

台指期貨波動性、基差、與三大法人交易部位

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摘 要

本研究分析三大法人之未平倉部位分別與近月台指期貨波動性以及其基差之間的關聯性，而波動性分別採用日報酬率和日內報酬率衡量，其中日內波動性我們使用三種方式計算：實現波動性(Realized Volatility)、高低價法(RHL)、以及高低收盤價法(RH)。基差在本研究做為衡量期貨價格效率性指標。

實證結果顯示，日內波動性方面，三種不同的日內波動性衡量方式皆指出外資的市場參與程度增加會使期貨價格日內波動性增加，尤其當增加多方部位參與時最顯著。在日波動性方面，雖然日內波動性隨著外資的市場參與程度而增加，但是外資的參與反而使日對日波動性減少。基差(絕對值)的結果顯示投信總市場參與程度增加，反而降低價格效率性，尤其在投信增加空方部位的參與時最為明顯。總括而言，外資的市場參與程度增加雖然會增加期貨價格日內波動性，但卻減少日對日的波動性；自營商增加市場參與會增加價格波動性不管是日內波動性或是日對日波動性；而當投信增加市場參與時，反而降低期貨價格效率性，自營商與外資的市場參與程度對價格效率性影響不顯著。

關鍵詞：三大法人、波動性、基差、日內波動性、日對日波動性、價格效率性

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Stock Index Futures' Volatility, Basis and Three Major Institutional Investors

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Abstract

The study analyzes the relationship between the open interest of major institutional investors (i.e. Foreign Institutional Investors, Investment Trusts, and Dealers) respectively with the volatility and basis of the Taiwan stock index futures. Volatility is measured using both intraday and inter-day returns, where the intraday volatility is calculated in three ways: realized volatility approach (RV), high-low prices approach (RHL), and open-high-close-low price approach (RH). The basis is applied to measure the price efficiency of stock index Futures.

The empirical results for all three intraday volatility measures indicate that index futures' volatility increase with the market participation of Foreign Institutional Investors, particularly when increasing participation in long positions. Although the intraday volatility increases with the market participation of Foreign Institutional Investors, the inter-day volatility results show that volatility decreases with the market participation of Foreign Institutional Investors. As for the basis (in absolute value) results, a higher market participation by Investment Trusts leads to a decrease in price efficiency, especially when increasing participation in short positions. Overall, the market participation by Foreign Institutional Investors increases the intraday but reduces the inter-day volatility of index futures' prices. However, the market participation of Dealers increases index futures' volatility, irrespective of intraday or inter-day volatility being applied. Finally, the market participation by Investment Trusts has a negative effect on price efficiency. There is no evidence showing that the participation of Foreign Institution Investors and Dealers reduces price efficiency.

Keywords: Institutional Investor, Volatility, Basis, Intraday Volatility, Inter-day Volatility, Price Efficiency

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