Bachelor’s thesis: 110 p., 12 fig., 28 tabl., 3 appendixes, 11 sources.

The topic of the research: “Analysis and estimation for indexes of the world stock markets on the basis of clusterization and principal component analysis”.

The subject of the reserch is local indexes of stock markets and their relationship dynamics and evolution of the market background.

Research method is the method of principal components, cluster and correlation analysis.

Objective: to reduce the dimension of problems for the analysis of financial time series.

Aim - to reduce the dimension of the problem to monitor the global stock markets.

Theoretical and methodological basis of the study is the work of domestic and foreign scientists in the field of economic theory, mathematical modeling, predictive models, correlation and cluster analysis.

During the thesis created software to isolate the main components of a set of stock indices.

The methodology is implemented on the basis of already known algorithms and using own development.

The software is implemented using the programming language VBA. The recommendations for further research are given.

STOCK INDEX, STOCK MARKET, DEPENDENCE, CORRELATION, CLUSTER