

The aluminium industry and the third world. Multinational corporations and underdevelopment, by Ronald Graham. Zed Press, London 1982, 278 pp. Price 6.95 GBP.

In his introduction to the study under review Graham states that an important aim is to do something about the fact that the existing literature on the aluminium industry fails to:

"examine the growth of the industry in the core capitalist countries in relation to the obstacles which this development has placed in the way of the industrialization of the third world."

This is indeed a worthy aim and Graham has contributed to the elucidation of this relation.

Outline of the book

In an introductory chapter Graham states some methodological assumptions, i e that it is important to put the development of the MNC — being "the most important external aspect of economic underdevelopment" at the centre of the analysis. In the introduction we are also told about the recent release of over 200 hitherto classified documents about developments around the Volta River Project — implying a richness of documentation that makes scientific investigation of this case potentially very fruitful.

Chapters 2 and 3 tell the story of the international aluminium industry from its beginnings in the late 19th century to the postwar period, focusing on the cartels, monopolies and later on the international oligopoly that the leading companies formed.

In chapter 4 focus is on the third world and at the end of the chapter the cases of Guyana and Guinea ara analyzed.

Chapters 5 to 7 are devoted to an indepth-analysis of the case of Ghana and the Volta River Project, comprising about half of the book. In chapter 8 the conclusions are drawn under the heading: "Third World Bauxite Producers: The Way Forward".

Too far-reaching title

In spite of my general very high esteem of the book I think I ought to mention some dimensions of the book that I find weak.

In order to discuss strategical options for third world countries that are rich in resources needed for aluminium production, such as a hydro-electric power potential, and reserves of bauxite, it is of great importance to have reasonably up to date figures for the cost structure of the industry as well as descriptions of the development of the cost components over time. In order to discuss the potential role of aluminium in a development strategy one must also illustrate the capital intensity of the industry as well as the very large lump-sum investments that are needed. The economies of scale force a small national economy to a very strong dependence on the world market. Furthermore it is hard to discuss potential allies of third world countries that are already in the industry if you don't supply the tools which are necessary for determining which of the existing operations that will survive present developments in the world economy. Cost structures are such tools.

But this is not the only lack of basic data in the book. One is looking in vain for the development of third world (or International Bauxite Association, IBA) shares of the world bauxite production. Since this share is an important measure of the strategies of the leading MNCs in the industry (showing for instance that redirection of investments is not as recent a threat as is implied in the book), such a lack is not inconsequential.

Not that data are totally lacking; lots of figures are quoted in the book. But even data that are intended to give a picture of the present-day situation are often very old, orders of magnitude are not given for comparison when individual figures are quoted, and one gets the general impression that the statistics have not been worked through. To quote another example: When aluminium consumption structures in India and the US are compared, no attempts are made to reconcile differences in ways of aggregation, years when the structures were measured are not given, per capita consumption in absolute terms not given and sources not presented.

Some readers might say that these are really comments on details. In my view, however, they are important. The possibility to develop a strong independent final goods aluminium industry is very different if the consumption basket of aluminium products in a developing country is a subset of the same basket in developed countries or if it to an important degree contains products not present in the latter. Graham too easily assumes the second alternative to be the case.

Above I have pointed to some weaknesses in the treatment of statistics. There are, however, also subjects that are left out in this comprehensive study of aluminium in the third world. The industries of Asian developing countries are not analyzed and, more important, Australia and Brazil are only mentioned as potential threats to IBA — and not analyzed in their own right.

The main focus of the discussion is on contradictions between MNCs and governments of resource-rich third world countries and on the contradictions between the imperialist countries themselves. These are clearly important issues, but one would have appreciated if some of the other contradictions mentioned by Graham himself as, for instance those between different factions of local bourgeoisies, had also been discussed. Also it is a pity that Graham just mentions the "surprising lack of solidarity amongst members of the IBA" with the Manley government without presenting the evidence and analyzing it. Some comments on the experience of the cooperation between third world countries and eastern countries would also have been of interest.

