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Mean-Deviation Analysis.

Mean-deviation analysis, along with the existing theories of coherent risk measures and dual utility, has been examined in the context of the theory of choice, which studies individual preferences in terms of ordering of random variables based on different sets of axioms such as transitivity, monotonicity, continuity, etc. Special attention has been paid to axioms related to the concept of risk aversion, and paradoxes arising in the mentioned theories in connection with those axioms have been discussed. A new set of axioms has been also proposed to resolve the discovered paradoxes. (Received February 27, 2007)