

Abstract:

The financial crisis of 2007–2009 has challenged the requirements of Basel II agreement on capital adequacy as well as, the appropriateness of value-at-risk (VaR) measurement for properly “back-tested” and “stress-tested” models. This paper reconsiders the use of VaR as a measure for potential risk of economic losses in financial markets. The conventional portfolio value-at-risk model with the assumption of normal joint distribution, which is commonly practiced, exhibits considerable biases due to model specification errors. This paper utilizes the estimation of hedged portfolio value-at-risk (HPVaR) to illustrate the potential model risk due to inappropriate use of the correlation coefficient and normal joint distribution of Net Asset Value of Mutual Funds.