

## **ABSTRACT**

*Building construction sector plays an important role in the economic development of any country. Building construction sector company, which are the main components of the construction industry have to be efficient, otherwise, they may create obstacle in the process of development in any economy. The purpose of this study is to estimate the technical efficiency of the Indonesian building construction companies listed in the Indonesia Stock Exchange (IDX) market over the period 2013-2017 using the Stochastic Frontier Analysis (SFA). For this, the authors considered the Cobb-Douglas Stochastic frontier in which the technical inefficiency effects are defined by a model with two distributional assumptions. Truncated normal and half-normal distributions were used in the model and both time-variant and time-invariant inefficiency effects were estimated.*

*The results reveal that technical efficiency increased gradually over the reference period for time-variant and that half-normal distribution is preferable truncated normal distribution for technical inefficiency effects. Company with the highest value of technical efficiency was SSIA and the lowest was DGIK, as compared with other building construction companies listed in the Indonesia Stock Exchange (IDX) market for both distributional assumptions in time-variant and time-invariant inefficiency effects. The results also show that the stated-owned building construction sector companies have lower value of technical efficiency than the private building construction sector companies for truncated and half normal distribution in time-variant and time-invariant inefficiency effects.*

**Key Words :** *Efficiency, Building Construction Sector, Stochastic Frontier Analysis (SFA), Indonesia Stock Exchange (IDX)*