

Abstract

To determine the buy and sell of shares is one of the most important issues for investor in share market. In this project, a fuzzy rule based approach to make buying and selling decision in share market is investigated. A fuzzy rule based system is constructed based on technical indicators and fuzzy rules. The four technical indicators used are -Accumulation/Distribution line(A/DLINE), Aroon indicator (AI), Moving average convergence divergence(MACD), Relative strength index(RSI). The fuzzy rules are a combination of the trading rules for each of the technical indicators used as the input variables of the fuzzy system. Membership functions were also defined for all the four technical indicators used. The result is a recommendation to *buy, sell or hold*. Data were collected for 21 Vianet Group Inc, Adobe System Incorporated, Credit Acceptance Corporation and Mercadolibre Inc for testing and evaluation of the system. The technical indicators were then computed for each data and from the computed technical indicators experiments were carried out for several months. The model was verified and tested using real data from NASDAQ stock symbols. The results were satisfactory. The system can therefore act as an effective model for traders in the stock market when there is a combination of the recommendation with the individual's trading skills.

Keywords: Share market, Fuzzy rule, Technical Indicator, Membership Function.