

## **RISK ASSESSMENT OF A STOCK PORTFOLIO USING VALUE-AT-RISK**

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### **Abstract**

This paper aims to evaluate the risk for of a stock portfolio using Value-at-Risk, being of interest to both financial institutions and potential individual investors. Using the portfolio's daily returns over a two-year period, the volatility will be estimated with various specifications of GARCH (GARCH, IGARCH, EGARCH, TGARCH), and normal, t-student and GED errors distributions. Then we will identify the optimal volatility estimation model required in the VaR calculation using the backtesting method.

**Keywords:** Value at Risk, volatility, GARCH, Backtesting, portfolio, stock market

**JEL Classification:** G11, C52, C53

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