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THE APPLICATION OF VALUE AT RISK AND EXPECTED SHORTFALL AS CONTROLLING MECHANISM OF SYSTEMATIC RISK OF PAKISTANI STOCK MARKET

Abstract:

Fama and French (1992) three factor and Fama and French (2014) five-factor Model estimated relevant idiosyncratic factors and CAPM beta as the systematic risk factor for stock returns' variations. Application of Value at Risk (VaR) and Expected Shortfall (ES) modified the risk management criteria. This study applies traditional one factor, three factor and five factor model on Pakistan's manufacturing companies. Compares and modifies the stated models while using VaR and ES as systematic risk factor and check the robustness of the significant extent of worst expected loss provided by VaR and ES by measuring 95% and 99% confidence levels and their impact on the stock returns. In comparison with traditional market risk factor, our findings are in favor of VaR and ES factor as it significantly affects the cross-sectional of excess stock returns and fulfills the criteria of risk aversion.

Keywords:

Value at Risk, Expected Shortfall, Fama and French Three Factor Model, Five Factor Model, Systematic Risk, Idiosyncratic Risk

JEL Classification: G10, G11, G14