

Mats Hammarström, *Securing Resources by Force* — The Need for Raw Materials and Military Intervention by Major Powers in Less Developed Countries, Report No 27 Department of Peace and Conflict Research, Uppsala University, Uppsala Sweden 1986.

In this doctoral thesis, the author critically investigates the hypothesis, that the need for raw materials has been one of the reasons behind military intervention by the major industrialized countries in less developed countries.

Those less developed countries that were involved in armed conflict during the period 1951—1977 are examined with regard to their positions as raw materials suppliers to three major powers, viz France, the United Kingdom and the United States. The author specifically examines fifteen economically and militarily essential metallic minerals, including iron, copper, zinc, uranium, lead, tin, nickel, manganese, bauxite, tungsten and chromium. In the cases of copper, zinc, lead and tin, both the ores and the metals are considered. In order to demonstrate the exact extent to which the findings depend upon the

inclusion or exclusion of oil, the hypotheses are also tested with the sample of the 15 metallic mineral commodities alone, and with a sample of 14 of these commodities plus crude oil.

By employing various combinations of two samples of minerals, two ways of measuring a less developed country's importance as a supplier, and two lists of armed conflicts, this hypothesis is subjected to several tests. According to the author, all the tests show that the importance of a less developed country as a supplier of essential minerals to the UK and the USA does not affect the likelihood of it being a target of military intervention, and increased only somewhat the likelihood of such an intervention in the case of France. This result is found to hold true also if one considers the subset of countries which belonged to the sphere of influence of the major power, if one only includes only those minerals upon which the major power was extremely import-dependent, and if one substitutes regions for the individual countries.

Securing resources by force — the limits of studying military intervention

In the views of the author, the notion that securing a stable raw materials supply might be an important reason for military intervention is a special case of a broader hypothesis, according to which foreign policy is motivated by economic interests. This latter idea lies at the core of imperialism theories revived in the late 60s and during the 70s. The theoretical starting-point of the study is to restate the propositions of some of the so-called "imperialism theorists", in this case Harry Magdoff, Gabriel Kolko, H Dean and Pierre Jalée, into explicit hypotheses, which may be submitted to empirical tests. In order to achieve this testability, the author delimits his scope to military interventions, a demarcation that unfortunately also diminishes the value of his findings.

A characteristic feature of the post-

war period up to 1974 was a tremendously increased need for raw-materials. The average length of haul in international commodity trade has grown at the same pace. Local and national suppliers of minerals etc have continuously lost their shares of world production to regional and later intra- as well as inter-continental sources. This development, however, holds primarily true for Japan and the countries in Western Europe, while the United States and the USSR have kept a higher degree of self-sufficiency. In the case of iron ore, which by far is the most important commodity as measured by volume in world dry bulk trade, the import dependency in the European Communities in world dry bulk trade, the import dependency in the European Communities amounts to 90 per cent compared to 25 per cent in the US. When geographically and politically close supplying countries (e.g. Sweden and Canada) are included, their ratio of import dependency declines to 70 and 10 per cent respectively. At the beginning of the 1950s, when the period under examination in this study starts, the corresponding import-dependency of iron ore in Western Europe was lower than 10 per cent. Japan, who during her industrializing era has been almost completely dependent on overseas sources of iron ore, increased her imports from 5 to 132 Mt per year between 1955 and 1975. With smaller and larger variations, this general tendency holds true for almost every commodity of importance.

The role of TNCs neglected

The fact that this dramatically changed flow of resources has not become a major source of international military conflict constitutes an extremely interesting and important starting-point for an investigation into the role of raw materials supplies in international relations.

The absence of military interventions in foreign countries which are important as suppliers of raw materials to the industrialized countries raises many

