CrossMark

A consistent jackknife empirical likelihood test for distribution functions

Xiaohui Liu[1,2] · Qihua Wang[1,3] · Yi Liu[1]

Abstract In this paper, a jackknife empirical likelihood based approach is developed to test whether the underlying distribution is equal to a specified one. The limiting distribution of the proposed testing statistic is derived under some mild conditions. It turns out that the proposed test is consistent and easy to be implemented. Some simulation studies are conducted to evaluate the finite sample behaviors by comparing the proposed method with the existing one. A real data example is also analyzed to illustrate the proposed test approach.

✉ Qihua Wang
qhwang@amss.ac.cn

[1] Academy of Mathematics and Systems Sciences, Chinese Academy of Sciences, Beijing 100190, China

[2] School of Statistics, Jiangxi University of Finance and Economics, Nanchang, Jiangxi 330013, China

[3] Institute of Statistical Science, Shenzhen University, Shenzhen 518006, China

⌀ Springer