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

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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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