

Efficiency Measurement of Turkish via the Stochastic Frontier Model

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Abstract : In this study, the efficiency measurement of the top fifty Turkish Universities has been conducted. The top fifty Turkish Universities are listed by The Scientific and Technological Research Council of Turkey (TÜBİTAK) according to the Entrepreneur and Innovative University Index every year. The index is calculated based on four components since 2018. Four components are scientific and technological research competency, intellectual property pool, cooperation and interaction, and economic and social contribution. The four components consist of twenty-three sub-components. The 2021 list announced in January 2022 is discussed in this study. Efficiency analysis have been carried out using the Stochastic Frontier Model. Statistical significance of the sub-components that make up the index with certain weights has been examined in terms of the efficiency measurement calculated through the Stochastic Frontier Model. The relationship between the efficiency ranking estimated based on the Stochastic Frontier Model and the Entrepreneur and Innovative University Index ranking is discussed in detail.

Keywords : efficiency, entrepreneur and innovative universities, turkish universities, stochastic frontier model, tübitak

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