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FRE 7121

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**Review of A Game-Theoretical Approach for Designing Market Trading Strategies**

**Background**

To maximize profit, the investors are constantly searching for new strategies to trade, which are derived from observing historical market data trends. However, the features that indicate the trends often appears in partial form, thus is difficult to analyze (Garrison W. Greenwood, 2008).

**Research questions**

In the paper *A Game-Theoretical Approach for Designing Market Trading Strategies*, the authors suggested using co-evolve fuzzy trading rules to handle the partial form features. The results shows that the co-evolutionary process creates trading rule-bases that produce positive returns. While the authors have also suggested some possible improvements of their model, our team is going to further investigate this problem by first recreate their program and then add the down trend day trading rules.

**Research methodologies and goals**

* Review the paper: *A Game-Theoretical Approach for Designing Market Trading Strategies*
* Recreate the program they have developed.
* Summarize on the insufficiency of their original program.
* Add down trend day trading rules to improve the program.

**Reference**

Garrison W. GreenwoodTymerskiRichard. (2008). A Game-Theoretical Approach for Designing Market Trading Strategies. Symposium on Computational Intelligence and Games, 页 1.