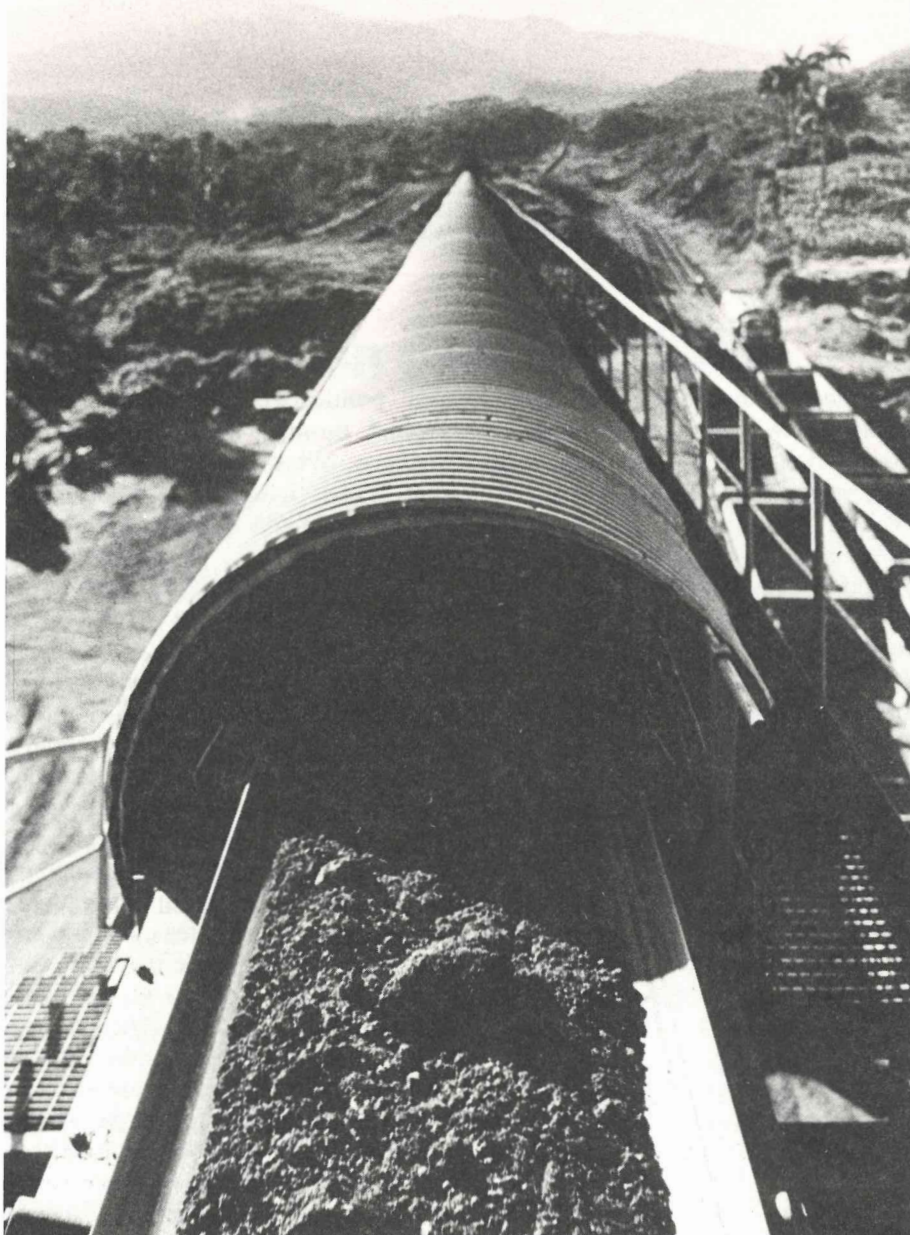
Transportation of nickel ore at the "Rene Ramos Latour" nickel plant, Nicaro, Cuba. Despite the US blockade nickel from Cuba is available on the world market.

questions about the mechanisms by which disturbances in the international flow of primary commodities are kept under control. The exclusion of a theoretical analysis of the actual, as opposed to the potential, hypothetical, real and critical import-dependency in major industrialized countries, as well as the avoidance to discuss the transnational mineral company as a dominant actor in the international commodity game, make together, according to our view, up a crucial drawback of this study.

This is of course a consequence of the author's point of departure. His study is not intended to be an investigation into the role of raw materials in world politics, but to be a contribution to the polemic between different schools in political science. Unfortunately, this approach, which aims at falsifying all results that indicate a relationship between political action and economic goals by restricting the analysis to open military intervention, does not generate new knowledge, and may take the research front in the wrong direction. There exists in many academic communities an unnecessary and unfortunate confrontation between economists and political scientists, who, each from their side, try to underevaluate or avoid results presented by the other group. As the main trend in international affairs is an increased interdependence between political and economic action to find an interdisciplinary academic environment like a department of peace and conflict research, engaging in research that isolates rather than intergrates indigenous theories from the political and economic sciences.

Securing raw materials without military intervention

The most important single factor explaining the stability in raw materials supply from developing countries is the extremely urgent need for foreign exchange revenues in these countries. This



need affects almost by definition all developing countries, regardless of political ideology. As the bulk of the markets for mineral raw materials remain geographically restricted to Japan, Western Europe and the USA, there are very strong forces which keep raw materials flowing from mines to markets. The crucial condition for this flow is not political alliance, but national stability in the raw materials producing countries.

This can be illustrated by the cases of Angola and Cuba, two of the most intimate allies of the USSR in the Third world. Angola is perhaps one of the least stable countries in the world, but it is significant that the military efforts of the government are concentrated to protect the oil installations where American companies (Chevron, Texaco) are extracting oil for export to the North American market. Without the revenues from these exports, the Angolan govern-

ment would not survive more than a couple of weeks. Although Cuba is less dependent on Western markets than Angola, an important part of its nickel production is sold to Western Europe. Probably this pattern would be even more pronounced if not the USA were boycotting Cuban nickel.

The point is that the raw materials supply very seldom is threatened in the long run. The exceptions to this rule are few, but potentially very important. One case in point is of course South Africa, with a key position in the world supply of such important mineral commodities as chromium, platinum, vanadium, uranium, and to a lesser extent manganese and antimony. South Africa may be an exception, not because a future ANC-government would throttle mineral exports, but because the Southern African conflict might result in a protracted civil war. Another exception, although less likely, is the position of the People's

Republic of China in the world tungsten supply. China is relatively less reliant on foreign exchange revenues than most developing countries, and could become involved in a serious conflict with the USA.

