

Efficiency of Mining Investments: Determining The Profitability Threshold of Mining Enterprises by the "Direct Costing" Method*

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Abstract

This paper intends to present different models for determining the profitability of mining enterprises related to efficient mining investment process. After presenting a large literature review of the beginnings related to this issue, the article deals with models related to the calculation of the profitability threshold with the aid of the "direct costing" method. As this method is an analysis method available to management and of cost calculation, based on grouping of production and sales costs that form the cost price, into fixed costs (conventionally fixed) and variable costs, in the beginning of this paper different components like gross profit and net profit, the actual cost price and the total cost price, and the contribution to profit are introduced in this method. Since in the practical problem that are analysed, we argue that the total costs and the production value depend on the year-to-year variations in the prices of materials and labour and respectively on the delivery prices. Hence, in this paper we considered useful to determine the break-even point on the data of each year of calculation, the real profitability threshold being estimated by the average of the profitability thresholds obtained on the annual data. The second part of the paper presents some numerical examples of applying these models in order to demonstrate their validity in investment decision-making for one mining exploitation.

Keywords: mining industry, model, fixed cost, variable cost, profitability threshold, total production cost