

Risk Measures in a Quantile Regression Credibility Framework with Fama/French
Research Portfolios and Three Risk Factors

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In this paper we extend the idea of embedding the classical credibility model into risk measures, as was presented by Pitselis (2014), to the idea of embedding regression credibility into risk measures. The resulting credible regression risk measures recapture the risk of individual insurer's contract (or individual financial risk) as well as the industry risk consisting of several similar but not identical contracts (insurance or financial portfolio of risks). For each model, regression credibility estimators are established and applications to Fama/French research portfolios with three risk factors data are presented.