

# THE ANALYSIS FOR THE DYNAMICS OF ITA AND PRICE CHANGES IN THE JAPANESE FINANCIAL MARKET

**R. Minami<sup>a</sup> and H. Yoon<sup>b</sup>**

<sup>a</sup>CMD Laboratory Inc.  
2-14-19 Jingumae, Shibuya-ku, Tokyo 150-0001, Japan  
minami@cmdlab.co.jp

<sup>b</sup>CMD Laboratory Inc.  
2-14-19 Jingumae, Shibuya-ku, Tokyo 150-0001, Japan  
yoon@cmdlab.co.jp

This paper examines dynamics of Ita in the Japanese financial market. Ita means an order matching board, and the dynamics of Ita is found to be directly related to price changes. Because there was no available data for Ita in the past, nobody has been analyzed Ita dynamics quantitatively. In this paper, we recognize Ita pattern by cluster analysis. Then, we examine statistical figures between changes of the Ita patterns and price movement during the trading hour. We obtain conclusions that Ita pattern is influenced by stock profile and that the changes of the Ita patterns effect price movement in next several minutes.

## **Keywords**

Ita analysis, Price changes

## **References**

[1] Joe H. Ward, "Hierarchical grouping to optimize an objective function", Journal of the American Statistical Association, Vol. 58, pp. 236—244, 1963.