

**The Role of Information-based Tradings in the Market Microstructure Model
: Evidence from the Hercules Market**

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: ヘラクレス市場からの実証

ABSTRACT

I investigate the role of information-based tradings in affecting asset returns in Hercules market by using the measure of the probability of information-based trading (PIN), which was derived by the Easley et al. (2002). The Easley and O'Hara (1992) theoretical microstructure model is used to get the measure's parameters, and I estimate these parameters by using data for individual Hercules-listed stocks for 2001 to 2005.

My hypothesis is that a higher risk of information-based trading for a stock translates into a higher required return for that stock, so I expect higher return of the stock.

But the result is opposite to my hypothesis, and higher risk of information-based trading for a stock translates into a lower required return for that stock in Hercules market. One of the reasons is the characteristics of Hercules market which is an emerging equity market. Those listed stocks have high risk, so it's not attractive to hold those stocks with high probability of PIN for uninformed traders. To hold the stocks of newly listed companies already has higher risk, so uninformed traders might avoid holding the stocks with high probability of information-based trading in advance. In the end, uninformed traders don't require high returns in those stocks. Therefore higher risk of information-based trading for a stock translates into a lower required return for that stock in Hercules market.

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