

ABSTRACT

Diploma contains: 72 p., 40 fig., 7 tabl., 24 sources, 3 appendixes.

The theme: «Time series forecasting quality improvement basing on different time frames lengths aggregation».

Object of research - the time series of instruments of financial markets.

Subject of research - models, methods and prediction technologies for time series tools of financial markets.

Purpose - to determine the optimal set time-frames for predicting price values of financial instruments and develop model for more effective forecast.

The work implemented software application that allows research in accordance with the purpose of work. Considered value of the time-frame in which you can prohnovunnya methods Back Propagation, principal components method and SSA autoregression. The comparative effectiveness analysis methods and experimental based optimization model forecast through the aggregation of different lengths of time-frames. The paper also presents research results in table and graphical form.

The results of the research approved on 18th International conference «SAIT-2016».

NEURAL NETWORK, FORECASTING, BACK PROPOGATION, SSA, AUTOREGRESSION, FOREX, TIME-FRAME