

# Dependence Model for Frequencies and Claims in the Compound Risk

Woojoo Lee<sup>1</sup>, Donghwan Lee<sup>2</sup>, Jae Youn Ahn<sup>2</sup>

<sup>1</sup>Department of Statistics, Inha University, 235 Yonghyun-Dong, Nam-Gu, Incheon 402-751, Korea.

<sup>2</sup>*Department of Statistics, Ewha Womans University, 11-1 Daehyun-Dong, Seodaemun-Gu, Seoul 120-750, Korea.*

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## Abstract

In this paper, we consider the generalized linear models on both the frequency and severity of claims in the compound risk, and provide their statistical estimation method as well as asymptotics. Unlike the classical compound risk models where frequency and severity are assumed to be independent, our model allows the dependency between frequency and severity. We found the suggested model to be interesting, as modelling of dependence in the model is intuitive and the estimation procedure is straightforward.

**Keywords:** Generalized Linear Model, Compound Model, Dependence