



8th International Conference on Management, Economics and
Humanities

7 - 9 December, 2018

Barcelona, Spain

A MULTIVARIATE DATA ANALYSIS OF FINANCIAL PERFORMANCES IN ROMANIAN TRADE

Stefania-Cristina Curea, Alexandra Horobet

The Bucharest University of Economic Studies

Lucian Belascu

“Lucian Blaga” University of Sibiu

ABSTRACT

The Romanian trade has changed its „face” after 1990, with stores improving their appearance and design, a significant increase in the number of stores and a gradual arrival of predominant chains such as Metro, Lidl, Kaufland, Profi etc. in Romania. Recent years have also brought increased competition, a typical phenomenon for a growing market. Overall, the new market conditions have led to a professionalization of retail. The paper aims at characterising the Romanian companies in the trade sector by taking into account a number of financial ratios that describe various area of corporate performance: liquidity, solvency, efficiency and profitability. Our multivariate data analysis follows their changes in time and tries to evaluate their development possibilities. In the absence of performance standards within each industry in Romania, it is difficult to assess the performance of a company. We propose in this paper the first step towards building such standards for the trade sector, by identifying homogeneous groups of companies based on their financial performance, which will support the subsequent observation of companies’ performance analysed in relation to the groups thus formed. The specific research method we employ is hierarchical and k-means cluster analysis, while the period under analysis is 2005 – 2017, with annual frequency of data. The cluster analysis progressively groups the companies, according to two main criteria: objects’ similarity within the groups and groups’ differentiation. We use, as clustering procedures, the single linkage method and the Ward’s method and we also construct a number of clusters using the k-means method.

Keywords: multivariate data analysis, cluster analysis, trade, Romania, financial performance

