ABSTRACT

Thesis: 131 p., 37 fig., 16 tab., 2 appendixes, 43 sources.

The object of study: linear and nonlinear transient processes in economics and finance.

Objective: To design and develop a decision support system for automated choice forecasting models.

Subject of research: mathematical models and methods for formal description of processes in economics and finance; decision support systems.

Diploma project dedicated to the development and implementation of software decision support system for analyzing nonlinear processes in economics and finance.

This work is particularly important because by building models we can take into account the long-term behavior of the time series and thus provide long-term forecasts.

The use of forecasting models can be used to approximate nonlinear, non-stationary processes with minimal errors. This paper analyzes the existing criteria of adequacy of models, criteria of quality of prediction assessments used in forecasting. A decision support system is created.

DECISION SUPPORT SYSTEM, MATHEMATICAL MODEL, CRITERIA OF QUALITY, ADEQUACY CRITERIA, COMPLEX CRITERION, AUTOMATED SELECTION.