# Technical Efficiency Analysis of tourism and logistics in ASEAN: Comparing Bootstrapping DEA and Stochastic Frontier Analysis Based Decision on Copula Approach

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**Abstract.** This study undertook the investigating on the technical efficiency of tourism and logistics sectors which is obtained from two concepts, namely the Bootstrapping Data Envelopment Analysis (Bootstrapping DEA) method and the Stochastic Frontier Analysis (SFA) method base on the assumption regarding the error in the production process. The results of two concepts can be compared by using copula model. The three top destinations in ASEAN (Thailand, Singapore and Malaysia) between 2006 and 2016 is selected. The main conclusion from the analysis is that they are asymmetric distribution. It is determined that efficiency scores from both methods should not be compare like previous papers we reviewed because this study proved the both methods have asymmetric comparison. The result suggests that the methods each have particular strengths and weaknesses and potentially measure different aspects of efficiency. This research endorses approach depending on the practical outcome.