Loss Distribution Approach for Company Operational Risk Analysis

by Rosita Kusumawati, Sahid, Syarifah Inayati

ABSTRACT

A company will always face the risk of loss. The total loss or aggregate loss experienced by the company in a period of time depends on the frequency of loss and the amount of loss experienced. A company is said to have high operational risk if the company has a high chance of experiencing a loss above the reserved capital. The function of opportunity or distribution of total losses of the company is very important for the company to know in carrying out the company's operational risk analysis. This study will discuss the determination of the loss distribution using the Bayesian method involving internal historical data and scenario analysis at several different levels of trust.

The steps in quantifying operational risk with the Bayesian method are estimating the parameters of the prior distribution of the distribution of losses which consist of the frequency distribution of losses and the large distribution of losses. The estimated value of the parameters of the loss distribution obtained is used to obtain VaR values ??with Monte Carlo and FFT simulations. Testing the accuracy and validity of VaR values ??is done by Backtesting test.

Kata Kunci: *Bayes, Monte Carlo, FFT*