## Galyna M. Azarenkova<sup>1</sup>, Ganna V. Ilgovska<sup>2</sup> DETERMINATION BASICS OF THE MANAGEMENT CRITERIA OF FINANCIAL CAPABILITY OF AN ECONOMIC AGENT

The importance of criteria definition regarding the management state of economic agent's financial capability is proved. The framework for the assessment of different criteria usage practicability for monitoring the management state of economic agent's financial capability is demonstrated. A matrix approach to the selection of criteria for the state of economic agent's financial capability management is suggested.

Keywords: information; criterion; monitoring; management; financial capability; economic agent.

## Галина М. Азаренкова, Ганна В. Ільговська ВИЗНАЧЕННЯ УПРАВЛІНСЬКИХ КРИТЕРІЇВ ФІНАНСОВОЇ СТІЙКОСТІ ЕКОНОМІЧНИХ АГЕНТІВ

У статті доведено важливість визначення критеріїв стану управління фінансовою стійкістю економічного агента. Обґрунтовано та розкрито основи встановлення доцільності застосування різноманітних критеріїв для визначення стану управління фінансовою стійкістю економічного агента. Запропоновано матричний підхід до вибору критеріїв з метою розкриття стану управління фінансовою стійкістю економічного агента.

**Ключові слова:** інформація; критерій; моніторинг; управління; фінансова стійкість; економічний агент.

Форм. 1. Табл. 1. Літ. 11.

## Галина М. Азаренкова, Ганна В. Ильговская ОПРЕДЕЛЕНИЕ УПРАВЛЕНЧЕСКИХ КРИТЕРИЕВ ФИНАНСОВОЙ УСТОЙЧИВОСТИ ЭКОНОМИЧЕСКИХ АГЕНТОВ

В статье доказана важность определения критериев состояния управления финансовой устойчивостью экономического агента. Обоснованы и раскрыты основы установления целесообразности применения различных критериев для определения состояния управления финансовой устойчивостью экономического агента. Предложено матричный подход к выбору критериев состояния управления финансовой устойчивостью экономического агента.

**Ключевые слова:** информация; критерий; мониторинг; управление; финансовая устойчивость; экономический агент.

**Introduction.** The analysis of economic entity functioning and its economic activity management state in particular is impossible without application of different criteria. Such criteria allow us having a general idea about the trends of an investigated economic agent's activity, as to embody its characteristic features within individual trends, defined by the financial and economic relations with other economic agents. Moreover, the variety of the criteria used is not always able to provide a definite outcome that leads to the definition of the usage possibility of certain criteria according to the consideration of conditions and peculiarities of economic activities from the view point of the investigated economic agent. The above contributes to the actuality of the chosen research direction, its complexity, the difficulty of its solution and its practical importance.

<sup>&</sup>lt;sup>1</sup> Kharkiv Institute of Banking, University of Banking of the National Bank of Ukraine.

<sup>&</sup>lt;sup>2</sup> "New Systems AM" Kharkiv International Airport, Ukraine.

Latest research and publications analysis. In general, the issue of analysis and multiplicity of the criteria characteristics review regarding the definition of economic agent's financial capability is a subject of a considerable number of scientific works. Among such investigations we can mention the works of M.I. Korobov (2000), M.S. Kravchenko (2010), D.L. Newman and L.D. Davis (2006), K.V. Orehova (2008), T.O. Smirnova and K.K. Usatyak (2011), S. Terzi and S. Cavalieri (2004), and other scientists.

The existing set of numerous criteria is an evidence of:

- on the one hand, the difficulty and ambiguity of possible visions of economic agents' stability under different conditions of activity and its particular directions;

- on the other hand, permanent interest of scientists to this problem that is provided by different meanings of economic agents' financial firmness during their business activity implementation, also considering the economic development of a region, sector, and state in general.

Besides, it is necessary to notice that the above research studies revealing the economic agent's financial capability and the corresponding management state also defined the possibilities of some criteria grouping, that in general allow finding the practicability of their usage. Moreover, for example, the works of S. Terzi and S. Cavalieri (2004), W. Ho, X. Xu and P.K. Dey (2010) identify the possibilities of such criteria usage in accordance with some stages that require certain management decision making. Despite this, we argue that there is a lack of a comprehensive approach to the definition of some criteria usage regarding economic agent's financial capability which would foresee the employment of some economic dynamic consideration principle, important not only for improving the management state of an economic agent's financial capability, but also for security protection of its development in general (Kuzemin and Lyashenko, 2008).

