

ABSTRACT

This study aims to measure and analyze technical efficiency among mining companies in the metal and mineral mining sub-sectors listed on the Indonesia Stock Exchange during the period 2012 to 2017. Efficiency analysis was carried out on each company and also on average based on grouping of types of ownership, state-owned companies or known as BUMN and private-owned companies (non-BUMN).

The method used in this efficiency study is a non-parametric Data Envelopment Analysis (DEA) method with an output-oriented BCC / VRS model. This study measures the level of company efficiency by using input variables: fixed assets, personnel expense and operating expense, and also using output variable: revenue. By using variable data obtained from financial statements of 6 object companies for 6 years of observation, 36 Decision Making Units (DMU) were obtained to measure efficiency.

Analysis results showed that from the company efficiency comparison, the highest average efficiency was achieved by TINS (PT Timah Tbk), followed by ANTM (PT Aneka Tambang Tbk) and INCO (PT Vale Indonesia Tbk). While for efficiency comparison based on the category of company ownership it is found that the average efficiency level of state-owned companies (BUMN) is above the average of private companies. However, if seen individually the efficiency values of Non-BUMN companies especially INCO are still at the efficient level with the value is not much different from the BUMN companies represented by TINS and ANTM. Related with correlation study between company efficiency with market value, the results show that there is no correlation between the company efficiency with market value.

Keywords: Technical Efficiency, Data Envelopment Analysis, Metal and Mineral Mining Efficiency, BUMN Efficiency