

# A FINANCIAL AND ECONOMIC ACTIVITIES EFFECTIVENESS EVALUATION AS A CONDITION OF CORPORATE MANAGEMENT DECISIONS MAKING

Nataliia BIELIAIEVA<sup>1</sup>

*Kyiv National University of Trade and Economics, Ukraine*

**Abstract.** *The purpose* of the paper is to substantiate, on the real figures, the need for enterprise's financial and economic activities analysis as a condition of management decisions making to achieve the success of the company. *Methodology.* The research is based on a comparison and analysis of data from the organization top management. So using matrix analysis in the paper, the financial and economic activities effectiveness is evaluated. Based on these calculations, it is possible to make conclusions about the necessity of an identified management decisions regarding the future activity of the company. *Results.* Daily managers of various function levels accept hundreds and thousands of decisions regarding seemingly slight problems of the organization in general. At the same time, every such a decision, especially relating to the activity of the whole structure, should be clearly justified. Such a need stems from the fact that every decision leads to certain consequences. If there is a need to make a decision relating to the future of the enterprise (e.g., embodiment, reorganization, etc.), it should be based on the data of the entire structure. And that is generally very difficult to do. Many factors complicate the possibility of comprehensive evaluation of the company's activity. At the same time, analysis of basic indicators will provide the specialist with some directions according to which the priority of the analysis can be indicated and appropriate management decision can be made. *Practical implications.* It is built an effectiveness matrix of financial and economic activities of the enterprise. Analysis of financial and economic activities makes it possible to design necessary strategic and tactical plan for the enterprise development, revealing its reserves of production efficiency increasing. So the aim of the paper is the assessment of the effectiveness of financial and economic activities of the company on the base of matrix analysis as a condition of adoption of necessary management solutions for the successful functioning of a company. *Value/originality.* The obtained data provide a better understanding of the need for enterprise's financial and economic activities analysis. So the main results of the evaluation and proposals of management decisions under described situation are determined.

**Key words:** management decisions, financial and economic activities of enterprise, matrix analysis, evaluation, economic results.

**JEL Classification:** C51, D70, G30

## 1. Introduction

Daily managers of various function levels accept hundreds and thousands of decisions regarding seemingly slight problems of the enterprise (organization) in general. At the same time, every such a decision, especially relating to the activity of the whole structure, should be clearly justified. Such a need stems from the fact that every decision leads to certain consequences. If there is a need to make a decision relating to the future of the enterprise (e.g., embodiment, reorganization, etc.), it should be based on the data of the entire structure. And that is generally very difficult to do. Many factors complicate the possibility of comprehensive evaluation of the company's activity. At the same time, analysis

of basic indicators will provide the specialist with some directions according to which the priority of the analysis can be indicated and appropriate management decision can be made. The relevance of such analysis is predetermined due to the fact that such evaluation will provide the evidence of the financial and economic activities effectiveness of the entire enterprise. And based on this, you can make defined management decisions. Analysis of financial and economic activities makes it possible to design necessary strategic and tactical plan for the enterprise development, revealing its reserves of production efficiency increasing. So the aim of the paper is the assessment of the effectiveness of financial and economic activities of the company on

*Corresponding author:*

<sup>1</sup> Department of Management, Kyiv National University of Trade and Economics.

E-mail: nswork@ukr.net

the base of matrix analysis as a condition of adoption of necessary management solutions for the successful operation of a company.

## 2. Analysis of recent researches and publications

Like any scientific problem, quite a lot of authors examined the financial and economic activities effectiveness evaluation in certain aspects. For example, H. Savytska (1999) during the analysis of economic activities highlights certain stages that should be taken and allocates financial analysis as a part of a comprehensive analysis of enterprise's economic activities. A. Kovalev and V. Pryvalov (1999) in their teaching determine the aim of the financial and economic activities techniques analysis not as in terms of identifying and assessing the financial condition of the company but in the perspective of information gathering for conducting work that should be directed towards its improvement. Such scientists as N. Rusak and V. Strazhev (1999) consider in their work not only basic tasks and stages of the enterprise's financial and economic activity analysis but also tools, with the help of which it is possible to implement it. Ye. Mnykh has described an interesting method (1998). It is based on a systematic analysis of financial statements – as a basis for comparison, the author used a complex regulatory model of financial sustainability of the enterprise, which connects different analytical ratios.

