

Production growth expectations in Canada are quite low, and are expected to remain low until the 1990's for zinc and 2000 for lead. This is due to market maturity, substitution of other metals, increasing production by LDC's, closure of some capacity due to stringent hygienic regulations in the smelter workplace, and stricter environmental regulations. For example, Cominco has "permanently" reduced its lead annual smelter capacity in the last decade, due in part to government regulations and in part to obsolescence.

Profits dropped dramatically from \$300 million in 1979 to a loss of \$17 million in 1983 (for the companies which reported results during that period), then bounced back to \$51 million in 1984. Profits are expected to stay low in 1985 due to low prices for lead, zinc and silver. The industry had had to borrow heavily over the last five years to modernize. This has left it highly leveraged, and in a poor position to raise capital, via debt or equity. This lack of funds will make it difficult to modernize further, to increase profitability through capital intensification, and therefore to maintain its competitive position in world markets.

Canadian companies have significantly improved their productivity. The best example is that, in 1983, Cominco opened its highly automated 271,000 tonnes per year zinc electrolytic refining plant, which has the largest capacity in the world.

There is considerable idle smelter and refinery capacity in the U.S. and Europe. In the U.S. in 1983, only four zinc smelters operated, having a total capacity of 300,000 tonnes. The others, with a total capacity of 207,000 tonnes, were idle, suggesting a utilization rate of under 50%. European smelters also continued to operate at a low rate, perhaps keeping alive the option that the European commission has given its smelters, namely, a \$203 per tonne payment for operations permanently closed. Europe's low rate of metal production has caused several closures in 1984 and 1985 of Canadian lead and zinc mines. These closures are planned to be short-lived but, no doubt, future decisions will depend on the European economy.

Profitability of the sector was under further pressure during the latter part of 1984 and early 1985. The price of zinc has dropped to 56¢, lead has dropped precipitously from 42¢ to 24-26¢, and silver has dropped from \$10 to \$7.75 (all are in Canadian funds).

2. Strengths and Weaknesses

(a) Structural

The scale of operations in Canada compares favourably with international standards. In lead, Cominco's 130,000 tonnes capacity is among the largest smelters in the world (two of the largest are BHS, Australia, 250,000 tonnes and Sc. Joe, U.S. 218,000). BHS' capacity of 58,000 tonnes is in the medium range by world standards. Cominco's new zinc refinery is the largest in the world. Kidd Creek's and BMS' zinc capacities would be in the medium size range of world operations.

The sector has been undergoing adjustment related to two factors: productivity and government restrictions on emissions. Low metal prices and reduction of profit margins have caused Canadian companies to modernize. Canadian producers are not price leaders; therefore, they attempt to improve margins by cutting costs. A greater proportion of funds has gone into modernization of zinc operations, and a lower proportion into maintaining operation of the old lead smelters. In Canada, as elsewhere in the world, lead smelter capacity has had to be reduced significantly to improve hygienic conditions in the workplace. The adjustment will continue. However, the adjustment could be catastrophic if, for whatever reason -