

عنوان مقاله:

A Chance-Constrained DEA Model with Random Input and Output Data: Considering Maintenance Groups of Iranian Aluminum Company

محل انتشار:

مجله نظریه تقریب و کاربرد, دوره 12, شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 17

نویسندگان:

Mohammad Izadikhah - *Department of Mathematics, College of Science, Arak-Branch, Islamic Azad University, Arak, Iran*

Mohammad Ehsanifar - *Department of Industrial engineering, Arak Branch, Islamic Azad University, Arak, Iran*

Saman Malekian - *Department of Industrial engineering, Arak Branch, Islamic Azad University, Arak, Iran*

خلاصه مقاله:

In this paper, we use an input oriented chance-constrained DEA model with random inputs and outputs. A super-efficiency model with chance constraints is used for ranking. However, for convenience in calculations a non-linear deterministic equivalent model is obtained to solve the models. The non-linear model is converted into a model with quadratic constraints to solve the nonlinear deterministic model. Finally, data related to twenty-eight maintenance groups of Iranian Aluminum Company (IRALCO) is used to demonstrate the applicability of the used models in this paper.

کلمات کلیدی:

Data envelopment analysis, Chance constraints, Random variables, Quadratic constraints, Super-efficiency

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1726712>

