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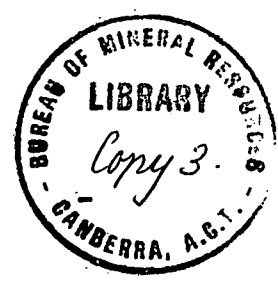
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The Role of the Mineral Industry in the Australian Economy



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THE ROLE OF THE MINERAL INDUSTRY IN THE AUSTRALIAN ECONOMY

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The expansion of the Australian mineral industry in the last decade has naturally increased the industry's contribution to the economy. This increased contribution is much more clearly evident in terms of export income and balance of overseas trade than in percentage contribution to gross national product; available statistics suggest that the percentage of G.N.P. earned by mining and quarrying rose from 1.8 in 1958/9 to 2.2 in 1967/8, although these figures are somewhat conservative because some primary treatment of ores has been allocated to 'manufacturing' in the statistical series.

However, on the export side the value of mineral exports, rising from \$133 million in 1958 to \$651 million in 1968 turned the unfavourable trade balance in minerals existing since World War II into a favourable balance rising to \$325 million in 1968, and increased the mineral industries contribution to total exports from about 8 percent in 1958 to about 20 percent in 1968.

Moreover, this contribution has come at a time when Australia's traditional export leader in primary produce - wool - has suffered temporary setbacks. Indeed ex-mine production exceeded the value of the wool clip for the first time in 1968 and the value of mineral exports exceeded that of wool in 1969; in view of confident projections of the value of mineral exports rising to at least \$2000 m in 1975 and \$2800 m. in 1980, it is obvious that this supremacy will continue and become more pronounced.

TABLE 1

Australian Mineral Industry - 1958 and 1968

	<u>1958</u> (000\$A)	<u>1968</u> (000\$A)
Ex mine value of mineral production	311,910	855,392
Added value arising from primary treatment	92,600	340,500
Total value of output	404,510	1,195,892
Exports of mineral products	133,044	651,203
Imports of mineral primary products	181,662	326,047
Balance of overseas trade in primary mineral products	-48,618	+325,156
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No. of mines and quarries	2,320	3,413
Mineral output - index at constant prices (1959 = 100)	97	219

In considering the role of the mineral industry in the Australian economy we need to take into account both the direct contribution, of which statistics provide some measure, and those less direct contributions where an expanding mineral industry provides support or expansion which it is not practicable to measure.

Some of the direct contributions of the industry have already been mentioned and additional salient statistics are shown in Table I. Over the last 10 year period for which statistics are complete the total value of output, including added value arising from primary treatment, has increased nearly 300 percent and exports nearly 500 percent while mineral imports have increased only 180 percent. Of course such increases suffer exaggeration by inflation over the period but the index of mineral output at constant prices (1959 = 100) shows a real increase of 200 percent over the years. The numbers of mines and quarries registered have also increased by about 50 percent and supports the general evidence of a fast growing mineral industry.

Although the contribution to G.N.P. by the mineral industry remained dwarfed by those of other major groups such as other primary production, manufacturing, commerce, etc., statistics for the 10 years up to 1967/68 indicated that the mineral industry attained the highest growth rate of any group at 137 percent over the 10 year period against 116 percent for building and construction, 107 percent for transport and communications, 94 percent manufacturing and 14 percent for primary production. This growth rate is even more pronounced in terms of annual increases in gross fixed capital expenditure

by private mineral industry which rose from \$40 million in 1957/8 to \$336 million in 1967/68.

Turning to less direct assistance to the Australian economy, the mineral industry in the last decade has again taken on the role of the pioneer in opening up and settling remote localities within the continent as, in fact, it has done on many occasions in the past. Settlements at Mt. Tom Price, Mt. Newman and Mt. Goldsworthy, at Weipa, Gove and Groote Eylandt now join Broken Hill, Mt. Isa, Kalgoorlie and many others in the list of towns and settlements which owe their existence to mining.

New railway lines, for iron ore in W.A. and for coal in Queensland, and new roads in many mining areas extend transport facilities and both mining itself and associated infrastructure have benefited the economy by providing demand for work forces, which have been almost entirely Australia, and for equipment and services, much of which has been supplied by Australian firms.

Although, on balance, the notable rise in activity in the Australian mineral industry has greatly benefited the economy, any review of the situation would be unbalanced if it did not refer to problems still facing the industry in Australia. In the first case, the industry deals with wasting assets and must face up to the continuing problem of finding additional reserves. This problem is more remote in the case of iron ore, bauxite, coal and phosphate rock but is pressing in the case of crude oil if Australia is to maintain even the 65 percent self-sufficiency reached in 1971; moreover, additional reserves of many minerals including uranium, lead, zinc, copper, tin, tungsten and mineral sands, will be needed before the end of this century.

The list of mineral insufficiencies in Australia has grown much shorter over the last decade but currently features petroleum (imports worth \$212 million in 1968) phosphate rock (\$34 million), sulphur (\$22 million), asbestos (\$8 million), diamond (\$6 million) and several other mineral products in which import accounts are minor in value. Admittedly, current petroleum reserves will greatly reduce the import bill in the short term and indigenous supplies of phosphate rock are assured in the long term, but additional reserves of crude oil and supplies of indigenous elemental sulphur are particularly required.

Australia also faces the problems of maximising local equity in the mineral industry in a situation where both exploration and development urgently need overseas funds. Exploration funds alone totalled about \$120 million in 1968 of which perhaps half came from overseas; contributions of overseas risk capital of this order can only be induced and maintained if foreign investors can be confident that mineral discoveries can be profitably developed. The latest statistics available for the value of production apportioned to Australia and to direct overseas ownership in the mineral industry, excluding petroleum, indicate that in 1965, 66 percent of the production stemmed from Australian ownership and 34 percent from direct foreign control.

Over the last decade Australia has learnt new techniques in development finance, including more efficient martialling of indigenous funds for mining development and the funding of major mining projects by overseas loan rather than by equity

contribution; but the problem of maintaining and increasing Australian equity in the industry continues to demand constant attention.

Other problems lie in the field of mineral processing to increase the added value accruing to Australia from higher levels of processing of mineral products before export. Although current levels of mineral processing in Australia must be deemed reasonably satisfactory, considering geographical location, restricted local markets and the existing pattern of world trade, the situation is challenging and calls for strenuous efforts to decrease costs, particularly in power and transport, and for more sophisticated marketing techniques.