

providing another powerful argument in favour of more CDIA as a trade enhancing measure. Telling examples of the benefits of early CDIA are the experiences of Alcan in aluminum production in Japan and Moore Corporation (with Toppan) in the Japanese printing market.

## Natural Resources

The relationship between trade and FDI in the natural resources sector is determined by the fact that extraction and primary production are in a fixed location and that an important part of the demand for the resources is international. For renewable resources in agriculture and forestry the sequence is similar to that of manufacturing except that trade usually consists of imports to satisfy demand in the home country (e.g., lumber to Japan). However, in non-renewable resources in petroleum and mining, FDI precedes trade. Moreover, exports from the host country may go to third countries. For example, the output of Inco's nickel mine in Indonesia goes to Japan.

There are also often good business opportunities (and pressure from host governments) for the TNC to make further investments in manufacturing and services, particularly in developed countries. For example, Shell and BP's investments in the oil business in the United States were initially to secure sources of supply, but they quickly added more FDI to develop petrochemical manufacturing plants (leading to exports of higher value-added products) and service stations, in other words - associated investment and trade. Furthermore, overseas investments by mining companies lead to the export of related exploration and mining equipment and services often from the home country where competent manufacturers of equipment and providers of services have already developed to serve the mining companies. Building on a very strong base in Canada, Canadian companies have been active in exploration and mine development overseas for many years. At the end of 1995, Canadian companies held interests in about 2,750 foreign mineral properties located in 99 countries around the world. Because of their knowledge and expertise, Canadian companies are well positioned to respond to opportunities arising from the globalization of the mining industry. Canadian-based companies now control one quarter of

the world's larger-company market for precious metal, base metal and diamond exploration, and they hold the dominant share of that market in both Canada and Latin America. In Southeast Asia about 40 companies are active in seven countries.

## Services

Trade in services usually requires interaction between producers and consumers and so their delivery abroad requires the movement of either producers or consumers or the use of affiliates, requiring FDI. Some very market sensitive services (such as local newspapers and advertising) have to rely on foreign affiliates. Many service companies start along the road to internationalization to support the international activities of their (goods producing) home country customers. Overseas branches of banks and trading companies usually start this way.

As services have grown in importance to become the largest sector in the world economy, FDI in services has also expanded, and now accounts for half of the world's FDI stock and 60-65% of FDI flows.

Although the above patterns are typical, there are variations on the theme depending on the characteristics of each industry, so that steel, automobiles, chemicals, communications, precision machinery and metalworking follow similar but distinct paths to globalization. Some examples<sup>24</sup> from Japanese industries illustrate this. The Japanese steel industry started later than its European and American counterparts and, lacking basic raw materials, built its mills on sea coasts to make transportation more efficient. Japanese firms developed large scale furnaces, LD converters and other advanced technologies to compensate for their lack of mineral resources. They have also pioneered the use of computers in heavy industry and, with their superb human resources, have developed the world's most efficient system of mass production and strengthened their ability to compete internationally. Instead of moving overseas, Japanese steelmakers have remained competitive by merchandising and selling their technology and experience; they are going global through technological cooperation.

The Japanese automotive industry started from scratch after World War II to reach the

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