Over-estimation of the aluminium industry as a dynamizing sector

Above I have mentioned some short-comings regarding statistics as well as subjects. But I also think that there are problems — at least of relative weight — with some of the conclusions.

Firstly there are some statements in the dependency school tradition that should have been qualified in order not to sound too rigid, e g:

"it is now apparent that successful industrialisation in the third world requires first and foremost a political solution whereby state power is transferred to the workers and peasents most directly involved in the production process." (p. 248).

By 'successful industrialisation' one can of course mean a non-exploitative industrialisation, but then the statement is almost circular. Or one can mean that the industrialisation is only successful if it leads to an independent economy, but in that case one would have to add that the smaller — and maybe also the medium-sized — European economies as well as those of Canada, Australia etc are not successfully industrialised.

Another area where I have problems with the emphasis of Graham's analysis is why he discusses the IBA, eg:

"it became clear that such policies (of forming cartels — reviewer's comment) were an 'institutional' response... and were consequently, neither informed by any real understanding of the past unhappy economic experience nor grounded in any real desire to restructure completely the countries' links with the international capitalist system." (p. 255).

By a parallel argument one could state that the formation of trade unions can not be based on a real understanding of a capitalist economy i e they must be based on economistic illusions. The spread in membership make most cartels limited in their aims but this does not mean that all the members must have illusions.

Finally the most dangerous weakness among the conclusions.

"Development planning, particularly in those countries which we have analysed in this study, must favour the development of an integrated aluminium industry and give this particular heavy industry priority over all other development schemes and planned investments in the manufacturing sector." (p. 248).

This is just one of many examples of the author's belief that the aluminium industry - if only properly handled by a progressive government — is the essential tool of industrialisation - at least in countries with bauxite and hydro-power resources. However, to my knowledge all existing technologies for integrated aluminium production require such massive investments in order to be competitive that the venture will mean a very one-sided industrialisation, heavy dependence on the world market, strong cyclical variations in state revenues etc. This would especially be the case if all the relatively small developing economies mentioned in the book would follow the advise and build their own integrated aluminium industry. A progressive regional co-operative venture might be something else. It is however clear that the author would have to present much more concrete evidence dressed in realistic figures - in order to present a strong case for his particular development strategy.

Very valuable case studies

My doubts about some of the conclusions should however not hide the fact that the case studies are of very great interest. In the description of *Guyana* we get a good picture of how the weak British colonial administration was used by the North American companies to almost totally avoid taxes and how a progressive government was later on destabilized through a

number of devices including manipulations of trade unions' fear of loss of a pension plan. We also get to know about an early example of the use of cancelled World Bank loans as a destabilizing device. Guyana's cooperation with the GDR and Yugoslavia as alternatives to the MNCs is also of great interest.

The very interesting West African cases have been briefly described by Graham himself in RMR Vol 1, No 4, so they shall not be presented here.

Brilliant analysis of the Volta River Project

Suffice it to say that the Ghanean example gives text-book-illustrations of how the US took over the role of the UK, how technological imperialism works, how a company succeeds in placing itself on both sides of the negotiating table and how a multi-purpose project is turned into a narrow project with very few links to the rest of the economy. Parts of the analysis of the VRP should obviously be compulsory reading for students of third world — MNC-relations.

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Aluminum: Profile of An Industry, published by Metals Week, McGraw Hill, (New York), 1982. Price 87 USD.

Metals Week has produced a well written and easily digestible compendium of facts and figures on the aluminium industry. It is a book which answers most of the what? questions you might want to ask but very few of the why?

The book, in effect, brings together in one publication a vast amount of information which was previously to be found scattered around in business newspapers, journals and magazines. As such it is a valuable tool for researchers and those generally interested in developments in the industry. But, as with its source materials, it adds little analytical depth or critical comment on the data it chronicles.

