Independent Study Title OPTIMAL OPTION PORTFOLIO STRATEGIES:

EVIDENCE FROM THAILAND

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## **ABSTRACT**

Current practises of asset allocation (such as modern portfolio theory – mean variance optimisation) are not suitable for optimisation of portfolios that contain options due to return distribution not being normal with short-life and high-dimensional covariance matrix problem. This is due to there being many options that have the same underlying asset. This study followed the option portfolio optimisation approach using a myopic objective function with options in the Thailand Futures Exchange, which has lower liquidity and more transaction costs compared to options in more developed countries.

The study showed that, even with lower liquidity and higher transaction costs, this strategy still achieved a better Sharpe ratio at 1.63 with positive skewness. Such performance was uncorrelated with market return without putting more risk in the portfolio.

**Keywords**: Option, Portfolio Allocation, Optimisation