

Developments in the international trading environment can significantly influence the trade performance for the machinery industry. On the positive side, import duties for the U.S. and other major markets are being progressively reduced as a result of the last round of tariff negotiations. In addition, a range of major machinery exports, including agricultural machinery, pulp and paper equipment, and some heavy metal working equipment, has been provided duty-free access to the U.S.

The principal forms of non-tariff barriers having an adverse effect on Canadian machinery and equipment exports include: (a) tied foreign concessional export financing and aid which, in effect, often preclude any significant Canadian participation in large projects; (b) government procurement policies such as U.S. "Buy American" legislation, and the policy of European and other countries simply not to consider Canadian or other foreign bids in areas such as power equipment, and oil and gas pipeline equipment; and (c) "local content" provisions, which are imposed in certain countries as a condition for Canadian suppliers to obtain contracts, and which tend to significantly reduce the volume of equipment shipped from Canada.

The varied range of machinery and equipment produced by the Canadian industry falls into four broad categories: (a) resource-based machinery; (b) electrical equipment; (c) plant and industrial machinery; and (d) service industries machinery. In order to remain competitive in markets characterized by a wide range of demands and a large number of suppliers, many companies have gradually reduced the range of machinery products manufactured in Canada, particularly standard types, and have concentrated on certain types and sizes of machinery as well as on custom-engineered equipment. Specialization has, in a number of cases, been achieved through rationalization agreements whereby the Canadian subsidiary produces a line of machinery for the corporate group, while rounding out its product lines with imports from the parent organization. In other cases, companies have developed unique equipment and capabilities that they have been able to market successfully in Canada and abroad.

Despite cyclical problems, the resource machinery equipment sector continues to provide a diversified range of high quality products to meet the particular and varied needs of the Canadian resource industries, as well as international market demands. Canadian manufacturers have derived a considerable competitive advantage from their longstanding reputation for service and reliability: a reputation established through close association with the development of the Canadian resource base. Many areas of resource machinery production involve custom-engineered equipment where production scale is a less significant competitive factor than in most other industrial sectors. In the case of agricultural equipment, the Canadian industry is technologically competitive and, in recent years, has been at the forefront of several technological achievements including the development of large capacity four-wheel drive tractors and axial flow combines. Canadian-developed, specialized machinery

for the production of cereal grains on large farms under dryland farming conditions is also well suited to the requirements of other large scale farms throughout the world, especially the grain growing regions of the U.S. and Australia, where such machinery has enjoyed significant success in recent years.

Canadian industrial electrical equipment firms have developed several areas of internationally recognized competence, notably large hydro-electrical turbines and generators, transformers, long distance transmission equipment, and large motors and controls systems. In most of these products, the sector is internationally competitive.

Canada's competitive strength in plant and industrial equipment, as with most other capital goods sectors, tends to be selective in terms of the range of sizes and models of equipment produced. Particular strengths include specialized packaging equipment, customized machine tool equipment (particularly for the automotive industry), steel plant and heat treating equipment, and a wide range of equipment for the food and beverage industry.

Although encompassing a diverse range of products, production of service industries machinery and equipment involves, to a greater extent than other machinery sectors, standard or off-the-shelf types of products where economies of scale are a major competitive factor.

Apart from ongoing trade development activities, including support under the Program for Export Market Development (PEMD) and the Promotional Projects Program (PPP), exports of machinery and equipment could benefit from a series of export marketing conferences for significant subsectors (e.g., oil and gas equipment). Such conferences, similar in format to the Annual High Tech Conference, could consist of brief presentations by trade commissioners from identified priority market areas about the "how-to's" of doing business in each market, and about the specific opportunities existing in the target country, as well as statements by the Department of External Affairs (DEA), CIDA, and EDC about government services available to exporters. One or two days, as required, would be devoted to private interviews between industry representatives and trade commissioners.

5. Transportation Equipment

It is estimated that, in 1984, Canada had a positive balance of trade with the U.S. in motor vehicles and parts of approximately \$5.5 billion. Offshore markets hold promise for original equipment manufacturers (OEM) and aftermarket parts.

Because the Canada-U.S. Automotive Products Trade Agreement provides for duty-free access of motor vehicles and OEM parts between Canada and the U.S. on a fully integrated industry basis, the Canadian motor vehicle industry has evolved with little management autonomy and a limited R & D capability.

As the motor vehicle industry moves toward internationalization of product design and production, new windows of opportunity (includ-