

VaR or TCE: Explaining the Preferences of Regulators

Authors : Silvia Faroni, Olivier Le Courtois, Krzysztof Ostaszewski

Abstract : While a lot of research concentrates on the merits of VaR and TCE, which are the two most classic risk indicators used by financial institutions, little has been written on explaining why regulators favor the choice of VaR or TCE in their set of rules. In this paper, we investigate the preferences of regulators with the aim of understanding why, for instance, a VaR with a given confidence level is ultimately retained. Further, this paper provides equivalence rules that explain how a given choice of VaR can be equivalent to a given choice of TCE. Then, we introduce a new risk indicator that extends TCE by providing a more versatile weighting of the constituents of probability distribution tails. All of our results are illustrated using the generalized Pareto distribution.

Keywords : generalized pareto distribution, generalized tail conditional expectation, regulator preferences, risk measure

Conference Title : ICIME 2022 : International Conference on Insurance Mathematics and Economics

Conference Location : Zurich, Switzerland

Conference Dates : September 15-16, 2022