

*The World Mining Industry:
Investment Strategy and Public Policy*
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Boston: Allen and Unwin

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The mining industry is of special interest to international business scholars. Historically, mining was among the first truly global industries, and it has remained so to this day. The industry also has been faced by many of the traditional problems of international business. For reasons that are well known, it has been more exposed than most to political risk and much of the discussion of political risk and the techniques to reduce them has been framed by the experience of mining firms. State-owned enterprises are now producing a substantial percentage of the world's output of a number of metals and minerals, and the issue of the impact of these firms on world competition has been extensively discussed by the mining community. One additional feature of mining is that it is a very risky industry. This has led to the development of some fascinating financing arrangements, some of which are described in this book.

One potential problem with the subject matter is that mining is not a homogeneous industry: there are large differences in the technology used in mining different ores, and consequently, significant differences in the structure of industries and in the relative bargaining strength of the parties [Amsalen 1984]. This makes it hazardous to generalize. The authors have wisely chosen to address two topics that generally apply across industries, investment strategies in mining, and the related policy issues.

The first chapter presents an overview of the mining industry. It briefly outlines the economic importance of the industry, its economic structure, the trend in prices, and introduces some of the issues that are discussed later in the book. The main business strategies followed by mining firms, namely vertical integration, horizontal integration and product diversification, are presented in chapter 2. This is followed by a section on financial strategies, and a discussion of the strategies followed by state-owned mining enterprises (SMEs). The section on vertical integration would have benefited from coverage of the recent work on the transaction cost theory of vertical integration in mining [Stuckey 1983; Joskow 1985; Casson and Associates 1986]. The section on financial strategies describes the methods that firms use to finance their mining ventures, and shows that the riskiness of mining projects makes it difficult for small firms to enter the industry. The points made are illustrated with case studies of copper mining firms. The authors then address the issue of state-owned mining enterprises (SMEs). They present two contrasting case studies of SMEs which suggest that, their own conclusion notwithstanding, the efficiency of SMEs seems to depend more on a country's managerial capability than on the fact that they are public institutions. The end of the chapter is devoted to joint ventures between MNEs and SMEs.

Chapter 3 describes the process by which firms decide (or should decide) whether and how much to invest in mine development. The chapter provides a useful and detailed description of the different stages of exploration and mine development, and the decision to be made at each stage. The end of the chapter reports results of a survey of recent mining projects which shows their riskiness: only one project in five met or exceeded investment expectations, while more than one third made losses.

The aspects of project evaluation that are specific to foreign projects, namely the interface between the investor and the host country, are treated in chapter 4. The authors discuss political risk and the financing techniques, such as project finance, which have been developed to minimize this risk. There is an excellent section on the pros and cons of different systems of taxation of mining profits. The chapter also deals with joint venturing as a way to reduce political risk.

Chapter 5 presents four case studies of investment projects in developing countries. The case studies provide interesting examples of the political and economic uncertainties that affect mining projects in developing countries.

The authors then turn to the policies of developed countries towards mining, namely taxation, security of supply, and environmental protection. Chapter 7 provides a concise introduction to four major international issues, international commodity agreements, vulnerability to foreign supply disruptions, the negotiations of the Law of the Sea, and international financial assistance to the mineral industries of developing countries.

The final chapter reviews the outlook for the mining industry. The authors underline the difficulty of predicting whether and when economic growth will be constrained by the exhaustion of natural resources. They consider the long-

term trends in mining to be the following (1) slow growth of demand; (2) increased price competitiveness; (3) shift of production to LDCs, with mining firms in developed countries concentrating on sophisticated downstream end-products; (4) growing importance of smaller, multi-deposit mines; (5) continued declining role of multinationals in Third World countries. Those are interesting propositions that deserved a more extensive discussion.

All in all, *The World Mining Industry* provides an excellent and concise introduction to managerial and financial strategies in the mining industries, and to the major public policy issues in mining. The concentration on the practical realities of the industry, and the extensive use of case studies, makes it particularly useful to international business scholars. Besides its direct interest to resource economists, this book provides useful material for students of political risk, and those interested in the relationship between MNEs and developing countries.

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***The International Airline Industry:
Trends, Issues & Challenges***
Nawal K. Taneja
Lexington, MA: Lexington Books, 1987

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This book describes, on a region-by-region basis, the challenges facing international airline firms and their associated governments. Of the seven chapters in the book, six deal with six mutually exclusive global regions: North America, Latin America and the Caribbean, Europe, Middle East, Africa, and Asia-Pacific. These categories are almost exhaustive but seem to omit the Soviet Union and its Eastern European satellites (the People's Republic of China is included); the omissions probably occur because the nations concerned are not members of the International Civil Aviation Organization (ICAO). Each of these six chapters is generally organized as follows: first a social-political-economic overview of the region is given; next comes a largely quantitative description of the air transportation system with emphasis on markets, fares, and financial performance; and, finally, comments on the future prospects of that region's airlines follow. The seventh and final chapter of the book, "Meeting the Challenges," is devoted to a very brief general summary (no new topics are broached) of common problems and potential responses. The