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Green purchasing frameworks considering firm size: a multicollinearity analysis using variance inflation factor

Gyöngyi Vörösmarty   & Imre Dobos 

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ABSTRACT

Significant differences exist among companies in terms of their green purchasing practices. One of the explanatory factors for the former is company size. This article examines how to capture related differences in purchasing goals, corporate environment systems, purchasing and supply management tools, and motivation. The investigation of such complex issues usually requires the measurement and examination of a large number of variables. A rarely used analytical tool for doing this is the variance of inflation factor (VIF), which helps by filtering out multicollinearity. In this study, size-related differences were identified in terms of management systems, supplier management practices, and motivational background. However, there is uncertainty concerning the routine application of the method in relation to the determination of the appropriate threshold value.

KEYWORDS:

Green purchasing

SME

supply chain

multivariate statistics

variance inflation factor (VIF)

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Notes on contributors

Gyöngyi Vörösmarty

Gyöngyi Vörösmarty She is an associate professor at Corvinus University of Budapest, Department of Logistics and Supply Chain Management. She holds a Ph.D. in Management Sciences. She is teaching Purchasing and Supply Management, Purchasing Strategy courses, and Operations Management in MSC and postgraduate programmes. Her research interest: purchasing and supply management, sustainability issues in purchasing, supplier assessment. She is secretary of Logistics and Supply Chain Committee of Hungarian Academy of Science (HAS). She is the founding member of the Purchasing Managers Club in Hungary. She is the author/co-author of more than 50 publications in refereed national and international journals and conference proceedings.

Imre Dobos

Imre Dobos He is a professor at the Budapest University of Technology and Economics, Department of Economics. He holds a Ph.D. in Management Sciences. He is teaching Operations Management, Logistics, Inventory Management and Management Science in MSC, PhD and postgraduate programs. His research interest: Inventory control, Sustainability issues in Supply chain management. He is the author/co-author of more than 50 publications in refereed national and international journals and conference proceedings.

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