

# COMPARISON OF VALUE AT RISK (VaR) IN STATE-OWNED BANK AND PRIVATE BANK USING THE METHOD OF GENERALIZED AUTOREGRESSIVE CONDITIONALS HETEROSCEDASTIC (GARCH)

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## ABSTRACT

*The investment is an activity that is often done in the business world, an investor invests a certain amount of its assets to expect profit in the future. In the investment contain elements of uncertainty or risk, the results of this investment can not be known with certainty by investors. The results can be in profit or loss, usually the higher the results obtained the greater the risk. The results obtained by the investor that is called a return. The risk is the uncertainty faced by an investor because the value of what is invested (the price of an asset or money) be smaller than the expected asset return. One of the tools of measurement to estimate the risk of a loss that is very popular is the Value at Risk (VaR). And one commonly used method is Generalized Autoregressive Heteroscedastic Conditionals (GARCH). In this study researchers want to compare levels of risk of loss on the shares of STATE-OWNED ENTERPRISES and private stock. Shares of STATE-OWNED ENTERPRISES used here is share of PT Bank Rakyat Indonesia Tbk. As for the private stock diakai is PT Bank Central Asia Tbk.. With such an investment of Rp 150.000.000,- and  $\alpha = 1\%$  confidence level (99%) obtained  $VaR_{BRI}$  is Rp. 74.958.840,- and  $VaR_{BCA}$  is Rp. 11.661.480,-. For  $\alpha = 5\%$  (confidence level 95%)  $VaR_{BRI}$  is Rp. 57.116.400,- and  $VaR_{BCA}$  is Rp. 9.055.800,-. Then it could be summed up Bank Central Asia has higher risk than Bank Rakyat Indonesia.*

**Keywords :** *Stock, Investment, Return, Risk, Value at Risk, GARCH*