Beside this, to methodological approaches to the analysis of financial and economic enterprises activity are dedicated works of such scientists: Y. Balabanov (2009), Y. Blank (2007), V. Ivakhnenko (2004), A. Sheremet (2005) and others. However, as it can be seen, the defined problem was really studied thoroughly in the last century, at present times new researches on the matter are absent or essentially duplicate the aforementioned scholars. That is why this article just mentions names of the authors who were the first or the last, who actually examined outlined issues in details.

Furthermore, there is also a lot of domestic and foreign literature devoted to the management decision-making subject. A significant contribution to the study of management decisions' problems was made by Yu. Brykhkem, L. Hapensky (2004), Yu. Honcharov (2014), V. Sopko, M. Benko, O. Honcharenko (2016), H. Ibarra (2015), A. Tebekyn (2013), and many others. The nature, tasks, objectives, and functions of management decisions were investigated by scientists. Also, there was identified the place of management decisions within the enterprise management system in general and considering management specifics. However, the problem still needs further researches; including the problem of the financial and economic evaluation of activities effectiveness as a condition of management decision-making process that still does not have proper justification.

## 3. Calculations of activities effectiveness evaluation

The main factors that are usually analysed in case of determining the effectiveness of financial and economic activities are, firstly, the execution of the financial plan and replenishment, as it necessary, its own working capital from profit and, secondly, the rate of turnover of working capital (assets). At the same time, we cannot consider these concepts separately. Implementation of the financial plan ensures continuous activities of the organization. Eventually, incessant work means that the company successfully operates, has demand for its services, and thus it is profitable and receives profits. Income presence gives the possibility to replenish its own working capital that expands the boundaries of demand satisfaction and, therefore, the market. During the extension of the target market, the turnover of current assets, under normal conditions, should increase. Therefore, the organization will get its income for services (products) earlier and can once again invest money either in activity expansion or in modernization (upgrading) of its assets; this ensures a complete cycle of the organization activity process.

In general, the literature offers various methods of evaluating the effectiveness of financial and enterprise's economic activities. Each of them has certain advantages and disadvantages, some direction towards the analysis of determined block factors. We can also say about cost-effectiveness that relates to an analysis of the costs – money, people, time, materials, etc. – that are expended as a part of a program in comparison to either their benefits of their effectiveness. And, of course, different analytical or mathematical approaches also have limitations. In this paper, the financial and economic activities' effectiveness evaluation on the basis of matrix analysis is calculated. Based on these calculations, it is possible to make conclusions about the necessity of an identified management decisions regarding the future activity of the company. Despite these limitations, the methods used in the present study do provide a means to understand the general pattern of relative cost-effectiveness and provide a meaningful metric to gauge immediate outcomes. So the assessment gives us essential information about how our company is working and about the extent, to which we are meeting our activity goals.

This is submitted in Table 1.

As it can be seen, the raw data for the matrix analysis of the financial and economic enterprise's activities effectiveness are represented by following indicators: income (sales revenue), expenses, and net profit (which are indicators of Financial Performance Report (Statement of Comprehensive Income)). Or it is called also Profit and Loss Statement or Income Statement. And by the total value of assets, equity, and the number of employees that are presented in the Balance-Sheet

Table 1

**Initial data for the matrix analysis of the financial and economic activities effectiveness evaluation**

№	Indicator	Symbol	Period, UAH thou.	
			basic	reporting
1	Income (sales revenue)	I	272,5	327,4
2	Expenses	Exp	240,5	271,8
3	Net profit	NP	31,5	37,1
4	Equity	E	197,2	159,9
5	Total assets	A	537,8	610,5
6	Average number of employees, persons	En	8	10

Source: option data from the author based on information from the organization top management

(Statement of financial position). In fact, those are the main basic indicators characterizing the company. These are general criteria that should be used as a basis for developing evaluative questions through the full range of evaluations topics. Analysis of indicated indices in dynamics (e.g. elements of horizontal comparative analysis, which enables to determine the deviation (absolute and relative) of the actual level of the analysed indicators from basic (planned, last period, medium, etc.) level) or in relation to each other and gives basic information about the state of the organization (such as productivity, profitability (indicators) activities, availability of means, dynamics of enterprise's activities, etc.).

