

Phornthiwa Wongvitsart 2019: An Empirical Study of Stylized Facts of Financial Returns in SET 50 Master of Arts (Applied Finance), Major Field: Applied Finance, Department of Finance. Independent Study Advisor: Assistant Professor Nattawoot Koowattanatianchai, D.B.A. 175 pages.

The empirical study of stylized facts of financial returns in SET 50 found statistical significance of the autocorrelation function of returns. This indicates that the Stock Exchange of Thailand (SET) is weakly inefficient. This independence study aims to verify common characteristics of asset returns, to increase the chance of beating the market, and to test the efficiency of SET. The historical price data of SET 50 index constituents is collected from January 1, 2014 to December 31, 2018. The SET 50 Index comprises the Top 50 listed companies with the highest market value and liquidity. Thus, they can be considered as the representatives of all stocks in Thailand. The statistical tools used in the study are Ljung-Box Test (for autocorrelation testing) and Jarque-Bera Test (for stock return distribution testing).

The autocorrelation test shows the statistical significance, meaning that SET is weakly inefficient. This implies that technical analysis can be used for investment planning in Thailand stock market. Also found in this study is that stock returns from SET 50 index has high Jarque-Bera value, with the P-Value less than 0.05. This confirms that stock returns in the SET have fat-tailed and sharp-peaked distribution. The implication is that standard deviation should not be used as a volatility measurement of SET. However, if the holding period is increased from daily to weekly or monthly, the return distribution is getting more normal. Therefore, the investment planning in SET must be in long-term. The last autocorrelation test aiming at absolute return ($|r|$) and squared return (r^2) shows the statistical significance. This test confirms a volatility clustering phenomenon and long memory of stock returns in Thailand. Investors investing in Thailand therefore should conduct their investment during the low volatility period, and should be very careful if they want to invest during the high volatility period because the high volatility of the market will continue for a long period of time.



Student's signature



Thesis Advisor's signature

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