ABSTRACT

Manufacturing industry is the main sector for Indonesian economy. Textile and product textile is industries that play an important role in the manufacturing industry. This study investigates the technical efficiency of Indonesia's textile and product textile industry. The method used is Stochastic Frontier Analysis (SFA) with a transcendental logarithmic (translog) production function model to analyze firm level cross sectional data for the year 2011-2015.

The purpose of the study was to find out empirically the technical efficiency score and its determinants which include firm size, foreign ownership, export, import, market share, concentration industry, and electricity. The results show that the firms' overall technical efficiency level is high. Average technical efficiency is observed to be around 73,34% which indicates that textile and product textile industry produce 73,34% on average out of the total potential with given resources.

The results of the study show that all of the determinants variable have a significant effect on technical efficiency except imports. The result also conclude that Firm size, foreign ownership, market share, and import positively influence the technical efficiency. On the other hand, the concentration industry and electricity have a negative effect. It also shows that dummy export variable negatively influences the technical inefficiency. It means that export impacts the technical efficiency positively. In this case, a firm that does not export is more efficient than a firm that does export.

Keywords: technical efficiency, stochastic frontier analysis, textile and product textile industry,