Chapter 8
Scoring Modeling in Estimating the Financial Condition of Russian Agro-Industrial Companies

Oleg Y. Patlasov
Omsk Regional Institute, Russia

Olga K. Mzhelskaya
Omsk Humanitarian Academy, Russia

ABSTRACT

The chapter presents the authors' estimations according to the scoring modeling techniques; also, internationally spread models of bankruptcy forecasting are systematized. Advantages and disadvantages of dynamic modelling methods as applied to financial condition assessment are presented here. Methodological problems of financial modelling are explained here in detail. Regression, logit-regression, and discriminant models are built on the basis of data on the Rosselkhozbank and Sberbank of Russia regulations, taking into account the agrarian specifics of organizations and regional specificity of the Omsk region. An attempt has been made to balance the simplicity of calculations and the accuracy of predictions. Graphs, to be used for express analysis, are constructed on the basis of two core financial indicators.

INTRODUCTION

Nowadays managers' tasks include not just optimal combination of production factors, based on the knowledge of production technology and own organizational capabilities, but also on taking into account the current marketing situation, financial analysis and then making the right managerial decisions. Success of entrepreneurship is thus predetermined by natural and technological factors, and also organizational and sociopolitical factors and finally, by the variety of business risks. Contemporary management requires the knowledge of bankruptcy diagnostics, business financial position assessment, its operational prospects, possible actions of creditors, internal opportunities for debt restructuring etc.

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Depending on the economic analysis objectives, attention can be focused on the following aspect: company's liquidity and debt service indicators, important (for creditors); profitability and equity in their dynamics (for shareholders); labor costs, volume and efficiency of capital expenditures (for labor analysts); accuracy in calculations and payment of taxes (for public authorities' representatives). Arbitration managers should become convinced in the absence of premeditated and fictitious bankruptcy, and for this they should assess company's real net assets, the extent of overdue debts etc., the execution of the already announced court decisions. From the standpoint of managers, financial analysis and managerial accounting are management function; and from the standpoint of competitors' comparative analysis, economic analysis is part of benchmarking.

In the framework of economic analysis, the following forms of comparative analysis have become the most common:

1. Comparative analysis of financial ratios of the given economic subject with the average industry indicators.
2. Comparative analysis of financial indicators with the related data from competing enterprises.
3. Comparative analysis of financial indicators of separate structural units and separate divisions of a legal entity (its responsibility centers).
4. Monitoring of reporting according to the planned and/or regulatory financial indicators.

It is always easier to assess the merits and bottlenecks of any official analysis method in scientific terms, however, in practical terms, it is always not subject to correction because all corrections immediately become the prerogative of the official body that has approved and imposed this method. Complex methods of analysis are indisputably more labor-consuming, but they are necessary for organizations themselves, namely, for their more grounded managerial decision-making, whereas for external users (tax revenue offices, creditors, banks etc.) it is necessary to conduct more punctual analysis according to the already approved and well established methods.

The currently used methods of the organizations' financial condition analysis all have a serious drawback: their conclusions are often based only on the accounting reports' data, thus, they do not take into consideration the current stage of a company's life cycle and/or its potential future situation. For proper managerial decisions, it is advisable to conduct system analysis which includes, in addition to assessing the financial state of an organization, the current state of the external environment and the human factor too. The maximum effect from the conducted diagnostics is achieved when this diagnostics is of complex character, however, such procedures are, of course, much more challenging since they are time- and cost-demanding.

WESTERN BANKRUPTCY DIAGNOSTICS TOOLKIT

Different methods of predicting bankruptcy forecast various types of crises and, accordingly, estimations obtained with their help are also very different. The choice of specific methods is prescribed and adjusted in accordance with the specifics of a particular industry/branch in which the organization operates. As a result, a large number of different models for bankruptcy forecasting have been developed.

Financial analysis models differ depending on the research principles and analysis priorities. The key of them are as follows: