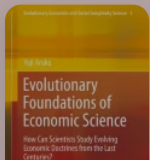


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Matching Mechanism Differences Between Classical and Financial Markets

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simultaneous move of ask and bid may be allowed. A strategy employing the market order without specifying the limit order may also be allowed. The market could accept any type of order, whether intelligent or non-intelligent. Non-intelligent agents may even be winners. Behavioral considerations, based on game theory, may be unhelpful or even useless in the market as it truly exists. Actual transaction customs are based not only on institutions but also computer servers. We therefore also need to examine the design of AI-based servers as well as transaction algorithms. This may lead us to re-examine the features of the free market, and in particular the financial one. Over recent years, we have been able to successfully examine a set of features of the market system by developing an AI simulator for the futures stock market, which is called U-Mart. In the light of this work, we will discuss an essential structure for the coordination of supply and demand in the free financial market system.

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an English textbook (Shiozawa et al. [2008](#)) as one of the Springer Series on Agent-Based Social Systems. The development of the U-Mart system was mainly engineer-driven (<http://www.u-mart.org/html/index.html>), and is now internationally recognized as a good platform for AI markets. The project has had a policy of publicizing all program sources. Many other reports of AI market simulations provide no information about how to operate the AI. We believe that the results of market simulations by secret sources may be almost worthless.

2. See http://www.tse.or.jp/english/faq/list/stockprice/p_c.html.

3. There are various kinds and qualities of rice, so there were also many types of rice stamps.

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