

ABSTRACT

Bachelor thesis: 165 p., 46 fig., 7 tabl., 3 appendixes, 15 ref.

In this work the problem was considered of implementation of the time series modeling methodology. An important task of imputation of missing values in statistical data was considered. The methods of imputation of missing data were represented and implemented in software. Their influence was analyzed on statistical characteristics of the data model. It was conducted the analysis of influence of the time series smoothing methods on statistical characteristics of the resulted data model.

Object of the research: statistical data about developing of chosen macro-economic processes.

Subject of the research: time series models building methodology, detecting methods of missing values, statistical characteristics of model adequacy and forecasting evaluations.

The methods of the research are as follows: modeling and forecasting theory, regression analysis, statistical analysis, methods of imputation of missing values.

Target of research: implementation of time series models building methodology, analysis of influence of missing values on model adequacy of dynamical processes, software developing for creation models of dynamical processes which based on represented methodology.

Represented methodology of the time series models building was used for building of time series model which describes the chosen microeconomic processes in Ukraine. Special software was created which can be used for data preprocessing, statistical analysis, building models of appropriate processes, analysis of basic statistical characteristics of the built model and implementation of the time series smoothing methods.

REGRESSION ANALYSIS, CONGRUENT METHODS, FORECASTING
FUNCTION, STATISTICAL ANALYSIS, NORMAL DISTRIBUTION