

CREDIT RISK MEASURES

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ABSTRACT. Credit Risk Measures are convex functions $\rho : E \rightarrow E$, where E is a partially ordered Banach space of random variables related to a probability space $(\Omega, \mathcal{F}, \mathbb{P})$, which denotes the space of the credit risk facts, while $\rho(x)$ denotes the insurance position for x . Each Coherent Credit Risk Measure admits the dual representation

$$\sup_{\pi \in B_u} \pi(\rho(x)) = \sup_{\pi \in B_u} \pi(-x),$$

where π may both represent pricing functionals for the positions, or density functionals of scenario measures for the credit events (default probability measures). Credit Expected Shortfall and Credit Adjusted Expected Shortfall are also defined. Questions about dynamic setting and 'illusion leverage effects' are also discussed.

Keywords: Ordered Banach Space; Bases of Cones; Moment -Index; Heavy -Tailed Distributions; Credit Risk; Coherent Credit Risk Measure

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