

ABSTRACT

Bachelor thesis: 112 p., 41 fig., 10 tabl., 2 appendixes, 11 sources.

Object of research: non-stationary processes of pricing on the stock exchange are time series.

Objective: building mathematical models of selected exchange processes; Evaluation of forecasts; development of software to perform computational experiments.

Method of research: mathematical models and methods of analysis processes on the stock exchange.

The paper reviews ways of investing in securities. Are some of the known methods of forecasting stock prices on the exchange. There are considered and analyzed two commercial software products for statistical data analysis.

An information system for analytical modeling and forecasting processes to exchange models is based on autoregressive moving average. The project results are selected prediction of stock prices using both: developed my own software and existing products and for statistical processing.

The system is implemented on the platform .Net Framework 4.5 using the programming language C #, are examples of programs for forecasting real equity prices. The ways possible to further improve the system.

STATIONARY PROCESSES, INTEGRATED PROCESS,
HETEROSCEDASTIC PROCESSES, AUTOREGRESSION MODELS MOVING
AVERAGE, AUTOREGRESSIVE CONDITIONAL HETEROSCEDASTIC
MODEL, DECISION SUPPORT SYSTEMS.