Thus, the flow of raw materials from the Third world to the industries of the Northern hemisphere is not threatened. However, this does not imply that raw materials are no longer of vital importance to the industrialized countries, nor that they are no longer a major source for international, regional and national conflicts. Perhaps the most important conflict today concerns the distribution of revenues from mining activities as well as the control of the location and management of the different stages in the processing of raw materials to primary metal or fabricated products.

We can illustrate this proposition by referring to the case of Ghana, a country with domestic bauxite resources and a huge hydro-electric plant supplying cheap energy. These are together excellent conditions for an integrated aluminium industry, but, as is well known to readers of RMR, the bauxite is exported to the UK, whereas its smelter in Tema is supplied with alumina processed from Caribbean bauxite. It was until recently impossible for Ghana to establish an alumina plant because of the reluctance in the managerial boards of aluminium TNCs to provide Ghana with a potentially completely integrated aluminium industry. Now it seems that an alumina plant will be built, but not by Western TNCs. The necessary technical and financial services will be supplied by the USSR, who incidentally itself is eager to diminish its actual import-dependency of bauxite and alumina.

The need for new research

The role of raw materials in international relations is too complex and too much intertwined with other economic

and political considerations to be studied through aggregate statistical methods. What we need is thorough case studies based upon an intimate knowledge of all the aspects involved in the single case.

Such case-studies could be based on different strategies:

- The first is to identify those regions, which are of crucial importance to the world supply of mineral raw materials. Some of these are self-evident, namely Southern Africa, including Zambia and Zaire, as well as Brazil and Australia, regions producing a large number of very important commodities. Individual countries with strategic mineral endowments include Chile (copper), Gabon (manganese), South Korea (tungsten) and New Caledonia (Nickel).
- The second strategy would identify strategic minerals and explore how the major industrial powers try to secure the supply of these commodities. Tungsten, chromium, platinum, manganese, vanadium, and cobalt immediately suggest themselves to such studies.
- A third strategy would be to look closely into those international conflicts where minerals seemed to play an important role, e.g. Zaire/Shaba, Namibia, Chile, Western Sahara, not to mention South Africa.
- A fourth path to enter may be to consider the physical effort to import, let us say 125 Mt of iron ore annually, and to pay attention to how such a huge volume of imports, representing several daily arrivals of super-large dry bulk carriers can be achieved without delays and disturbances. These are but a few of the many interesting opportunities for further scrutinization in the field of economic warfare and preparedness for mineral provision that still are waiting to be explored.

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Books received

De Archaeologische Pers, Metallurgical Reprint Series:

Messrs Coste & Perdonnet, *Smelting of Lead ores in Reverberatory Furnaces as Performed in Great Britain*, Facsimile of the 1830 Edition, Eindhoven, Holland 1986. H W Dixon, Notes on the Blowing of Copper in Converters as practised at Anaconda, Montana USA, Facsimile of the 1900 Edition, Eindhoven, Holland 1986.

R H Carnegie, *Outlook for Mineral Commodities*, Group of Thirty, New York, 1986.

Ciaran O'Faircheallaigh, *Mine Infrastructure and Economic Development in North Australia, Working Paper No 36*, Centre for Resource Studies, Queens University, Ontario, Canada, 1986.

GRESEA, *La Crise de l'Etain*, Dossier — Marchés Moniaux des Matières Premières, Bruxelles, Septembre 1986.

IDOC Internazionale, *Are diamonds forever?*, A special issue on Namibia, 1986/3, Rome, 1986.

Claude Mouton, *Les Nomenclatures Douanières et Economiques*, Les Cahiers de Recherche du CREMMAP, No 10, Octobre 1986, CNAM, Paris 1986.

OECD, *Uranium, Resources, Production and Demand*, Overview prepared by the OECD Nuclear Energy Agency and the International Atomic Energy Agency, Paris 1986.

Werner Olle und Nam-Yong Choi, *Wirtschaftssozialzonen in der VR China*, eine Bilanz der Aufbauphase (1980—1985), Forschungsstelle Sozialökonomik der Arbeit, Berlin, 1986.

Werner Olle und Werner Oesterheld, *Auswertungsbericht: Investitionsbelegung, erhöhte Auslandsproduktion und Beschäftigungsstabilisierung in deutschen multinationalen Unternehmen*, Forschungsstelle Sozialökonomik der Arbeit, Berlin 1985.

United Nations Centre on Transnational Corporations:

ST/CTC/39, *Transnational Corporations in the International Semiconductor Industry*, UN, New York, 1986.

ST/CTC/58, *Analysis of Engineering and Technical Assistance Consultancy Contracts*, UN, New York, 1986.

ST/CTC/69, *National Legislation and Regulations Relating to Transnational Corporations*, Vol 5, UN, New York, 1986.