Min Deng* (mdeng@towson.edu), Dr. Min Deng, Mathematics Department, Towson University, 8000 York Road, Towson, MD 21252. Risk Measures for the Mixture of the Popular Models.

From the data to model is the most important and challenge task in actuarial science field. Because we wish to predict the future risk and uncertainty in order to either avoid the risk, transfer the risk, or reduce the impact of the risk and the mathematical models will enhance the accuracy of the task. There are many popular models (continuous distribution and discrete distributions), such as normal, parato, exponential, binomial, etc. But we realized it is difficult to fit the data to a single popular model etc. Therefore, in this paper we are going to develop the mathematical models by mixture of popular models and discuss the risk connected with those model. We also will give the examples to illustrate our models based on the actual data or artificial data.

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