

## **ABSTRACT**

Thesis includes: 92 p., 11 tabl., 19 fig., 1 sup., 24 sources.

Theme: Credit risk calculation system using regression analysis methods.

**CREDIT RISK, EXPECTED CREDIT LOSSES, REGRESSION ANALYSIS, MODEL OF LINEAR MULTIPLE REGRESSION.**

Thesis is devoted to research of the credit risks in banking activity. For this purpose, a thorough analysis of the methods used by banks in accounting has been carried out. The methodology of calculation, determined by the basel committee, as well as models based on the loss rate, probability of default, etc. are considered. Main models used in the regression analysis and methods of their construction and validation for adequacy have been investigated. Based on results of the performed research, a software product that uses the model of multiple linear regression to calculate the expected credit losses has been developed. Examples of its work are given.

The software product was developed using the C # programming language, the interface - using Windows Form technology.