# TARPTAUTINĖS STUDENTŲ MOKSLINĖS-PRAKTINĖS KONFERENCIJOS
## *EKONOMIKA. VERSLAS. VADYBA – 2018*
## STRAIPSNIŲ RINKINYS


# PROCEEDINGS OF THE INTERNATIONAL STUDENT SCIENTIFIC-PRACTICAL CONFERENCE
## *ECONOMICS. BUSINESS. MANAGEMENT – 2018*

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# WAYS OF IMPROVEMENT ASSESSMENT METHODS OF THE CREDITWORTHINESS OF ENTERPRISE BORROWER IN UKRAINE

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## Introduction

**Actuality.** Management of credit risk which would comply European Union plays a significant role in Ukrainian bans development. Whereas financial and economic crises trends in modern Ukrainian reality are observed.

One of the most efficient tools of credit risk identification, measurement and management is analysis of borrower solvency. It contains the estimation of financial stability, solvency and profitability coefficients etc. It's important to take into consideration macroeconomic indicators of social and economic development of the country in general.

Object of the study: analysis of the process of assessing the creditworthiness of a borrower by a commercial bank. Subject of evaluation: the effectiveness and disadvantages of domestic methods and models of assessing the creditworthiness of a borrower - a legal entity commercial bank, world experience, its features.

Purpose: to determine the effectiveness of methods for assessing the borrower's creditworthiness by commercial banks and their modernization with the help of proposed measures and approaches for improvement.

Objectives:

1. To assess the current state of creditworthiness in Ukraine.

2. To analyze and compare Ukrainian and foreign methods for assessment the creditworthiness.

3. To offer improved ways of domestic methods to estimate the creditworthiness.

Methods of study: statistical methods, methods of analysis and synthesis and performance analysis.

## 1. The current state of creditworthiness in Ukraine

Creditworthiness is the ability of the borrower to accumulate cash flows sufficient for timely repayment of debt obligations in accordance with a pre-agreed schedule of refunding and payment of interest (Tereshchenko, 2012).

The lack of effective methods of enterprise analysis of creditworthiness and qualified

specialists has led to the deterioration in the quality of the banks' loan portfolio. According to American analysts, 30-40% of overdue loans arise as a result of inadequate analysis of the financial condition of the borrower at the first stage of the negotiations (Chaykovskyy, 2014). In turn, this leads to a deterioration in the solvency of these financial institutions-creditors, or even using legal procedure of bankruptcy.

During 2016, 17 banks were declared insolvent, and another 4 were liquidated by the decision of shareholders, according to official report of the National Bank of Ukraine (Banking sector review, 2016). In 2017, 14 banks left the market, of which four became financial companies and one merged with another one. In early 2017, these banks accounted for 1.7 % of net sector assets (Banking sector review, 2017).

A detailed estimation of creditworthiness serves as the basis for financial and economic stability of both banks itself and the borrowing company. In this case, the main purpose of the analysis of creditworthiness is to obtain a bank qualitative assessment of the borrower.

**2. Ukrainian and foreign methods for assessment the creditworthiness**

In Ukraine, the creditworthiness analysis of a business entity is carried out by determining its rating class, depending on the value of the integral indicator. It also takes into account the size of the enterprise (large, medium or small). It is based on the methods of discriminatory analysis method, which is widely used in the world practice for credit risk assessment.

Calculations of the integral index of the financial condition of the enterprise are carried out using a multi-factor discriminant model according to the following formula:

$$Z = a_1 * K_1 + a_2 * K_2 + ... + a_n * K_n - a_0,$$ **(1)**

Where $Z$ – integral index;

$K_1, K_2 ... K_n$ – financial ratios, which are determined, based the company's accounting financial statements;

$a_1, a_2, ... a_n$ – parameters that are determined taking into account the weight and severity of financial ratios and are updated annually by the National Bank of Ukraine on the basis of data of financial statements of debtors;

$a_0$ – free element of a discriminator model (Smoleva, 2014).

Due to the value of the integral index, the enterprise belongs to a certain range of values of possible default, which corresponds to a particular class.

In world practice the following basic methods of assessing the creditworthiness of the borrower are used (picture 1)                    (Vasylchak, 2012).