Thus, as the **objective** is to determine the practicability of some criteria usage regarding the management state of economic agent's financial capability. The task of this research is the analysis and generalization of the foundation basis to accomplish the above objective.

**Key research findings.** First of all, it is interesting to note that management of economic agent's financial capability is impossible without monitoring the problematic aspects and determination of actions on their elimination. Hence, there is a need to realize such monitoring functions as:

- the cognitive function which allows expanding the existing presentation of a monitoring object that after all contributes to reasonable managerial decisions;

- the supervisory function, on the basis of which it is possible to track changes in the monitoring object's state and that allows controlling the influence of external and internal factors on the state of management of economic agent's financial capability;

- the control function, which in general defines monitoring as an integral part of management for further achievement of the investigated economic agent's defined stability;

- the forecast function, which facilitates the formation of adaptive actions on the management state of economic agent's financial capability.

Simultaneously, it shall be understood that tools, used for such aims of monitoring (activity indicators, analysis coefficients etc.) not only reveal the management state of economic agent's financial capability but promote the formation of influences on such a state. However, it is necessary to take into account the indicators of activities and different coefficients within the functioning analysis of the economic agent, from the point of view of its financial capability management which can be generalized by some criteria that define the importance of practicability of different criteria usage in improving the management of economic agent's financial capability. Defining the practicability of different criteria usage, no less important are the principles of the corresponding monitoring. Also, crucial is the question of the peculiarities of this monitoring implementation.

Based on the existing results of the monitoring and the main stages of its implementation (monitoring, information accumulation, information processing, analysis and forecasting) (Arzhevitin, 2010; Puhachova, 2007), it shall be noted that among the key drivers of management monitoring of economic agent's financial capability, the key principles of monitoring compliance are:

- the principle of analytical basis increased for managerial decisions;

- the principle of information reduction (non-admission);

- the principle of different indicators multiple usage, in particular, for the determination of management state of economic agent's financial capability;

- the principle of coherence between some monitoring indicators,, which reveal the management state of economic agent's financial capability;

- the principle of monitoring openness, which doesn't limit the possible usage of different indicators and coefficients while analyzing the management state of economic agent's financial capability;

- the principle of structuring and hierarchy, which defines the possibility of various indicators consideration of the used monitoring as a whole regarding the analysis and decisions of management of economic agents.

The abovementioned demonstrates that in general the monitoring principles can be the basis for establishing different criteria usage for analysis of financial capability. This is based on:

- on the one hand, the examined monitoring principles being mainly directed at consideration of the criteria, used in the investigation of management state of economic agent's financial capability;

- on the other hand, the presence of different criteria for the analysis of management state of economic agent's financial capability emphasizing the presence of many external and internal factors of influence on the management of economic agent's financial capability.

While using monitoring as an effective tool in management analysis of financial capability, its stages shall be considered, where an exceptional moment for the practicability establishment and different criteria use regarding the economic agent's financial capability, and this can be considered as information processing.

At that, as the key signs of general practicability of different criteria usage for management of economic agent's financial capability, first of all, shall be considered:

- the transparency of the received information that foresees the presence of a close relationship between the main stages of monitoring and the procedure regard-

ing the practicability establishment of different criteria usage of the management of economic agent's financial capability;

- the relevance of the used information and the degree of coherence and practical importance of the received information with various conditions of management;

- the information pertinence that determines the usefulness degree of the used information for management decisions on economic agent's financial capability in the total volume of the received information;

- the adequacy of the received information processing, in accordance with which are used such methods of primary information processing which allow defining new knowledge for more effective management of the observed economic agent's financial capability.

So, the monitoring shall be considered as an integral part of operations sequence. This is determined by the fact that monitoring shall consider the factors of external and internal environments influencing the economic agent's functioning in general. So, in this case monitoring serves as a connecting element in the system establishing practicability of different criteria usage for the discovery of financial capabilities.

