

集合競價、限價簿揭露資訊與 委託積極度決策

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本文聚焦於國內集中市場，檢視投資人是如何詮釋並回應提取自限價簿揭露內容之多方訊息。在盤中分盤競價階段，投資人委託出價積極度不僅與買賣價差呈現反向關係，當股價更趨振盪時，也會迫使機構投資人選擇較保守價位委託。投資人委託價位積極與否，也與限價簿最佳報價的買賣同邊一側相對委託深度大致呈現正向關係，呼應排擠效果(Parlour, 1998)觀點。限價簿外側序列委託深度也受注視，投資人出價積極度略與買賣同邊委託深度中內側序列占比呈正向關係，符合信號效應(Goettler, Parlour, and Rajan, 2005)預期方向。

在收盤競價階段，出價急迫者有搶在集合競價頭一分鐘(13:25-13:26)內提出委託之現象。在2012年2月20日收盤前資訊揭露新制啟動後，象徵資訊優勢方的機構投資人輕度升高其委託價位積極度，佐證文獻中競鼠效應之推論；然而，或許是顧慮搶單風險上升，機構投資人對大型股每筆委託規模則略見降低。象徵資訊弱勢方的自然人，其價位積極度決策對當前買賣價差的負向關係更為強化，佐證試撮合資訊揭露有助增進其對關鍵市場品質指標之掌握程度。有趣的是，本次局部時段透明化新制似引發外溢效果，促使盤中階段自然人出價積極度微幅趨降。針對2015年6月29日實施之開、收盤競價透明度正常化措施，在市場流動性與資訊揭露品質等方面是否將造成負面衝擊，確實值得注意。

關鍵詞：集合競價、限價簿資訊揭露、委託深度、集中市場、委託積極度。

「政策與管理意涵」

本文以 2012 年初「收盤前資訊揭露新制」實施前後各約 2 個月的日內交易資料，分析投資人於盤中、收盤競價的委託積極度決策及其攸關因素。本文發現，限價簿內、外側委託深度增減變化都可牽動場內委託積極度。該結果暗示，2015 年 6 月底啟動的「擴大開、收盤前資訊揭露措施」須注意揭露資訊品質，以免影響投資人信任度。

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Call Auctions, Limit Order Book Information and Order Aggressiveness

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The paper investigates how the investors of the Taiwan stock exchange interpret and respond to the multiple aspects of information extracted from the disclosed state of the limit order book (LOB). During the 20-second call auctions, our empirical results support a negative relation between order aggressiveness and the bid-ask spread. In addition, the institutional investors tend to submit more patient orders when price volatility increases. Order depths are found to be meaningful to the investors. Consistent with the ‘crowding out effect’ predicted by Parlour (1998), at the best quotes of the LOB, our finding suggests a positive connection between order aggressiveness and the ratio of the same-side depth to the sum of the both-side depths. On the same-side of the LOB, we also document a slightly positive relation between order aggressiveness and the ratio of the depth at the best quote to the sum of the depths on the top five quotes, thereby supporting the ‘signaling effect’ predicted by Goettler, Parlour, and Rajan (2005).

During the closing call auctions, it can be found that orders submitted within the first minute (13:25-13:26) of the 5-minute call tend to be more impatient. After the implementation of the new information disclosure mechanism on February 20, 2012, our empirical results show that the institutional investors (symbolizing the informed traders) slightly increase their order aggressiveness, thus providing evidence for the prediction of ‘rat race effect’ in the literature. Nevertheless, the institutional investors make somewhat smaller orders with increasing transparency. As for the individual investors (symbolizing the

uninformed traders), the transparency reinforces the negative relation between their order aggressiveness and the bid-ask spread. This finding implies that the disclosure of the simulated best quotes of the LOB contributes to the uninformed traders' prediction accuracy of this kind of market quality indicator. Interestingly, the new mechanism also triggers the 'spill-over effect', therefore causing the individual investors to slightly lower their order aggressiveness even during the 20-second calls. With respect to the further reinforcement (which is implemented on June 29, 2015) of the market transparency applied to opening and closing calls, it is noteworthy to observe whether the reform produces adverse impacts on market liquidity and the quality of the disclosed LOB information.

Key Words: Call Auction, Limit Order Book Information, Order Depth, Taiwan Stock Exchange, Order Aggressiveness.