

عنوان مقاله:

Test of fit for Cauchy distribution based on the empirical likelihood ratio with application to the stock market price

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نویسنده:

Hadi Alizadeh Noughabi - *Department of Statistics, University of Birjand, Birjand, Iran*

خلاصه مقاله:

Recently, it has been shown that the density based empirical likelihood concept extends and standardizes these methods, presenting a powerful approach for approximating optimal parametric likelihood ratio test statistics. In this article, we propose a density based empirical likelihood goodness of fit test for the Cauchy distribution. The properties of the test statistic are stated and the critical points are obtained. Power comparisons of the proposed test with some known competing tests are carried out via simulations. Our study shows that the proposed test is superior to the competitors in most of the considered cases and can confidently apply in practice. Finally, a financial data set is presented and analyzed.

کلمات کلیدی:

Cauchy distribution, Empirical likelihood ratio, Goodness-of-fit test, Test power, Monte Carlo simulation

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