To generalize the procedures it is necessary to consider monitoring stages, where, as shown above, for the immediate establishment of practicability of different criteria usage, processing and analysis of the received information is important. It shall be noted that for the implementation of such monitoring stages as processing and analysis of the received information different formalized methods are used, which are (Synyuhina, 2011):

- external and internal factors influencing economic agent's financial capability. In particular, the formalized methods of processing and analysis of the received information, considering the need for management of economic agent's financial capability are the methods of statistical analysis. First of all, it is necessary to mention here correlation and regression analysis. They allow determining the stage and the significance of various external and internal factors influence on management of economic agent's financial capability, and therefore they can be considered as the first step in establishing different criteria for management of economic agent's financial capability. The essence of this step consists in the fact that it enables organizing the analysis of effecient conditions of the economic agent under study;

- various aspects of economic agent's activity. The importance of such a stage in practicability establishing of different criteria usage for management is determined by the fact that the determination of criteria for management analysis of financial capability is necessary to establish the economic agent's ability to cover its obligations;

- various components of mobility of economic agent's financial flows, determined in accordance with the comparison of size and structure of the liabilities of the investigated subject that can be considered as complementary to the abovementioned stage of definition of various aspects of economic agent's activity. It shall be added that both the research of various aspects of economic agent's activity, and various components of its financial flows mobility are directed at revealing the structure of economic agent's trade and financial flows.

Concurrent with it, proving the practicability of different criteria usage for determining the management state of economic agent's financial capability, it is necessary to pay attention to the components of the organized analysis of such criteria. In particular, it concerns considering:

- the time limits of using certain criteria, where it is possible to select short, medium and long periods of economic agent's functioning, and therefore some types of criteria for the analysis organization of economic agent's management state;

- the conditions for the implementation of the purposes set by the investigated economic agent, where, first of all, it is the necessary to emphasize the need to determine the economic development conditions for both a country in general, and for a specific economic agent by means of selecting the most agreeable criteria for the analysis of management state of financial agent's economic stability under the investigated conditions;

- the possibilities of the set purposes achievement by management, which according to time limits shall be distributed at various management levels, all influencing on the economic agent's financial capability and where particularly should be outlined: urgent decisions, decisions on medium- and long-term perspective;

- management of decisions riskiness regarding the economic agent's financial capability, where it is necessary to distinguish the decisions from the perspective of: extreme pessimism, extreme optimism and optimal management decisions;

- the sources of financial resources of individual economic agents for the implementation and organization of economic activity.

According to the plurality in examination of some criteria concerning the determination of their usage practicability, first of all, it is necessary to generalize this plurality. It is suggested to use here the matrix approach, which allows:

- firstly, specifying various signs for the justification of some criteria choice determining their usage practicability for the management of economic agent's financial capability. From the point of view of management improvement, it allows determining the existing conditions of using different criteria, thus contributing to the development of the unified approach to establishing the practicability of employing certain criteria in management of economic agent's financial capability;

- secondly, taking into account the existing connections between specific signs regarding the selection of different criteria. Being based on the importance of management improvement of economic agent's financial capability, it promotes the most appropriate criteria, considering specific conditions (signs) of their usage.

As an example of the matrix approach usage in some criteria consideration defining their practicability for management of financial capability we shall establish their usage time limits and the used type of management concerning the riskiness degree of management decisions of economic agent's financial capability.

For the realization of the abovementioned matrix approach we initially need to specify the components of the selected signs for the determination of different criteria in the management of economic agent's financial capability.

So, from the point of view of these signs, as a temporary "border" of its application can be distinguished such components as short, medium and long-term functioning of the economic agent.

At that, the components on the basis of management type according to the riskiness of decisions regarding the management of economic agent's financial capability are defined as management on the basis of extreme pessimism, management on the basis of extreme optimism and management with optimal management decisions, but such that are so under current circumstances only.

The general view of the matrix determining the multiplicity of separate criteria concerning the definition of management of economic agent's financial capability is reflected in Table. 1. At the intersections of the matrix, which reveals the whole multiplicity of separate criteria, between different signs of possible criteria the following ones are found. So, the choice of criteria for the management of economic agent's financial capability is carried out on the basis of consideration of these criteria properties concerning the possibilities of generalization.

developed by the authors				
Criteria signs		time limit of the criteria introduction		
		short-term period	medium period	long-term period
type of management by the level of decisions riskiness	level of extreme pessimism	criteria of minimum, maximum	criteria of the taken balance	maximal and minimal criteria
	level of extreme optimism	criteria of minimum, maximum	criteria of the taken balance	maximal and minimal criteria
	level of optimal management decisions	criteria of minimum, maximum	criteria of the taken balance	combinations of extreme pessimism and extreme optimism

Table 1. Matrix determining the plurality of some criteria considerationregarding the disclosure of the management state of the economicagent's financial capability by separate signs of such criteria,

The practical realization of the proposed analysis concerning the selection of criteria shall be carried out in economic agent's structural units that track the current activities of this economic agent and plan its further development. At that, if in the short-term perspective the correspondent management decisions can be placed on the management of the lowest level (employees, engaged in the analysis of economic activity within some directions of its activity), but in the medium and, above all, in the long-term perspective, such decisions shall be made by top management of the economic agent responsible for current activity and planning of future development directions. Besides, to make long-term decisions, joining the results within separate directions concerning management of the economic agent's financial capability is needed (regarding the solvency of the economic agent, the support of its liquidity level according to the existing obligations towards contractors etc.) under command of top managers.

