ABSTRACT

The theme: Forecasting solvency of clients using intellectual data analysis.

Master's thesis contains 125 p., 22 fig., 4 tables, 7 appendices, 25 references.

The problem of strategy analysis of development and activity of the banking institution, strategic planning and estimation of financial risks are considered in this work. The important role is also allocated to other element of development of strategy – forecasting solvency of clients.

Object of research is statistical data of the bank's clients.

The work is devoted to analysis of the credit risk of banks under uncertainty using data mining techniques such as decision trees, Bayesian networks, logistic regression.

Purpose - to investigate existing methods of financial analysis, build classification models using actual type of statistical data.

The paper presents the results of statistical analysis using the following methods: decision trees, naive, tree augment and augment Bayesian networks, logit and probit models. The software on SAS IML language was developed for building Bayesian networks using heuristic methods.

PUBLICATIONS

– «Застосування наївного та дереводоповненого байєсівських класифікаторів для прогнозування кредитоспроможності фізичних осіб» - SAIT-2016 conference abstracts;

– «Моделювання фінансових ризиків з використанням наївного та доповненого деревом класифікаторів у формі байєсівських мереж» - article, "Research Bulletin of the NTUU "KPI"", 2016;

– «Text Mining Analysis of Agriculture Internet Sources Using SAS Software» - ISDMCI-2016 conference abstracts;

FINANCIAL RISK, SOLVENSY, DATA MINING, BAYESIAN NETWORKS, DECISION TREES