

# **Price movements after an information event detected by a new measure PIR**

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### **Abstract**

This paper proposes the private information ratio (PIR), a ratio of abnormal returns to KOSPI returns. The PIR considers security-specific information in the form of abnormal returns and market-wide information in the form of returns on KOSPI, a broad market index in Korea. By the definition of the PIR, an increase in the PIR increases abnormal returns and the close-to-zero PIR brings about the highest returns on KOSPI. To investigate price movements after a large price movement, the paper adopts the event study methodology and defines an event day as two cases: The first case involves large security-specific information for the top 10% and bottom 10% of the PIR, and the second one, large market-wide information between 40% and 60% of the PIR. Two types of cumulative abnormal returns differing in their definitions of the cumulative period are employed to investigate price movements after event days:  $CAR_{j,S_1}$  uses trading days for the cumulating period, and  $CRE_{j,S_2}$  uses continuous event days. The results provide more support for return continuations than for return reversals. Cases are specified depending on the sign of abnormal returns, the sign of KOSPI returns, the method for cumulative abnormal returns, and the definition of an event. Eight of a total of 18 cases are considered as return continuations, whereas 2, as return reversals. Because the PIR is a relative measure of security-specific and market-wide information, it can detect price movements after a price impact from such information. Therefore, more evidences of return continuations provide further support for market efficiency.

### **Keywords:**

Price Movement, Overreaction, Underreaction, Return Continuation, Return Reversal

### **JEL code:**

**G02, G14, G15, F21**