

論文名稱：我國股票、期貨、選擇權市場

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套利系統之建置

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論文提要內容：

台灣的學者將 Ross (1976) 創立之套利訂價理論運用至股票、期貨、選擇權市場，顯示機會與獲利都隨商品推出時間久、商品間市場效率提高而有下降的趨勢。在實務交易上，套利交易必須考量的事務相當的多，包含各商品的買賣流程、手續費、交易稅、保證金和眾多的套利公式。

在此次的研究中，我們建立一個以台灣股票、期貨、選擇權市場為主的套利系統。投資人可依據對風險與類股偏好進行設定。風險的部分包含起始價差增加幅度、結算價差增加幅度、現股模擬家數、起始價差遞增模式。類股的部分可選擇類股與其族群，台灣 50 包含電子、金融、傳產，電子類股包含網通、半導體、光電、電腦週邊，金融類股包含金控、證券、保險。

最後，以 2006 年至 2007 年的股票、期貨、選擇權每分鐘交易資料，轉換成買賣報價資訊。根據實驗結果，增加套利起始價差會降低套利次數，平均獲利則提升；增加套利結算價差，提前平倉次數降低，含股票的套利方式，平均獲利因為放置到期貨結算日的機率增加而降低。

關鍵字：套利系統，套利，金融商品，金融衍生性商品

Construction of an Arbitrage System among Stock, Future, and Option
Markets in Taiwan

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ABSTRACT

Scholars in Taiwan have tried to use arbitrage pricing theory, discovered by Ross in 1976 on financial products among stock, future, and option markets. Arbitrage Opportunities and profits have decreased as products of these three markets get matured. In practical, investors also need to consider other factors such as cost interests, fees, taxes, arbitrage methods, etc. as well.

In this study, we construct an experimental arbitrage system among stock, future, and option markets in Taiwan. Investors can set their own risk preferences and group preference in the system. Risk preferences include ratio of arbitrage start margin, ratio of arbitrage strike margin, numbers of simulate index adopted stock companies, and margin increased mode of arbitrage start margin. Group preference includes the selection of group and one of its types.

Data from 2006 to 2007 are used to simulate the real bid-ask pricing. Experiment results show that increasing ratio of arbitrage start margin will reduce arbitrage opportunity and the average profit also increased. Increasing ratio of arbitrage strike margin might reduce the average profits due to the opportunity of early strike decreased, especially on arbitrage methods with stock.

Key Words: arbitrage system, arbitrage, financial products, financial derivatives