

## **Efficiency of the Slovenian Hotel Companies Based on Malmquist Productivity Index**

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*Abstract.* The article investigates performance factors of Slovenian hotel companies using the Data Envelopment Analysis between the years 2001 and 2018. A balanced panel dataset includes 20 hotel companies within a nineteen-year period ( $20 \times 19 = 380$  observations). Hotel companies differ by their size, type of accommodation, the number of hotels within the company, and location. Data was obtained from the GVIN portal based on the companies' financial statements already processed (balance sheets and profit and loss accounts). The selected hotel companies have operated continuously throughout the whole period. This set criteria reduced the number of studied hotel companies in our balanced panel dataset substantially. In the final phase of cleaning the database, we decided to find out the outliers. To determine efficiency factors, we used the Malmquist index, which can be broken down into a change in efficiency and technological change. The change in efficiency was further broken down into a change in pure technical efficiency and a change in scale efficiency. Between 2001 and 2018, the average score of total factor productivity decreased by 0.2%. The main reason for this decline was mainly deterioration in the technological change, which decreased by 0.3%. On the other hand, within the period, enterprises recorded a 0.1% increase in the average score of technical efficiency. It should also be noted that hotel companies recorded a 0.1% increase within the average change in pure technical efficiency and stagnated in a change in scale efficiency. It should also be noted that in only seven years the hotel companies recorded a growth in the average score of total factor productivity and in the remaining ten years a decline. The highest average growth of total factor productivity was achieved by hotel companies in the third analysed year, i.e., 2002, reaching 14.8%. On the other hand, hotel companies recorded the highest decrease of total factor productivity in the ninth analysed year, i.e., 2008, where it was 7.3%. One of the key reasons for deterioration in technological change was the 2008 economic crisis.

*Keywords:* hospitality, hotel companies, total factor productivity, Malmquist Productivity Index