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## **EVALUATION OF EFFICIENCY OF THE RESTAURANTS USING THE DEA METHODS**

### *Summary*

Traditionally for Ukraine, the evaluation of the efficiency of restaurants is carried out on the basis of coefficient financial analysis. This approach has several disadvantages, among them – the inability to take account of the specific restaurant business. Using the DEA method makes it possible to take into account this specificity.

The aim is to study the DEA method for evaluation the efficiency of restaurants and justify ways to improve its evaluation in accordance with the realities of the restaurant business in Ukraine. To build a generalized model for evaluation the efficiency of restaurants used a systematic method of research in symbiosis with the coefficient analysis and the method of DEA-analysis.

Researches have shown the advantage of using the coefficient approach by Ukrainian and some foreign researchers over the method of DEA-analysis, which has gained popularity abroad. The DEA method qualitatively combines the advantages of coefficient analysis and offers a flexible way to determine efficiency, where the analyst has the opportunity to use an unlimited amount of data, including an infinite number of coefficients (or vice versa – only one coefficient).

For research the efficiency of restaurants, this method can be used in two ways: as the technical efficiency of resource use and as the technical efficiency of operational activities. In this method, we understand that the technical efficiency is the ability of a restaurant for a given number of resources to achieve maximum turnover (or a set of other performance criteria to be determined by the researcher). On the example of technical efficiency of resource use, we demonstrated the concept of using the DEA method to assess the efficiency of restaurants in Ukraine.

The application of the DEA method will help in diagnosing the activities of restaurants, comparing the efficiency of different restaurants. The method makes it possible to quantify the level of efficiency, and therefore - to determine the goals of its improvement and the best way to achieve them.

Further research is aimed at finding and justifying a specific list of input / output parameters for restaurants using the DEA method: resources and results and development of an adaptive mathematical model for restaurants in Ukraine, which would calculate their efficiency in terms of maximizing results and adjusting their operating and strategic activities.

**Keywords:** catering, restaurant management, restaurant efficiency, DEA method.

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