

國立臺北大學九十七學年度第二學期碩士學位論文提要

論文題目：臺灣電子與金融期現貨市場互動性、波動外溢與長期記憶效果之研究
—外資介入與美國期貨避險效果及 FIEC-HYGARCH 之應用—

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論文提要內容：

本文以臺灣電子與金融股價指數期現貨為主要研究對象，並應用 FIEC-HYGARCH 模型分析臺灣電子與金融股價指數期現貨之互動性、波動外溢與長期記憶效果，同時兼論外資介入與美國期貨之避險效果，樣本期間為 2005 年 1 月 1 日至 2008 年 8 月 31 日。

實證結果證明 FIEC-HYGARCH 模型可以正確的捕捉長期之波動，臺灣電子與金融股價指數期現貨報酬率具有長期記憶與自我外溢效果，同時條件變異亦具顯著之波動外溢、長期記憶與波動振幅，顯示臺灣電子與金融股價指數期現貨報酬率具有動態關聯性。納入外資與美國期貨後，臺灣電子與金融股價指數期現貨報酬率之長期記憶會縮短，波動外溢效果與波動持續性亦有減少之現象，顯示外資與美國期貨會對臺灣電子與金融股價指數期現貨造成影響。避險方面，本文以考量美國期貨之 FIEC-HYGARCH 模型之避險績效為最佳。

關鍵字：長期記憶、分數共整合、FIEC-HYGARCH、避險

ABSTRACT

**A Study on the Interactions, Volatility Spillovers, and Long Memory Effects for Stock and Futures Markets of Taiwan Electronic and Financial Indexes:
The Mediating Effect of Foreign Capital and hedge effect of American Futures and an Application of FIEC-HYGARCH Model**

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This study investigates the interactions, volatility spillovers, and long memory effects for stock and futures markets of Taiwan electronic and financial indexes by using FIEC-HYGARCH model. It also discusses the mediating effect of foreign capital and hedge effect of American Futures. The sample period of this study is from January 1, 2005 to August 31, 2008.

The empirical results verify that the FIEC-HYGARCH model can capture the long-term volatility behavior. The stock and futures indexes returns of Taiwan electronic and financial indexes have long memory and own-mean spillover effects. Moreover, the conditional variances also have volatility spillover effects, long memory and amplitude. Hence it exist dynamic interrelationship among the stock and futures indexes returns of Taiwan electronic and financial indexes. Further, it also reduces the long memory and spillover effects by incorporating foreign capital and American futures into the model. In addition, it founds that the hedge performance of FIEC-HYGARCH model is the best when including the American futures into the model.

Key words: long memory, fractional cointegration, FIEC-HYGARCH, hedge