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Detection Efficient Enterprises via Data Envelopment Analysis

Authors: S. Turkan

Abstract : In this paper, the Turkey's Top 500 Industrial Enterprises data in 2014 were analyzed by data envelopment analysis. Data envelopment analysis is used to detect efficient decision-making units such as universities, hospitals, schools etc. by using inputs and outputs. The decision-making units in this study are enterprises. To detect efficient enterprises, some financial ratios are determined as inputs and outputs. For this reason, financial indicators related to productivity of enterprises are considered. The efficient foreign weighted owned capital enterprises are detected via super efficiency model. According to the results, it is said that Mercedes-Benz is the most efficient foreign weighted owned capital enterprise in Turkey.

Keywords: data envelopment analysis, super efficiency, logistic regression, financial ratios

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