Bayesian Premium Estimators for Pareto Distribution in the Presence of outliers

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Abstract

We propose the Pareto distribution in the presence of outliers based on the Dixit model. We consider the estimation of the Bayesian Premium under squared error loss function (symmetric), linear exponential, and entropy loss function (asymmetric), using informative and non-informative priors. We use the Lindley approximation and Markov Chain Monte Carlo methods such as the importance sampling procedure. Finally, the results are analyzed by using simulation studies.

Keywords

Bayesian Premium ; Pareto Distribution ; Outliers ; Non-informative Prior Dis- ; tribution ;

Entropy ; Linex and Squared Error Loss

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