

ABSTRACT

This research aims to analyze the level of technical efficiency level and its determinants in Indonesian mobile telecommunications industry during the period of 2008-2014. As a company engaged in providing services, the company should be as efficient as possible to be able to survive and continue his business activities. Inefficient companies will then make those companies out of business competition. To measure efficiency level, the Data Envelopment Analysis (DEA) is applied. The objects of research are the cellular operator companies in Indonesia. They are PT Telkomsel Tbk, PT XL Axiata Tbk, PT Indosat Tbk, PT Smartfren Telecom Tbk, and PT Bakrie Telecom Tbk. Variable inputs used are the number of employees and total assets, while the output variables used is total revenues. In this research, Technical efficiency level is a performance indicator used as dependent variable, while the independent variables such as: company size (Size), Tangibility, Liquidity, and Leverage. To estimate the determinant of Indonesian mobile telecommunications industry, the regression with Tobit model is applied.

The results showed that PT Telkomsel Tbk has the highest average level of efficiency from 2008 – 2014, while PT Indosat Tbk has the lowest average level of efficiency from 2008 – 2014. Tobit regression shows that company Size and Leverage has negative influence on efficiency. However, Tangibility and Liquidity has positive influence to efficiency.

Keyword: technical efficiency, cellular telecommunications industry, Data Envelopment Analysis (DEA), Tobit models.