Modification of Pickands' dependence function for ordered bivariate extreme distribution.

ABSTRACT

We study the characteristics of the Pickands' dependence function for bivariate extreme distribution for minima, BEVM, when considering the stochastics ordering of the two variables, $X < Y$. The existing Pickand's dependence function terminologies and theories are modified to suit the dependence functions of extreme minimum cases. The main result is the introduction of the restricted logistic dependence function, A_{RL}, and the restricted exponential function, $V_{RL}(x, y)$.

Keyword: Bivariate extreme; Pickands dependence function; Stochastics ordering.