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# Bayesian analysis of multi-group nonlinear structural equation models with application to behavioral finance

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## Abstract

Structural equation models (SEMs) have been widely used to determine the relationships among certain observed and latent variables in behavioral finance. The purpose of this paper is to develop a Bayesian approach for analysing multi-group nonlinear SEMs. Using recently developed tools in statistical computing, such as the Gibbs sampler, we propose an efficient method to estimate parameters and select an appropriate model. The proposed method is used to investigate the relationships among all identified influential factors that have an impact on the motivation for insider trading within the framework of behavioral finance.

Keywords:

Bayesian statistics

Behavioral finance

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