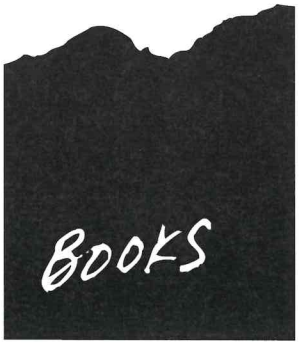

Corporate strategies and government responses

by Olle Östensson

Bonnie Campbell and Magnus Ericssson (editors), *Restructuring in Global Aluminium*, Mining Journal Books (London). Fax: +46-8-744 0065.

This book consitutes constitutes attempt to "reassess the restructuring of the international aluminium industry, by examining corporate and state control". The authors consider that developments with respect to international competitiveness and comparative advantage are insufficient to explain structural change in the aluminium industry, in which they of course also include bauxite and alumina production. Changes in corporate structures, with consequent modifications in-strategies strategies deemed to be the main driving force behind location decisions, although the authors recognize the important role that government policies play. Seven authors have contributed analyses of four countries and regions (Australia, Guinea, Jamaica and the province of Québec in Canada). The different chapters do not utilize a common methodology, although it is clear that all the authors share a preparedness to take into account corporate strategic and political factors when trying to explain location decisions. The editors, Bonnie Campbell and Magnus Ericsson, have contributed more general chapters on the evolution of corporate structure and the factors underlying geographical relocation, as well as a final chapter which sums up the conclusions.

Olle Östensson, United Nations Conference on Trade and Development Geneva. The views expressed do not necessarily reflect those of UNCTAD.

A reason why it is useful to study the evolution of the international aluminium industry is mainly – apart from the intrinsic benefit of understanding an industry which has performed much better in terms of growth than most other raw materials industries – that lessons from aluminium may be possible to apply to other industries. Many of the emerging characteristics of the "globalizing economy "present for decades in the aluminium industry. The globalization and "slicing up" production chains, the speed with which cost reductions in one part of the industry impact on other parts, and the pressure on governments to provide competitive investment conditions, are examples of phenomena which are familiar to the aluminium industry – and, indeed, much of the international mining and metals industry – but to which other industries are only beginning to adjust. Globalization in aluminium was forced on the companies by the fact that the crucial inputs (bauxite and electrical power) are seldom located in the same place.

Other characteristics of a global industry, such as the almost complete absence of tariffs at the initial production stages, have been the result of policy decisions necessary to allow the industry to deal with the forced globalization. Consequently, the aluminium industry depends on a close relationship with governments in host countries, particularly since the important economies of scale at every stage of the bauxite to primary aluminium process means that aluminium projects are generally on a scale that requires the national government to be involved. Moreover, governments usually control the access to the localized inputs. Since it is never a good idea to put all of your eggs in one basket, aluminium companies have always strived for geographical diversification and distribution of risks. Accordingly, much of the location of the industry reflects the outcome of a bargaining process between the industry and governments. The different chapters of the book illustrate the varying forms this bargaining process can take. One observation that can be made is how the outcome in terms of revenue sharing and economic development impact differ, largely as a reflection of the bargaining power of the governments involved. The outcomes at various stages of the development of bauxite and alumina production in Guinea differed considerably over time, partly as a result of the importance of Guinean bauxite– alternative to other sources, as shown by Bonnie Campbell chapter on that country. Paul-André Lapointe provides the following illuminating quotation from the 1988 energy policy statement of the government of Québec chapter on modernisation in the province: "Québec has only electricity to offer." Som would argue that the weak bargaining position illustrated by this statement is reflected in the power tariffs for aluminium companies in the province. In this context, it is perhaps somewhat surprising that the authors do not mention the most recent example of close interaction between governments and the international aluminium industry. I refer, of course, to the 1994 Memorandum of Understanding whereby several governments took note of the production cutbacks planned by major companies in order to reduce the excess of supplies over demand and avoid a collapse of the aluminium market.

The authors see the bargaining process as heavily weighted in favour of the industry. There is almost no mention of the International Bauxite Association (IBA), although it could be argued that the IBA was the most successful of the various organizations that were set up by governments of commodity producing countries in the wake of the early OPEC successes. However, the ultimate closure of the IBA could be seen as confirming the authors

authors' view. The authors believe that the bargaining power of the aluminium companies will probably grow over the 1990s (and, presumably, beyond). Nevertheless, they state that governments, as well as local or national interest groups, have become increasingly flexible in dealing with new challenges. This adaptability is said to offer some hope that they can respond more effectiovely effectively future developments in the industry. While one would hope that future location decisions will take into account the development interests of countries and local communities as well as the industry remain competitive in relation to possible substitutes, it should be noted that one recent development could shift the balance of bargaining power even further in favour of the industry. Deregulation of national and international power markets may remove one of governments important bargaining chips from the table (although the efficiency gains from more open power markets of course provide benefits to national economies).

