

# Collective Modified Value-At-Risk in Life Insurance When the Number and Amount of Claims Has Poisson-Lognormal Distributions.

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- **Abstract:** Actuary in the insurance company should have expertise in measuring and controlling risks of the aggregate claims. The risk of a claim generally measured using the variance, but often can't accommodate all the events of claim risks. In this paper developed a risk measure called the model of Collective Modified Value-at-Risk (CMVaR), which is an extension of the Collective Risk Model. Expansion of the main risk measurement model when the number and amount of claims has Poisson and Lognormal distributions. Expansion of the model is done by doing a statistical estimate of the mean, variance, skewness, and kurtosis, and then used to formulate the model of CMVaR. This paper will explain the concept no how the purpose model been developed. The purpose of study is to obtain an alternative model of aggregate risk assessment in life insurance claims.
- **Keywords:** Collective Modified Value-at-Risk, Lognormal distributions, Aggregate risk assessment