The organization and presentation of the material shows a bias towards USA activities, although sufficient coverage is provided of companies and developments elsewhere to still make it useful for non-North American readers. While much of the information will be familiar to "industry watchers" the coverage is wide enough that all must inevitably find something new. Personally, I found the chapters on fabricator operations and energy, economics and the environment particularly worthwhile reading. In addition there are a number of well presented tables which allow one, for example, to trace the international sourcing of USA smelters (Table 3.11, p 42) or investments by the "six sisters" of the world industry in various countries (Table 6.3, pp 96-107). This should make calculations of foreign equity in the industry relatively simple, a much needed information service. Chapter 12, Appendix provides a useful listing of sources of information including books, periodicals, government publications and trade associations.

Nevertheless, readers from outside the business community might find some curiosity in the way some of the information is presented. In the section on bauxite, for instance, there is a brief mention of IBA countries, unexplained, followed by a lengthy section on research conducted to find technologies able to use non-bauxite ores. One has to read over one hundred pages further to find out what the IBA is.

It also gives a somewhat curious view of relations between national governments and international aluminium companies. Here the government is presented as the instigator of the conditions and policies which form the business environment in which these companies operate. The impression is given of the corporations being

passive responders to the conditions so created. There is mention of countries demanding domestic refining of local bauxite but not of the rising transport costs which made this economically advantageous (p 20). In relation to smelting, it states that "the most aggressive capacity expansion program is being launched by Australia" (p 94) but neglects to point out that this is merely the outcome of the activities of energy-starved multinationals seeking alternative sources of supply. There was no predetermined government policy involved whatsoever.

These curiosities illustrate that this book is far from the last word on the aluminium industry. But then, it was never intended to be. It is a useful tool for those seeking to have that last word.

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Aluminium – the international perspective, by Gerry Butcher, Financial Times business information, London 1982. 180 pp. Price 92 GBP.

The title of the study combined with the name of the publisher makes it clear that the study is aimed at businessmen with direct or indirect interests in the aluminium industry. As with many studies of this type it is however not stated anywhere how familiar or non-familiar you should be with the industry in order to get new insights through reading the study. But this of course is a consequence of commercial laws. Why limit the number of potential buyers by giving too clear indications of the level of the study? Anyhow - for an outsider to the industry the study is of a certain interest but has some surprising shortcomings, to which we will return below.

Outline of the study

On page 1-25 some basic hand-booktype data are given. They are of the sort that should be of no surprise to people that have taken an interest in the aluminium industry. Page 26-119 are devoted to descriptions of

- a) the aluminium industries in some 40 different countries (i e countries with one or more of the links in the aluminium chain) and
 - b) the 6 leading MNCs.

Pages 120–172 treat secondary aluminium trade and consumption patterns, new technologies and prices. Pages 167–176 contain conclusions and company comments on the study.

Mass of data - lack of systematizing

When studying trade patterns for a product like aluminium you obviously want to know aggregate figures of export and import since aluminium can be traded in so many different forms. You would also want to know regional patterns of trade and production such as are given with five vear intervals by the French publication Annales des Mines. You would like to have prices deflated (even though it is hard to find good deflators) in order to make your predictions. Such basic requirements are not filled by this study. And when the MNCs are analyzed you do not get the kind of solid company structures that are provided for instance in the Aluminium study published by the West German Bundesanstalt fur Geowissenschaften und Rohstoffe/Deutsches Institut fur Wirtschaftsforschung. And which are the under-lying assumptions of different projections given in the study? When it is stated that aluminium production will grow 3-4 per cent for the rest of this century one would at least like to know what GNP growth is assumed to arrive at this conclusion.

Too close to company sources

An interesting part of the study is the summary of a questionaire sent to a number of aluminium companies. In other re-

spects, however, it's a weakness that the author is so close to company sources. He has for instance been just as unable to project the persistency of the present crisis of the industry as the companies themselves, though he doesn't share their need to be optimistic in order to keep share prices high.

