عنوان مقاله:

Evaluation of Iran Rail Freight Transportation Efficiency in Comparison between the World Countries and the Middle East and Central Asia

نویسندگان:

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خلاصه مقاله:

The study of various countries rail transportation indicators is an appropriate criterion for evaluating the existing performance of Iranian railways. The experiences of other countries can be used to improve the efficiency of Iran's rail transportation. At the beginning of the study, in order to compare the Iranian railway performance with railways of other countries, various efficiency indicators have been defined. The comparison based on data from the International Union of Railways members in 2012. The Iranian railway performance indicators comparison with other countries around the world and in the Middle East and Central Asia show that the main priorities to meet the needs of Iran's rail freight transportation are increasing the number of the locomotives, developing railway lines and increase efficiency of fleet. In order to evaluate the efficiency of each of the areas listed above, nonparametric method of data envelopment analysis DEA (modified Output-oriented BCC) has been used. Based on the obtained results, the Iranian railway rank is 23 among 66 countries of the world with efficiency of 51 percent and its rank is 9 among 14 countries of the Middle East and Central Asia with efficiency of 55 percent. The efficiency of Iran railway wagons is low and the annual ton-km can be increased from 22604 to 41136. At the end of the study, time series performance index of countries from 2000 to 2012 were studied. And over these years, Iran has always had a constant downward trend with efficiency of 30 percent.

کلمات کلیدی:

Data Envelopment Analysis, freight transportation, rail transportation, efficiency indicators

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