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Foreign Investment in Mining Projects, Raymond F. Mikesell

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FOREIGN INVESTMENT IN MINING PROJECTS

RAYMOND F. MIKESELL
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In Mikesell's preface he states that the objective of his book is to "analyze the issues in the negotiation of mining agreements between international mining companies and the governments of developing countries." The analysis is by means of eleven case studies from the 1970s; seven of these projects were operational in mid-1982. His detailed descriptions of negotiations with host governments over taxes, royalties, and development and production plans, and the complex financial arrangements among lenders and equity participants provide the inexperienced reader with a strong and valuable dose of reality. He gives substance to risks often referred to, but rarely exposed for close examination—geologic, engineering, cost estimation, and expropriation (or, more frequently, forced "renegotiation")—which are unique to each site and to each host government, as well as the market risks engendered by fluctuation in minerals prices, inflation, and cost of capital.

In examining eleven cases from Africa, South America, and Asia, only one of which has proven to be quite profitable, the ex post results reveal the frailties of feasibility studies and discounted cash flow analysis. As Mikesell points out, most of these projects were initiated in the early 1970s when metals and energy prices were strong and most professionals held optimistic expectations. Then continuous inflation raised construction and financing costs; as energy prices soared, metals prices softened; and host governments often forced renegotiation of past agreements and increased taxes. The detailed data show how experience deviated from initial estimates and financial plans, and how equity partners had to scramble to raise additional capital when project costs overshot estimates and time delays lengthened. Financing and equity schemes (joint ventures, local subsidiaries, agreements to share capital costs, returns, and risks) are described extensively. However, additional charts and analysis detailing the cost of capital and the obligations and risks assumed by various parties could have simplified the burdens placed on the reader. The brief references to the technology of mining, milling, and processing require prior knowledge. Those without some background in mining and finance will find the going tough, but reading about the real-world experiences of others makes the task wothwhile.

Mikesell gives several reasons why mining agreements required detailed and lengthy negotiations in the 1970s: past expropriation by South American and African governments made joint ventures with local private capital or governments desirable; frequent changes in tax policies made tax stability a necessity; and large project size frequently exceeding $1 billion total investment, and increases in exploration and feasibility study costs, required primary reliance on external project finance. The increasing sophistication of host governments negotiating the distribution of rents and other objectives, coupled with the multitude of foreign equity partners, private lenders, and international organizations meant that many parties were negotiating over a large number of complex and interdependent issues. Multiple party/multiple issue negotiations make difficult the definition and estimation of mutual gains from trade, and the case studies speak eloquently of these.

Although the author discusses rent and non-rent related issues in the introduction, multiple goals and measures of net benefits could have been more clearly spelled out by him. Capturing rents requires the efficient exploitation of the natural resource, and information to ensure that economic rent is measured accurately. Monitoring transfer pricing (inputs including capital and loan terms, and outputs) for non-market prices is a legitimate concern of host governments, as are estimates of net foreign exchange earned and net increases in income and training for the local population. While Mikesell reports such calculations in three of the case studies, neither the method nor the rationale is discussed, and the reported return on investment to equity is not reported consistently.

The author's primary conclusion is that the ideal way to tax and capture rent is via a profits-related tax which allows for capital recovery. A secondary conclusion is that advisors and consultants employed by host governments may render a disservice by prolonging negotiations and, therefore, development because they do not properly appreciate the time value of early development (he cites a nine year delay in the OK Tedi project in Papua, New Guinea, over which time capital costs *trebled*). Because of the poor profitability of the projects studied, it appears that the governments which benefited most utilized "inefficient" output based taxes and royalties, and instituted stringent controls on repatriation of profits, foreign exchange transactions, and local hiring and training requirements.

The author's first intent to analyze international mining agreements is only partially fulfilled. However, the method and secondary purpose of developing the eleven case studies makes the book a significant contribution to the economics of mineral extraction. Nowhere else is such detailed information available in one place. The studies give new meaning and content to mining risks, both those unique to each site and those related to resource and capital markets. Every international banker, and every development, international, and resource economist should examine this book, perhaps not to study it in its minutia, but to read and appreciate the experience and the lessons it reveals.

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