The importance of studying different types of efficiency when evaluating the impact of privatization: Evidence from a chain of small hotels in Portugal

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Abstract

The objective of this paper is to examine the technical efficiency, cost-revenue efficiency and productivity of a chain of small scale hotels in Portugal in order to study the impact of partial privatization.

Following a comprehensive review of the studies that have used the non-parametric technique known as Data Envelopment Analysis (DEA) to evaluate the impact of privatization on productive efficiency of enterprises, we conclude that privatization, per se, does not appear to be sufficient to guarantee performance improvement. Whilst a number of studies have provided evidence of a positive impact in several sectors, a similar number of studies have concluded that there is no clear evidence of a positive impact derived from privatization.

In order to contribute to this body of literature, we analyze data from a Portuguese chain of hotels during a period of 10 years (two years prior to privatization, privatization year and seven years after privatization). Firstly, we used DEA to estimate hotel-specific scores of relative technical efficiency and cost-revenue efficiency for each of the ten years analyzed. Secondly, we use the Kruskal and Wallis rank test to analyze whether or not a significant frontier shift occurred between the pre-privatization period and the post-privatization period. Lastly, we estimate Malmquist Productivity Indices and their components for the periods for which a significant frontier shift was identified.

The results from our study provide interesting insights regarding efficiency and productivity evolution in the hotel sector revealing that technical efficiency and cost-revenue efficiency do not always go hand in hand. When we compare the performance in the pre-privatization period with that of the post-privatization period, we found evidence of improvements in productivity from a technical point of view, derived from a statistically significant frontier shift four years after privatization. However, this improvement was not accompanied by an improvement in productivity from a cost-revenue point of view. On the contrary, we found evidence that this chain of hotels significantly deteriorated its productivity in terms of cost-revenue after its privatization.

Our results emphasize the importance of studying the impact of privatization from multiple perspectives. Future studies should focus on different contexts in order to provide further evidence regarding the impact of privatization on different dimensions of performance, as well as study the conditions under which privatization may be associated with certain effects.

Keywords: Productive efficiency; Data Envelopment Analysis; Privatization; Hotels

