

Charateristics of trading interval in double auction market

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Abstract

We investigate the characteristics of trading intervals of individual stocks listed on the DOW 30 index and propose an order-driven market that is constructed using Agent Based Modeling to understand the non-trivial features of trading intervals observed in financial market. In this work, the heterogeneous agents consist of three type agents such as fundamental trader, technical trader, and noise traders that are characterized by their investment time horizon and specific risk-aversion factors can submit limit or market order according to their trading strategies. Then, we generates an artificial time series with a broad parameter sets. The proposed method is shown to satisfy several properties of the trading interval estimated from real financial market.

Keywords

Market microstructure, Agent Based Modeling, double auction market.

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