An analysis of stress testing for asian Stock portfolios

ABSTRACT

While extreme asset price movements are a common feature of the global financial system, recent financial crises have witnessed an increase in the use of serious stress testing in risk management. This paper examines the performance of a bivariate normal distribution model and a bivariate mixture of two normal distributions model in the institutional context of five Asian stock markets, namely Bangkok, Hong Kong, Seoul, Taipei and Tokyo. To assess the performance of the two models, the data from the five stock markets for the period 4 January 1990 to 28 February 1998 are employed. The results show that the bivariate normal distribution model outperforms the bivariate mixture of two normal distributions model. This seems to suggest that the latter model can more precisely capture the fat-tailed property of left and right tails in return distributions.