《人文及社會科學集刊》 第三十三卷第三期 (110/9), pp. 383-423 ©中央研究院人文社會科學研究中心

新聞情緒指標 與臺灣加權股價指數之關係

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本研究以媒體文字量化資訊作爲新聞情緒 (news sentiment) 之變數,探討 新聞情緒與臺灣加權股價指數報酬率的關係。結果發現正向、負向情緒變數與 股價指數報酬率具有統計上的顯著性結果。我們進一步建立投資策略並考量交 易成本於做多的績效,發現加入負向情緒變數後之投資策略,其最佳收益率爲 13.308%、夏普指標爲 0.759、期末現值爲 197.528 (萬),皆比未納入情緒指標 來得高,顯示納入負向新聞情緒於績效指標均表現較好。本研究結果顯示以新 聞正、負向內容形成的新聞情緒指標的確能預測股票市場報酬率,且負面情緒 預測能力較正面情緒來得好,與 Tetlock (2007)及 García (2013)的研究結果 一致。

關鍵字:新聞情緒、投資人情緒、股價指數、文字探勘、交易策略

Relationship between News Sentiment Indicator and the Taiwan Weighted Stock Index

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ABSTRACT

This study explores the relationship between positive and negative news sentiment and the returns on the Taiwan weighted stock index by taking media quantitative information as a news sentiment variable. The findings show that these two sentiment variables and the returns on the stock index are statistically significant. Through further establishment of investment strategies and valuing a long position on an option with transactions costs, this study shows that, for the investment strategy with the negative sentiment, the optimal return is 13.308%, the Sharpe ratio is 0.759, and the ending present value is 1,975,280 thousand. They are higher than those strategies with no sentiment variable. This denotes that the performance indicator is better if the negative sentiment variable is included. The results of this study indicate that the negative sentiment is a better prediction than is positive sentiment, which is consistent with the results of Tetlock (2007) and García (2013).

Key Words: news sentiment, investor sentiment, stock market index, text mining, trading strategy