The analysis of hedge ratio between stock and futures market: Evidence from United States and Taiwan

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ABSTRACT

Stock and future market have been experiencing rapidly and continue to attract investors who look for opportunities to promote portfolio performance. This paper studies the relationship between the stock and futures markets in terms of lead-lag relationship, correlation, and the hedge ratio. Our results showed that the futures market has higher volatility than the stock market and the futures market leads the stock market. This result is the same as empirical studies of In and Kim (2002); Kai-Li, Mei-Ling (2006) that indicate the futures market may respond more quickly than the stock market and support the futures market help stabilize the stock market, thus providing investors the good ways of managing risk. In this paper, we focus on multi period hedge in order to investigate the relationship between the stock and futures markets over the different periods to improve the effectiveness of hedge ratio that plays important role in risk reduction. We discovered United States market use hedge ratio more effective than Taiwan market. This finding is very important for all the less developed markets to study from the Benmark which is a high advanced market such as United States. Our paper indicated that investors have the low hedge ratio at the short-term scale, whereas investors can achieve the high hedge ratio at the long-term scale. Therefore, the examining of the multi period hedge ratio can offer more detail information than one-period hedge ratio.

Keywords : hedging effectiveness; futures market ; stock market ; Wavelet analysis

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