

## ABSTRACT

The thesis is presented in 52 pages. It contains 2 appendixes and bibliography of 8 references. Fifteen figures and 2 tables are given in the thesis.

The purpose of this work is to improve the quality of prediction of the exchange rate in the interbank market by developing the mathematical and software of the corresponding automated system.

Modeling the dynamics of exchange rates based on various statistical models, singular spectrum analysis, regression analysis, and artificial neural networks are discussed. According to the formulated criteria, recursive neural networks are chosen for solving the task.

During the course of the thesis the system of forecasting the exchange rate in the interbank markets was developed. The developed system was tested.

Keywords: exchange rate, forecasting, artificial neural network, recursive network.