Returns on stocks have traditionally been modelled by fitting a suitable statistical process to empirical returns. Studies on agent based models of stock market have been carried out by researchers, primarily on US markets. This paper analyzes the empirical features generated using historical data from the Bombay Stock Exchange (BSE), employing the concept of agent based model proposed by LeBaron[2,3,8]. Agent-based approach to stock market considers stock prices as arising from the interaction of a number of individual investors. These investors are modeled as intelligent agents, using differing lengths of past information, each trading with its own rules adapting and evolving over time, and this in turn determines the market prices. It is seen that the model generates some features that are similar to those from actual data of the BSE.
Financial Market Analysis of Bombay Stock Exchange using an Agent Based Model

Reference


Index Terms

Computer Science
Adaptive Systems
### Key words

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**Assets**

- Risk Free Assets
- Feed Forward Neural Networks
- Rational Expectations Price
- Forward Testing