The conditioning and packaging of hygienic and pharmaceutical products continued in 1981 to be the most important after the food sector. However, for the first time in many years, growth has been almost non existent (0.4 per cent). Export sales also diminished slightly. Although the packaging industry continued to be closely associated with the food and drink sector, consumer demand slowed during 1981 to 0.9 per cent. A growth of 1.2 per cent is estimated for 1982.

Sales of domestic household equipment dropped by 0.4 per cent in 1981. Glass production for packaging dropped by 6 per cent; plastics also by 6 per cent; steel sheet by 5 per cent; and, paper and cardboard by 2 per cent. Short-term forecasts tend to predict slightly better growth in the food and drink sector but little change is foreseen for the other sectors.

The best possibilities for Canadian manufacturers of packaging and labelling machinery appear to be in the wrapping of bread, biscuits, cakes and dairy products, the packaging of pharmaceuticals, cosmetics and meat, as well as soft drinks and beer — where French manufacturers are technically behind North America, Germany and the Netherlands. An important point to note is that the machinery presently in use in France is aging and 50 per cent of the machines are more than 10 years old.

Although Canada's exports to France amounted to only U.S.\$178,000 in 1981 (down from \$305,000 in 1980 but up from \$8,000 in 1975), there is no reason to believe that the U.S., which is the third ranking supplier to France, is in a more competitive position than Canada.

The Canadian Industry

The Canadian labelling and packaging machinery industry is comprised of more than 85 companies, of which only about 10 per cent could be considered to be medium to large in size, i.e., with more than 100 employees. The industry is located primarily in the large urban centres of Ontario and Québec where markets, supplier inputs, and skilled labour are concentrated.

Subsidiaries of foreign, predominantly U.S.-based companies, comprise roughly 15 per cent of the number of firms manufacturing labelling and packaging equipment in Canada. In general, these subsidiary operations, which have rationalized production with their parents, have complete export autonomy for those items produced in Canada.

The diverse and sophisticated nature of demand which characterizes labelling and packaging equipment markets in Canada and around the world, has led to the development of a highly-specialized domestic production capability. Production of labelling equipment in Canada ranges from printing, slitting, die-cutting, counting, re-winding, and inspection machinery to pressure-sensitive glue, and thermoplastic label-applicating machinery as used in the food processing, pharmaceutical and beverage industries. Canadian packaging equipment supply

capability for various industrial and commercial applications includes:

- aseptic packaging systems;
- liquid and dry-product filling systems for bottles, bags and pouches;
- bottle-capping and cleaning systems;
- case-forming, opening and sealing machines;
- cartoning machines:
- blister packaging, thermoforming, and heat-sealing machinery;
- pouch and bag form-fill seal machines;
- shrink, skin, stretch-wrap and pallet-wrapping equipment;
- vacuum-forming, strapping, and taping machinery.

Canadian labelling and packaging equipment has gained wide international acceptance on the basis of its advanced technology, price competitiveness and quality.

Production of labelling and packaging equipment in Canada has increased at an average annual rate of 15.4 per cent from \$7.1 million in 1970 to more than \$34 million in 1981. The industry is highly exportoriented, with exports traditionally accounting for upward of 90 per cent of total industry shipments. Exports have realized an average annual growth between 1970 and 1981 of 16.4 per cent, reaching \$33.5 million in 1981. The U.S. represents the major export market for packaging equipment, absorbing in 1981 some \$22.5 million (67 per cent) of the industry's export sales. Exports to Europe have historically accounted for approximately 15 per cent of the industry's exports. In addition, packaging equipment has been exported to a wide variety of other markets including Japan, South Africa, Australia, New Zealand and Mexico.

Recent Canadian Marketing Activity

To date, Canadian marketing initiatives for labelling and packaging equipment have not focused on any particular country market in Europe; rather, they have been aimed at achieving a broader regional or international exposure. In this regard, Canadian producers have participated actively since 1975 in Canadian government-sponsored international fairs held in Europe.

Canadian companies have exhibited at the Interpack fair in Düsseldorf, West Germany in 1975, 1978 and 1981. In 1980, 15 companies participated in the Pakex fair in Birmingham, England. These fairs generated close to \$3 million on-site sales, with an additional \$35 million in subsequent sales.

Canadian Success Stories

As mentioned earlier, the Canadian exports of labelling and packaging machinery to France have been marginal to date. A few Canadian firms, however, have taken action to remedy this situation: Langen and Sons Ltd., Arpeco Engineering (printed labels), Pamco Ltd. and Stackpole Machinery have establish-