

## ABSTRACT

The sum of insurance product claim is one factor of the influence from insurance company performance. If the company insurance has 2 portofolio products, then it needs to pay attention from the sum of claims between portofolio 1 with portofolio 2, for example  $M(t)$  is sum of claims in portofolio 2 which has more sum of claims in portofolio 1 in time range of 0 to  $t$ , then it define the proportion sum of claims from these 2 portofolios. Based on these things in final project will discuss the expectation of  $M(t)$  using analitic approach and numeric simulation and assume portofolio 1 and portofolio 2 independent. In addition the size of claim distributed in Pareto and frequency income claim distributed in Poisson. Based in value of  $M(t)$  defines the company performance that optimize for avoiding the company in bankruptcy.

**Keywords:** insurance, independent,  $M(t)$ , Pareto, *Poisson*