In conclusion, the book provides a great deal of valuable insight into the workings of a major global industry. While it may be possible to disagree with the authors on the relative weight of different factors in individual cases, the book achieves its purpose of explaining the processes that have led to the present industry structure. It would be interesting to see the same analytical approach applied to other major industries. ■

Books received

edited by Robert Lilljequist

Stephen Brown et al., *The Economic Impact of International Climate Change Policy*, ABARE, GPO Box 1563, Canberra 2601, Austalia. Fax: +61-6-272 2001. ISBN 0 642 26608 5, 107 pp.

This report provides an assessment of the economic impacts of alternative emission abatement policies on developed and developing countries. It also provides a comparative analysis of uniform emission abatement strategies with emission trading schemes.

ABARE Update. ABARE, GPO Box 1563, Canberra 2601, Austalia. Fax: +61–6–272 2001. 24 pp. Circulation subscription enquiries; +61-6-272 2211.

ABARE Update is published twice a year and aims to provide clients with valuable information on economic research and commodity forecasting. This number features wool futures, climate change policy, Australian energy production and use, Johne¿´ isease, irrigation and dryland salinity.

Lester Brown et al.: *Vital signs 1997 – the environmental trends that are shaping our future*, Worldwatch Institute, 1776 Massahusetts Ave., NW, Washington, DC 20036–1904 . ISBN 0 393 04067 4, 165 pp. Published by W W Norton & Co., 500 Fifth Avenue, New York, NY 10110, USA.

Vital signs is a book of interconnecting trends. Economic growth in developing countries was triple that of industrial countries, yet the gap between rich and poor widens. There was a record grain crop last year – yet grain stocks barely inched upward, leaving the world with little more than pipeline supplies to make it to the next harvest. The C0 emissions rose to new levels and wind power was the fastest growing energy source at 26 per cent for the year. The rate of the population growth slows, but the global population grows older.

Dresher, P.E. and Poitier, D.R., *Metallic alloys and mixtures: definitions, behaviour and characteristics. With special reference to the environment*. International Council on Metals and the Environment, 294 Albert Street, Suite 506, Ottawa, Ontario, Canada K1P 6E6. Fax: +1-613-235 2865. 35 pp.

Metals and alloys are insoluble in aqueous media and therefore cannot be considered to be bioavailable. Bioavailability refers to the amount of a chemical compound in the environment that can be absorbed by an organism. In order for metals to become soluble they must become ionized through a chemical reaction called corrosion. Metallic elements, some of which may be considered toxic, are added to alloys in order to increase their resistance to corrosion.

International Council on Metals and the Environment, *Report of the Internationalø Workshop on Risk Assessment of metals and their inorganic compounds*, ICME, 294 Albert Street, Suite 506, Ottawa, Ontario, Canada K1P 6E6. Fax: +1-613-235 2865. ISBN 1 895 720 18 4, 810 pp.

The international workshop on risk assessment of metals and their inorganic compounds took place in Angers, France in November, 1996. The objectives of the workshop were to identify the key issues and to develop a common understanding of the path forward in risk assessment methodologies for metals. The participants brought to the discussion a broad spectrum of experience and expertise in geology, agronomy, metallurgy, chemis-

try, biology, epidemiology, aquatic and terrestrial ecotoxicology, toxicology, medicine, statistics, risk assessment and regulatory development. Interdisciplinary interaction may be helpful to ensure that the unique aspects of metals and metal compounds, such as natural occurrence and essentiality, are adequately addressed.

International Council on Metals and the Environment, *Risk Assessment and risk management of non-ferrous metals realizing the benefits and managing the risks*, CME, 294 Albert Street, Suite 506, Ottawa, Ontario, Canada K1P 6E6. Fax: +1-613-235 2865. ISBN 1 895720 192, 115 pp.

Like all materials, non-ferrous metals have the potential to present risks to public health and the environment. Much progress have been achieved in reducing the risks, and all sectors of society now recognize that the production and use of metals, both for existing and new applications, must be environmentally acceptable. This publication presents an overview of the risk assessment and risk management of non-ferrous metals. The four steps of risk assessment are: (1) hazard identification; (2) dose-response evaluation; (3) exposure assessment; and, (4) risk characterization. Risk management is the decision making process which seeks to minimize risks and costs while maximizing the benefits associated with the substance. ■