題目	避險時間水準不同下線性與非線性的台指期貨避險策略與績效的探討
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摘要	台灣期貨交易市場自 1998 年上市台灣第一個期貨商品「台灣加權股價指數期貨」後，台灣股票市場才正式成為一個具有避險機制的市場型態。本文研究的主要目的乃是利用現貨與期貨間的關聯性為風險規避的操作依據，選取避險模型如大中取小避險策略為主，以台灣加權股價指數期貨為工具，進行台指現貨的避險操作，再輔以 OLS 模型與 M-GARCH 模型來做互相間避險的比較，探討於相同標的物與相同避險績效衡量方法下各避險方法及策略之優劣點。實證結果發現現貨與期貨間的關聯性會因避險時間水準的不同而有差異：當避險時間水準較短(當天)時其關聯性差異會較大，且樣本的非線性特性將較強，因此大中取小避險策略的避險績效表現的較 OLS 模型好；但當避險水準較長(如 7 天、14 天、21 天)時其關聯性差異會較小，同時樣本的線性特性將較強，所以 OLS 模型避險績效反而變的較好，而 M-GARCH 模型由於只模式化二階動差，在現貨與期貨的關聯性很大且線性特性強時，反而表現的不如預期。
關鍵字	台指指數期貨、大中取小避險策略、GARCH 模型、OLS 模型、避險績效衡量
Title	Investigating The Hedging Strategy and Performance of The Taiwan Stock Index Futures under Different Hedging Time Horizons
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Abstract	Since the issue of the first future product "Taiwan stock exchange capitalization weighted stock index (TAIEX)", Taiwan stock market then formally holds the market mechanism of investment risk hedging with derivatives. The main purpose of the paper is to explore the relationship between the financial spot and future product, and illustrate a most optimal hedged portfolio to avoid investment risk. We selects minimax hedging strategy as the major approach associated with OLS and M-GARCH models to do the stock hedging operation and employs Taiwan stock index futures to hedge the spot risk of the Taiwan stock index. To find out which model is more appropriate, the outcome of the minmax hedging performance is compared with the hedging performances of the OLS model and the M-GARCH model while they are subject to the same underlying and hedging criteria. The findings of this paper state that under the same hedging condition, the correlation between the spot and future will become lower with the shorter time interval (present) and the minimax hedging strategy has the superior hedging performance to the OLS model because of the non-linear characteristics of the spot and future research data. On the other hand, the correlation between the spot and future will become higher with the longer time interval (7 days, 14 days, and 21 days) and thus the OLS model will outperform the M-GARCH and even the minmax due to the linear

	characteristics of the spot and future research data. The M-GARCH however performs not quite well as we expected since it only models the second moment of the spot and future data that have high correlation and strong linear characteristics.
Key Words	Taiwan stock index futures, minimax hedging strategy, GARCH model, OLS model, hedging performance measure