Market Risk Models for the Stock Exchange of Thailand
An Intraday Value at Risk Approach

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ABSTRACT

In this study, we quantify the market risk models at an intraday time horizon level. The risk models in our study are Normal GARCH, Student GARCH and RiskMetrics. Our study follows Giot (2005); in which that we illustrate on how to transform the irregularly timed-space data into regularly timed-space data. The study also emphasize on the importance of intraday seasonality component; which must be removed prior to estimating risk models. We select five most actively traded stocks from SET (Stock Exchange of Thailand) from January-March 2007 and we perform VaR calculation with 15 minutes and 30 minutes returns. With two backtesing techniques (Kupiec and Christofferson) and vary size of estimating windows, our empirical finding suggests that RiskMetrics performs best among others. Because of a small time horizon, our study should benefit intraday trader whose trading period is less than one day.