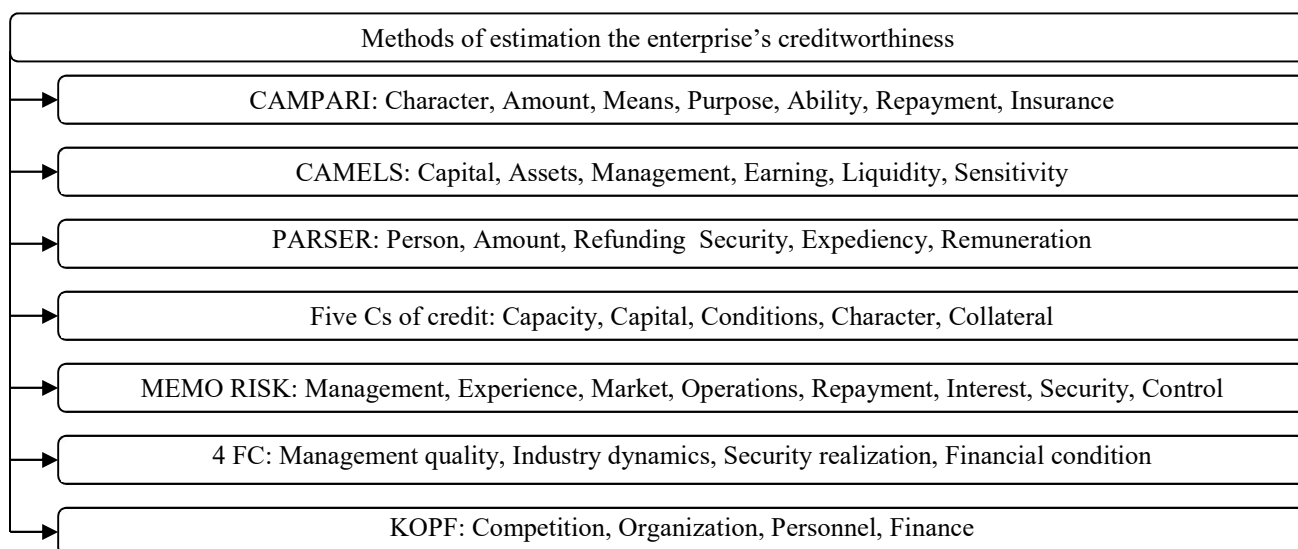| Methods of estimation the enterprise's creditworthiness |
|---|
| CAMPARI: Character, Amount, Means, Purpose, Ability, Repayment, Insurance |
| CAMELS: Capital, Assets, Management, Earning, Liquidity, Sensitivity |
| PARSER: Person, Amount, Refunding  Security, Expediency, Remuneration |
| Five Cs of credit: Capacity, Capital, Conditions, Character, Collateral |
| MEMO RISK: Management, Experience, Market, Operations, Repayment, Interest, Security, Control |
| 4 FC: Management quality, Industry dynamics, Security realization, Financial condition |
| KOPF: Competition, Organization, Personnel, Finance |

Figure 1. Methods of estimation the enterprise creditworthiness

The 5 Cs and 4 FC are the most efficient methods because they take into account economic macroeconomic performance. The main disadvantage of complex method data is the complexity of their adaptation in Ukraine. They do not take into account domestic conditions in which the entities operate, namely: peculiarities of public financial reporting according to national standards and not always its fairness, even after the confirmation of an audit company; imperfection of tax legislation; significant level of corrupt government structures; specificity of doing business, etc.

Previously, in practice, in order to assess the financial position of a borrower-legal entity, 10 indicators and one-level logistic discriminant model have been used. From January 1, 2017, 16 indicators and a two-level logistic discriminator model (Regulation 351 of National Bank of Ukraine, 2016) are used. Such an increase of the formal approach to assess the borrower's credit risk leaves without answer the question of the adequacy of a strictly formalized approach to assess the financial condition of the borrower – a legal entity and its credit risk.

**Conclusions**

Ukraine analyzes the creditworthiness of the borrower company by calculating the integral indicator and provides the use of a discriminant model based on the principles of the Basel Committee on Banking Supervision. Instead, in foreign practice, complex methods are predominantly used: CAMELS, PARSEL, MEMO RISK, etc. Their significant advantage over the methods used in Ukraine is the calculation of a wide range of qualitative indicators, namely: business reputation of the borrower; the quality of enterprise management; state of affairs and level of development of market infrastructure, dynamics of economy branches of, etc.

Nowadays in Ukraine, according to the approval of the relevant legal acts, there is an improvement in the methodology for assessment the creditworthiness of the borrowing companies.

However, conducted analysis has shown that there is a need for its further harmonization with international standards taking into account national characteristics. First, this concerns the deepening of the scientific substantiation of the process of determining the classes of borrowing enterprises. Secondly, it concerns the introduction of quality indicators evaluation and their transfer to quantitative equivalents. Thirdly, further optimization of individual indicators used in the system of assessing financial condition of borrowing companies.

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## WAYS OF IMPROVEMENT ASSESSMENT METHODS OF THE CREDITWORTHINESS OF ENTERPRISE BORROWER IN UKRAINE

### Summary

The determination of creditworthiness and the main goal of its assessment were explained in the study. The state of banking development depends on quality estimation the creditworthiness methods. The analysis of methods has showed the differences in domestic and foreign approaches. Main advantages of foreign methods are highlighted over Ukrainian ones. The following research describes different means of definition of credit risk size from active banking operations by Ukrainian banks. The scientific novelty of the work is to develop proposals for the use of new tools and approaches to improve existing methods of assessing the borrower's creditworthiness by domestic commercial banks. A number of recommendations to improve the process of assessment the creditworthiness of enterprise borrower in Ukraine have been provided.

Keywords: creditworthiness, solvency, creditor, borrower-legal entity, rating estimation, complex method, model of calculation of integral index.