The main aim of the economic agent's structural units engaged in tracking the current activity of the given economic agent and planning of its further development on the basis of achieving effective management of financial capability shall consist:

- firstly, in warning of the negative factors emergence in management of financial capability on the basis of the analysis of different indicators of its activity and discovery of negative changes in its dynamics;

- secondly, in forecast calculations concerning possible dynamics of the indicators of economic agent's activity that will reflect the activity of the used management decisions on the state of economic agent's financial capability; - thirdly, in the development of management decisions concerning management improvement of the economic agent's financial capability for different management strategies.

It is possible to discover other matrices according to the observed criteria signs. Then, for establishing the practicability of some criteria usage regarding the management state of the economic agent's financial capability, it is necessary to observe the whole exponential population of the possible matrices. Usually, the basis of such observing can be discovered by choosing the most important (from the point of view of managing financial capability and development) criteria signs, the distribution of the built matrices by such signs and the consistent observing of possible usage of the corresponding criteria. In the formalized appearance it defines the comparison of many criteria signs to many criteria on each step of the built matrices comparison for the analysis concerning the practicability of different criteria use for management of financial capability.

$$\{ok_1, ok_2, \dots, ok_{ni}\}_i \to \{k_1, k_2, \dots, k_{mi}\}_i,$$
 (1)

where ok – the signs of criteria for the matrix building of practicability establishing for different criteria of management state of the economic agent's financial capability. The number of such signs *ni* on each *i* stage of the plurality analysis of the built matrixes defines their critical number concerning the plurality of the corresponding number of criteria *mi*; k – the criteria that can be effectually used on each *i* stage of the plurality analysis of the matrices. It is necessary to note that on each *i* stage of the analysis narrower become both the plurality of the investigated matrices, and the plurality of the criteria. It is conditioned by the fact that the same criteria can be used concerning the discovery of different signs of such criteria.

So, on the basis of the abovementioned it shall be emphasized that generalizing the practicability of different criteria purposely the analysis of management of the economic agent's financial capability can become effective.

The main components of this approach is the necessity of considering the influence factors for financial capability, and also different aspects of economic agent's activity, mobility of trade and financial flows.

Influence factors can be observed accordingly as to the existing economic and political situation, in which the economic agent exists. The generalization of different aspects of financial capability, as emphasized above, can be defined according to the management of financial capability, as: the indicators of financial responsibility, the indicators showing the ability of the economic agent to cover its liabilities and the indicators that allow comparing the growth and the structure of actives and passives of the investigated subject.

According to the abovementioned, it is possible to characterize the main relations of the key stages generalizing the operations sequences in establishing different criteria for determining the management state of the economic agent's financial capability.

Simple criteria are used here for the analysis of management state of the economic agent's financial capability in those situations, when a decision is made on the short-term perspective and in the stable situation. More complex criteria are used for the decisions concerning the analysis of management of financial capability in the situations, when such a decision is taken on the long-term perspective and unstable situations. In more difficult situations an effective solution is in making such decisions on the basis of quality and quantity criteria consideration. Such an approach to different criteria usage, in particular, for management financial capability, considers, first of all, the financial-economic component taking of managerial decisions. In the longterm perspective such administrative decisions and their consequences can't be estimated in advance.

Generally, the basis for establishing different criteria practicability for the management of the economic agent's financial capability can be reduced to:

- the necessity of monitoring as an inherent management component;

- the practicability of generalizing and plurality of the used criteria in managerial decisions regarding the economic agent's financial capability on the basis of the abovementioned matrix approach;

- the importance of maintaining the key conditions for the key stages of the main operations for financial capability.

**Conclusions.** In this work we observe the key aspects in the definition of the criteria for the management of the economic agent's financial capability. Discrete factors on grounding the possible criteria choice are defined. In particular, the practicability of the criteria of management state of the economic agent's financial capability, the necessity to use monitoring as an inherent part of management are suggested. Along with it, we also define the key stages and the general operations sequence in practical establishment of different criteria usage for the management of the economic agent's financial capability. So, the main aim of this work is systemic and complex.

A matrix approach for the definition of criteria for the management of financial capability has been offered.

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