

عنوان مقاله:

A semi-oriented radial measure for Malmquist Productivity Index: A case study of regional electricity companies in Iran

محل انتشار:

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خلاصه مقاله:

One of the important applications of data envelopment analysis is to determine the progress and regress of the units under evaluation at two different times, which has been addressed in many papers. Also, one of the distinctions of data coverage analysis technique with other methods is the introduction of achievable and flexible benchmarks. In the present paper, we intend to study the progress and regress of Iranian regional electricity companies during two consecutive years of ۲۰۱۵ and ۲۰۱۶. Since some of the evaluated indicators are semi-positive and semi-negative indicators, in this study we will develop Emrooznejad et al. [۷] to determine the productivity index of Malmquist for semi-positive and semi-negative indicators. Finally, for further explanation, we have used the proposed models to determine the progress and regression of ۱۶ regional electricity companies in Iran with ۳ semi-positive and semi-negative indices in the presence of the limitation on the benchmark, an undesirable index and ۱۱ completely positive indices in the nature of input with constant scale returns as a black box

کلمات کلیدی:

Progress and Regression, Semi-oriented radial measure, Malmquist Productivity Index, Regional Electricity Companies, Data Envelopment Analysis

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