

The financial risk of a set portfolio

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Abstract

We model a risky portfolio as a random set in the d -dimensional Euclidean space. A slight modification of the definition of risk measures for vector portfolios given by Cascos and Molchanov [4] makes it valid for the new set portfolios. In this framework, the risk of each set portfolio is given in terms of a subset of \mathbb{R}^d . Some relations between risk measures for set portfolios and stochastic orderings for random sets will be briefly discussed.

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