

## ABSTRACT

*Concerns about measurement of investment risk in Indonesian stock market and IDR/USD exchange rate and the influence of time, accuracy and risk anticipation fund become the focus of this research. VaR method, using 3 models namely EWMA (Exponential Weighted Moving Average), GARCH(1,1) (Generalised Autoregressive Conditional Heteroscedasticity) and EVT POT (Extreme Value Theory Peak Over Threshold) based on Indonesian stock market data of IHSG, LQ45 and exchange rates data of IDR/USD from July 1994 to July 2009, was used to evaluate market risk.*

*Data was analysed using Eviews 4.1 and MATLAB 2007b software. Programs for calculation of VaR in Matlab were updated the from programs originally developed by Nityanand Misra available at <http://sites.google.com/site/nmisra>. Volatility or standard deviation of exchange rate IDR/USD > IHSG > LQ45. On the contrary, standard deviation on returns of LQ45 > returns of IHSG > returns of IDR/USD exchange rate. These facts indicate that high volatility of IHSG does not mean that volatility on the returns of IHSG is also high.*

*VaR calculation concludes that the fund to anticipate risk will increase as the confidence level and period of risk increased, consequently the fund allocated to anticipate risk also increases.*

*VaR method with EVT POT performs superior in comparison to EWMA and GARCH(1,1) models with minimum deviations for IHSG, LQ45 and IDR/USD exchange rate with confidence level of 95% and 99%.*

*Simulation using Basel Amendment 1996 indicates that the cost of risk anticipation for exchange rate IDR/USD was higher than the cost of risk on LQ45 investment during crisis in 1997 and 2008.*