

## Intisari

# PEMODELAN *GENERALIZED PARETO* UNTUK DATA KLAIM ASURANSI KENDARAAN BERMOTOR DENGAN METODE ESTIMASI *TRIMMED-* *MOMENTS*

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Asuransi di Indonesia semakin berkembang, termasuk juga asuransi kerugian. Dengan berkembangnya asuransi, jumlah nasabah pun semakin banyak sehingga klaim yang harus ditanggung perusahaan pun turut bergerak naik. Klaim yang ditanggung perusahaan dapat dipandang sebagai distribusi kerugian yang harus dimodelkan. Salah satu manfaat dari permodelannya adalah untuk mengukur resiko yang bisa timbul, yaitu dengan *VaR*. *Loss Distribution* pada data keuangan biasanya berekor gemuk sehingga salah satu model yang tepat adalah *Generalized Pareto Distribution*. *Fitting Distribution* dengan metode *Maximum Likelihood* tidak berbentuk *closed form*, sehingga dibahas Metode *Trimmed-Moments*.

Kata kunci: *Trimmed-Moments*, *Generalized Pareto Distribution*, *Value at Risk*, *Fitting Distribution*, Distribusi Kerugian, Ekor Gemuk.

## Abstract

### ***GENERALIZED PARETO MODELLING FOR AUTOMOBILE DATA CLAIM WITH METHOD OF TRIMMED MOMENTS ESTIMATION***

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*Insurance company in Indonesia grow bigger and bigger everyday, including non-life insurance. The amount of client increasing year by year, so the claim that should be handled by the company also increase. The amount of claim that paid by company is one of loss distribution. Fitting loss distribution can be used to measure the risk that may appear in the future. Value at Risk is one of the method to measure the risk from a lost function. Finance loss distribution usually have a heavy tail, so the distribution that proper to the condition is heavy-tailed distribution, such as Generalized Pareto Distribution (GPD). Fitting distribution using Maximum Likelihood give unclosed form result, so need a numeric solution. Beside that, there is a estimating method that can be used to fitting GPD. The method is Trimmed-Moments.*

*Keywords: Trimmed-Moments, Generalized Pareto Distribution, Value at Risk, Fitting Distribution, Loss Distribution, Heeavy-tailed*