Extreme Value Index Estimators and Smoothing Alternatives: A Critical Review.

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Abstract

Extreme-value theory and corresponding analysis is an issue extensively applied in many different fields. The central point of this theory is the estimation of a parameter γ, known as the extreme-value index. In this paper we review several extreme-value index estimators, ranging from the oldest ones to the most recent developments. Moreover, some smoothing and robustifying procedures of these estimators are presented.

Keywords : extreme value index; semi-parametric estimation; smoothing modification.