

## ABSTRACT

This study is about modelling and simulation probability of bankruptcy in the insurance company at the time of receiving claims by costumers. The company has the funds to pay claims that derived from accumulated initial reserve and income of insurance from premiums that have payed. If the company's funds at time  $t$  is smaller than 0 then the insurance company will going bankruptcy. Therefore will be analyzed the premiums that must be payed by insurance costumers. If the premiums that payed by costumer is greater, so the funds of insurance company will greater too at the time- $t$  to cover the next claims. Probability of bankruptcy in the insurance company can be predicted from the simulation model  $n$ -times with claims frequency which happened at the time between 0 dan  $t$  is assumed distribution Poisson and claim sizes is distribution Exponential.

**Key Words:** bankruptcy probability, Exponential distribution, Poisson distribution, premiums