

**Modified Neural Network Algorithms for Predicting Trading Signals of Stock Market
Indices: An Empirical Study on Thai Markets**

Titiya Treekittinurak
5102042479

Master of Science Program in Finance (International Program) Faculty of Commerce
and Accountancy Thammasat University, Bangkok, Thailand

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ABSTRACT

This study modifies the Ordinary Least Squares error function (OLS) in a way suitable for the classification problem based on the structure of Feedforward Neural Networks (FNN) to forecast the trading signals of Thai stock market index (SET Index). The world's major stock market indices are used as inputs in neural network model. The percentage of correct trading signals classification is used as a performance measure of each algorithm. Empirical results show that FNN models are able to predict the trading signals of SET Index to some extent; however, it is unlikely that the trading technique can be applied to make effective trading decision in SET Index. The algorithms with the modified error functions introduced in this study produce better predictions than the standard FNN algorithm.