Some interesting suggestions

The criticism above should however not be taken to mean that the study lacks interesting information. Such information is present and there are also some interesting suggestions, e g that the control of alumina facilities will be an important strategic factor during the 1980s and that the role of the "Big Six" will not be very much weakened. And this in spite of the fact that their share of market economy smelter production will have fallen from 60 per cent in 1971 to 48 per cent in 1985. The lack of systematizing however makes you uncertain of the value of such predictions.

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Norman Moss, *The Politics of Uranium*, Andre Deutsch, London, 1981.

This book could rather have been named "The Politics of Nuclear Techniques in Western Europe and the USA". To a person somewhat familiar with the subject, the title of the book gives the impression that it deals with different aspects of uranium supply, such as reserves, the influences of companies involved, the effects of mining, etc. This may certainly be found in the book, but it is treated in an incomplete and inferior way. The main subject of the book is nuclear techniques and their application to nuclear power and nuclear weapons.

In fourteen chapters with some rather cryptic headings ("What God hath joined . . ."; Plowshares and swords; The tiger in the nursery; etc) Moss gives a broad description of the nuclear technique; its technical and scientific background, its history and above all its political consequences. Of course, such a wide subject cannot be treated fully in a little more than 200 pages. But my impressions is that the fundamentals are included and that the book gives a valuable summary both for the reader without previous knowledge and for the one already familiar with parts of the subject.

As the title says, the greatest value of the book lies in the description of the politics, for example concerning "Atoms for peace", India's atomic bomb, and the conflicts between Western Europe and the USA. However, too many unrelated facts, from astrophysics and elementary nuclear physics to descriptions of different parts of the nuclear cycle, are included in the more political sections. This rather confusing disposition and the already mentioned cryptic headings reduce the value of the book as a reference book, even though there is an index at the back.

At times, it seems as if Moss lost concentration and only tried to fill the pages. For instance, his description of a visit to an uranium mine gives me the impression of foolish innocence. He has a strange sense of humor, which bores me. Generally, I think that the book could have been made shorter, stricter and more easily surveyable without loosing information.

Uranium as a raw material and uranium mining are dealt with in several chapters as described. As this is not the main subject, the presentation is rather incomplete. Most space is given to the anecdotic and unimportant stories of the first search for and mining of uranium from the 1930s to the 1950s. Descriptions of the environmental effects of uranium mining, the uranium of the Third World and the actions of the large companies in those countries are quite incom-

plete. Moss seems to think that the environmental problems of uranium mining are solved, which indeed is not the case.

The uranium cartel is dealt with quite fully and Moss considers its importance limited. The rapid increase of the price of uranium in the middle of the 1970s was due to factors beyond the control of the cartel; the primary reasons being that the US import restrictions came to an end; the temporary Australian export restrictions, and, of course, the oil crisis. The cartel, which according to Moss was dissolved in September 1974, could thus not stop the considerable fall in prices after 1977. I find Moss' description convincing.

The reliability of this kind of book, must of course be judged in terms of the author's opinion on nuclear techniques. Moss seems to be a sceptical advocate for nuclear power. However, his discussions throughout the book, on the connection between nuclear power and nuclear weapons, are so convincing that it is difficult to understand how he, in spite of this, still can be in favour of nuclear power. His final discussion on this connection is astonishingly insignificant. It is summed up by the concluding sentence, which, in my opinion is a truism:

"The safer the world is, the less incentive there will be for more countries to build nuclear weapons. The less incentive there is for more countries to build weapons, the safer the world will be."

In spite of these objections, I highly recommend this book for critical reading. I found it both instructive and easy to read. While reading the book, many pieces of the nuclear puzzle fell into place. I had known the facts, but not how they fitted together. As for me, I am now even more convinced that nuclear techniques are dangerous and unnecessary.

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