speed, efficiency and economy.

Over the medium term, there should continue to be an increasing concentration of manufacturing facilities and shipments among the major business forms printing organizations. The wave of acquisitions that has swept the industry over the last few years is expected to continue in the medium term. For many printing organizations, acquisition is considered the best corporate strategy for geographical expansion and penetration of new markets.

With the anticipated increase in import pressures resulting from the Canada-U.S. Free Trade Agreement and the overall moderation in the country's economic growth, business attitudes of business forms printers, like other commercial printers, are becoming more and more cautious. Companies are being forced to re-examine all areas of operations in order to tighten control mechanisms.

Investment plans are also being closely scrutinized. Investment in the coming years will likely be directed at improving international competitiveness as opposed to increasing capacity.

### 16.4 Supply Factors

No critical shortages of materials currently used by business forms printers are expected over the medium term, although there will no doubt be spot shortages from time to time. According to the Canadian Pulp and Paper Association, overall production capacity of Canadian mills for printing and fine papers from virgin fibers is expected to increase by 29.7 percent between 1989 and 1992. In addition, production capacity for recycled paper stock is expected to expand substantially in response to the anticipated demand for this type of paper. However, higher prices for most virgin and recycled paper grades is expected over the coming years. The price of petrochemicals, a basic ingredient of most printing inks, will also increase.

The prospects for employment growth in the canadian business forms printing industry over the medium term range. from modest to relatively good, depending primarily on the industry's ability to adjust to increased competition from U.S. printers and from nonprint methods of storing and transmitting information. The size of the entry-level workforce in Canada has been declining for a number of years and this trend is expected to continue over the medium term. This will make it more difficult for many employers to recruit young employees. Nonetheless, the business forms printing industry, in general, should face no critical problems in attracting sufficient workers in the medium term.

From a managerial perspective, the wider selection and higher cost of printing machinery and equipment in the future, coupled with increased import and domestic competition in the marketplace, will put more pressures on managers in the Canadian business forms printing industry to better plan and control human and financial resources and to use more effective marketing techniques.

The industry will continue to be a small energy consumer, so that moderate increases in energy prices would not affect its competitive position.

## 17. Conclusions

The business forms printing industry is an old industry. It is engaged in large measure in processing and upgrading canadian natural resources.

The industry is yet another example of the familiar $80 / 20 \mathrm{rule}$, where 80 percent of the industry's shipments are accounted for by
about 20 percent of the establishments. Industry concentration is even more pronounced at the company level.
small and medium-sized business forms printers tend to concentrate their product and marketing expertise in one or two areas. The larger companies are more diversified and possess facilities for the production of a broader product range and the specialized staff to market the complete line in diverse environments.

The industry is heavily concentrated in central canada. Nonetheless, the industry extends the benefits of its activities to all regions of Canada in both large and small communities.

The industry is still healthy financially, although the financial strength of some companies was strained in 1989-90.

Over the period 1983-89, the performance of the business forms printing industry in canada compared favourably with that of the manufacturing sector as a whole. However, it would appear that 1990 was a poor year for business forms printing.

Under the present tariff structure and exchange value of the Canadian dollar, the Canadian business forms printing industry is capable of supplying most of the requirements of the domestic market and of filling specialized niches in export markets, principally the United States. However, the Canadian industry suffers size-related economic disadvantages vis-à-vis its U.S. counterpart.

It is projected that Canadian market demand for business forms, in deflated dollars, will grow at an average annual rate of between 1.5 and 2.0 percent over the medium term, a more moderate level than during the 1983-89 period.

The industry is at a crossroads in its development. It will be facing a number of challenges in the coming years, including slower domestic market growth, free trade with the United States and increased competition from non-print methods of transmitting and storing information. Most large Canadian printers have started to respond to these challenges. overall, the industry has the potential to adjust positively to these challenges.

## ANNEX A

## TARIFF ITEMS FOR BUSINESS FORMS AND RELATED GOODS - CANADA

Tariff Item
4820.10.00 Registers, account books, order books and receipt books 1989 1990 1991
4820.40.00 Manifold business forms and interleaved carbon sets 1989

1990
1991

Rates on Products Imported from U.S. MFN ${ }^{1}$

| $8.4 \%$ | $10.5 \%$ |
| :--- | :--- |
| $6.3 \%$ | $10.5 \%$ |
| $4.2 \%$ | $10.5 \%$ |

4.2\%
10.5\%
9.7\%
$12.2 \%$
7.3\%
12. $2 \%$
4.8\%
$12.2 \%$

1 The most-favoured-nation (MFN) tariff rate applies to most developed nations other than the United States.

## ANNEX B

TARIFF ITEMS FOR BUSINESS FORMS AND RELATED GOODS - UNITED STATES 1989 4.2\% 5.3\% 1991 2.0\% 5.3\%

Tariff Item
4820.10.40 Registers, account books, order books and receipt books 1989 1990 1991
4820.40.00 Manifold business forms and interleaved carbon sets 1990

Rates on Products Imported from CANADA GENERAL ${ }^{1}$

1 The general tariff rate applies to most developed nations other than Canada.

## ANNEX C

TARIFF ITEMS FOR BUSINESS FORMS
AND RELATED GOODS - EUROPEAN COMMUNITY (E.C. $)^{1}$

## Tariff Item

## Description

Registers, account books, order books and receipt books

| 1989 | $12 \%$ |
| :--- | :--- |
| 1990 | $12 \%$ |
| 1991 | $12 \%$ |

4820.40.10 Continuous manifold business forms and interleaved carbon sets
$1989 \quad 12 \%$
1990 ..... $12 \%$
1991 ..... $12 \%$
4820.40 .90 Other business forms

| 1989 | $12 \%$ |
| :--- | :--- |
| 1990 | $12 \%$ |
| 1991 | $12 \%$ |

1 Belgium, Denmark, France, W. Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and the United Kingdom


ISTC 1551 (8/88)



[^0]:    ${ }^{1}$ Business forms consumed by others than the printer of the

[^1]:    3 An international association that represents manufacturers of business forms and their suppliers. It has about 625 members, mostly from the United States. It is affiliated with the Printing Industries of America.

    4 Classified under SIC 2761.

