Independent study title OPTIMAL HEDGE RATIO FOR RIBBED

SMOKED SHEETS N0.3 MARKET IN

**THAILAND** 

Author Miss Nutthaporn Sangsiriroj

Degree Master of Science (Finance)

Major field/Faculty/University Master of Science Program in Finance

(International Program)

Faculty of Commerce and Accountancy

Thammasat University

Independent study advisor Assistant Professor Wasin Siwasarit, Ph.D.

Academic year 2019

## **ABSTRACT**

This study aims to investigate the hedge effectiveness for each hedging method in the ribbed smoked sheet No. 3 (RSS3) market in the period from May 16, 2016 to October 31, 2019, totaling 645 days. RSS3D futures is the tool to hedge the price of RSS3 in the spot price. The normal hedge ratio, constant hedge ratio models (e.g., ordinary least squares, vector autoregressive model, and vector error correction model), and time-varying hedge ratio models (e.g., Markov regime-switching model, constant conditional correlation generalized autoregressive conditional heteroscedasticity (GARCH) model, and dynamic conditional correlation GARCH model) are used. The amount of variance in portfolio is the criteria used to measure hedge effectiveness. Result shows that no unique model is the best for the testing scenarios.

Keywords: Optimal hedge ratio, Constant hedge ratio, Time varying hedge ratio, Ordinary Least Squares Model (OLS), Bivariate Vector Autoregressive Model (VAR), Vector Error Correction Model (VECM), Constant Conditional Correlation-GARCH Model (CCC-GARCH), Dynamic Conditional Correlation-GARCH Model (DCC-GARCH)