摘　　要

投資者面對到期日相同的一序列不同履約價格的選擇權時，應如何建立最佳的組合交易策略，這個問題雖已有許多標準的交易公式可依循，但這些標準的交易策略無法全面涵蓋複雜多變的組合策略。本論文提出整數線性規劃模型用來建立選擇權的最佳交易策略。模型針對到期日相同的買權、賣權如何買賣的組合，建立最佳交易策略。若我們預期在到期日時，標的股價將會落在某一範圍內，則我們可修改原來的規劃模型配合此項預期，以尋求最佳的交易策略。最後，我們以 Ericsson 的選擇權為例，驗証本模型的效能。

關鍵字：選擇權交易策略、整數線性規劃、選擇權套利機會。

ABSTRACT

The problem of how to construct the optimal combination trading strategy for investors when they face a series of options of different exercise prices on the same maturity date can be solved by many standard trading rules. Yet these standard trading rules cannot completely cover the complex and highly changeable combination strategy. This thesis proposes an integer linear programming (ILP) model to construct the optimal trading strategy for option portfolio selection. This model focuses on constructing the optimal strategy for an option portfolio of call- and put-options on the same maturity date. Given the investor's belief of the stock price, we also provide an extended ILP model to include this belief. Finally, an empirical study will be presented by using the ILP model applied to the Ericsson's call and put options.

Key words: options trading strategies, integer linear programming, options arbitrage opportunities