

Features of enterprises solvency modelling in agriculture, forestry and fishery

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The article is sanctified to the pressing questions of modelling of enterprises solvency. The methodical sequence of evaluation of solvency of enterprises of Agriculture, Forestry and Fisheries is offered.

Solvency – is one of the conditions of arising and implementation of credit relations between the bank (lender) and businesses (debtor) concerning the provision of loans to the lender under its return in the corresponding period with interest payments.

An important step in credit analysis is the evaluation of financial condition of the debtor by commercial bank, on the basis of which its credit grade is determined.

The bank assessment of the financial condition of the legal entity (excluding banks) granted a loan by calculating the integral indicator of the financial condition of the debtor – legal entity.

The bank calculates the integral index using multivariable discriminant model as follows:

$$Z = a_1 \times K_1 + a_2 \times K_2 + a_3 \times K_3 + a_4 \times K_4 + a_5 \times K_5 + \dots + a_n \times K_n - a_0, \quad (1)$$

where Z – integral indicator;

K_1, K_2, \dots, K_n – financial ratios determined on the basis of the financial statements of the debtor – legal entity for a large or medium enterprise;

a_1, a_2, \dots, a_n – parameters determined by weight and capacity of the financial coefficients and annually updated by the National Bank on the basis of the financial statements of debtors – legal entities.

In calculation of the integral index the bank takes into account the belonging of the enterprise in accordance with the legislation of Ukraine to large, medium or small type of economic activity.

Model of calculation of integral indicator of the financial condition of the debtor – legal entity for a large or medium enterprise of such a type of economic activity as agriculture, forestry and fishing (section A, sections 01-03):

$$Z = 1,3 \times K_3 + 0,03 \times K_4 + 0,001 \times K_5 + 0,61 \times K_6 + 0,75 \times K_7 + 2,5 \times K_8 + 0,04 \times K_9 - 0,2. \quad (2)$$

After determining the model of integral index, financial ratios are calculated according to financial statements.

Class of debtor – legal entity is determined depending on the value of the integral indicator with consideration of the enterprise value, the highest class of debtors is 1, the lowest – 9.

Thus, assessment of creditworthiness is necessary for the decision to grant the loan and its repayment justification.