

to determination of ore reserves and feasibility studies to see if the mine is worthwhile. This first section is very relevant for a lot of small exploration companies and investors as it takes a critical view of how not to waste money, and tries to put exploration spending in perspective.

The second section gives basic mining methods for metalliferous and coal mines, both surface and underground, with the case studies being largely from Australian mines. The third section dealing with practical rock mechanics and subsidence will, however, hold little interest to the non mining engineer. Throughout the book the emphasis is on why, rather than how, so that readers can understand why the methods are used.

The text is amply supported with monochrome photographs and line drawings, and each chapter has a long list of additional reference material mostly from Australian sources.

Although the prime purpose of Dr Thomas' book is to provide basic material for first-year mining engineering students, it is also suitable for everyone including stockbrokers, institutions and analysts with a financial background, who wish to understand the more important in-depth aspects of the mining industry.

- N.M.

THE MINERAL INDUSTRY AND AUSTRALIAN DEVELOPMENT

By R.T. Madigan, June 1973

This topical review of the Australian mineral industry was given by Mr. Madigan, Chairman of Hamersley Holdings Limited, as the Sir Robert Menzies Lecture to the Western Australian Division of the Liberal Party of Australia in Perth on 12 June, 1973.

It makes a strong case for continuance of private capital, which took the initiative and risks and whose enterprise has led to massive economic benefits - a strong balance of payments, a wide range of supporting industries, a higher rate of economic growth, a larger migration intake and a better standard of living.

The support and co-operation of governments was essential to this achievement, and even more government-industry consultation is desirable in the future to meet the increasing interest in national economic planning. But some overseas attempts at such planning have failed and "target" planning should certainly be rejected. There should be collaboration between government and industry to establish broad objectives, but in a situation of economic, political, scientific and technological changes "you can't make cut and dried plans for many years ahead".

The points are made that only industry has the experience and knowledge for day-to-day decision making, and its activities could be seriously inhibited by a hostile attitude to the concept of profit. A proper acceptance of the profit motive by people and government is essential to economic progress. Whilst Australian participation and ownership will gradually increase, foreign capital will continue to be needed in the mining industry; the need for an international approach and association with international corporations will be the greater if there is to be a movement into secondary processing.

The limitations on "resources diplomacy" are underlined but the powers of government to provide an infrastructure in remote areas are equally emphasized. The desirability of development in the Pilbara is given as an example, but such a development would require "closer Government/Industry relationships than anything previously known in Australia."

- K.J.H.