

ABSTRACT

Internet users in Indonesia grow continuously every year. Nowadays, the internet is not only used as an information provider only, but also affects systems in the world of business. This development creates the evolution that leads to digital banking service. Beside giving and offering convenience for customers, digital banking evolution also has higher risks such as cyber security..

Risk measurement is one of important aspect for investment decision making. Every investment decision will always be followed by level of risk so that investor candidate must be able to manage those risks. This research aims to calculate Value at Risk (VaR) of bank sub-sector companies by using historical simulation method, and validate VaR value by using backtesting method with Kupiec Test model with approaching loglikelihood ratio.

The data used in this research is secondary data, with descriptive method and purposive sample method for sampling technique. The researched units are stocks of PT Bank Rakyat Indonesia Tbk. (BBRI) and PT Bank CIMB Niaga Tbk. (BNGA) during December 31st, 2017 until December 31st. 2019.

Calculation result of Value at Risk (VAR) towards level of confidence 95% for BBRI stocks is 3.1% and 2.81% for BNGA stocks. If an investor invests the initial fund of IDR 100.000.000, the risk of BBRI asset is IDR 3.106.610.667 and IDR 2.816.867.623 for BNGA. Based on the backtesting test of this research, VaR value of BRI is valid, while VaR value of CIMB Niaga is not valid.

Keywords: Value at Risk, Historical Simulation, Backtesting, Kupiec Test, Loglikelihood Ratio