

ABSTRACT

This paper focuses on hedging effectiveness of KOSPI 200 index futures which is measured by percentage reduction in variance of portfolio returns due to dynamic hedging. Random selection technique is employed in order to form large number of stock portfolios with different size (number of stocks contained in a portfolio). Simultaneously, these simulated portfolios are hedged by using ex-ante hedge ratios and actual performance of each portfolio is measured. The results show that hedging can effectively reduce the portfolio variance and the hedging effectiveness has a positive relationship with portfolio size. However, hedging effectiveness in 2005 is noticeably low as compared to other years due to low correlations in bullish period. For the hedge ratio estimation technique, Minimum Variance Hedge Ratio obtained from OLS estimation can generate highest hedging effectiveness from 2003 to 2006. Besides, annual returns, annual variance and worst weekly returns given 95% confidence level are also quantified.