One approach to improving company's activity is outcome assessment – the process of providing credible

evidence that a top manager's objectives have been obtained.

For the matrix analysis and construction of appropriate matrix, it is needed to conduct intermediate calculations. They are submitted in Table 2.

Index growth (see "Index" in Table 2) for each indicator is calculated as follows:

$$I_i = \frac{\text{Indicator}_1}{\text{Indicator}_0}, \quad (1)$$

where

Indicator<sub>1</sub> – an indicator of the reporting period;

Indicator<sub>0</sub> – an indicator of the basic period.

Usually, for the most complete vision of the situation (or for the adoption of management decisions that have an impact on the strategic development of the organization), there is a need to use data samples for at least four consecutive years. In this case, it is really observed dynamics of indicators change (if by this time it had been taken certain management decisions at the level of middle or top management, it is important to include information about the nature of these decisions. The change of particular indexes may indicate the effectiveness or negative consequences of some decision).

Nowadays the application of matrix analysis of indicators is a pretty promising direction in the analysis of the funding efficiency and the use of the enterprise's property (assets). Of course, depending on the specific situation, conditions of the organization activity may vary the methods, techniques of analysis, even a set of indicators (including their number) – depending on

Table 2

**Interim calculations for the construction of the financial and economic activities efficiency matrix**

№	Indicator		Period		Index
			basic	reporting	
1	Net income (net profit) per: NP				
	– 1 UAH of income (or sales revenue)		0,116	0,113	0,974
	– 1 UAH of expenses		0,131	0,136	1,038
	– 1 UAH of equity		0,160	0,232	1,45
	– 1 UAH of total assets		0,059	0,061	1,034
2	– one employee of the enterprise		3,938	3,710	0,942
	Income (or sales revenue) per: I				
	– 1 UAH of expenses		1,133	1,205	1,064
	– 1 UAH of equity		1,382	2,048	1,482
	– 1 UAH of total assets		0,507	0,536	1,057
3	– one employee of the enterprise		34,063	32,74	0,961
	Expenses per: Exp				
	– 1 UAH of equity		1,220	1,70	1,393
	– 1 UAH of total assets		0,447	0,445	0,996
4	– one employee of the enterprise		30,063	27,18	0,904
	Equity per: E				
	– 1 UAH of total assets		0,367	0,262	0,714
5	– one employee of the enterprise		24,65	15,99	0,649
	Total assets per: A				
	– one employee of the enterprise		67,225	61,05	0,908

Source: the author's calculations

what kind of information the structure wants to get from this analysis. The matrix model that reflects the results of matrix analysis is a rectangular table, elements (cells) of which reflect the connections between objects (indicators) of analysis (Table 3).

As it can be seen from the reduced matrix, a column “Expenses” is calculated as the inverse indicator. In this case, a “Growth Index” for the indicator “Expenses” is understood as “Reduction Index” – because it is desirable expenses to decrease, while the value of other indicators to increase. So, the calculation is also carried by Formula (1), but it is used the inverse calculation of its indices. As a formalized form, it can be shown as follows (Table 4):

An indicator that characterizes the efficiency of organization’s financial and economic activities calculated as follows:

$$E_f = \frac{\sum I_i}{I_n} \quad (2),$$

where  $I_i$  – a growth index of the  $i$ -s indicator;  $I_n$  – the total number of estimated growth indices (see Table 3).

An effective one is considered such activity if  $E_f > 1$ .

The size of the resulting generalized indicator is affected by many factors (in this case, indicators used in the analysis). For the analysed situation in this article, let us calculate the efficiency of financial and economic activities:

$$E_f = \frac{0,974 + 1,038 + 1,45 + 1,034 + 0,942 + 1,064 + 1,482 + 1,057 + 0,961 + 0,718 + 1,004 + 1,106 + 0,714 + 0,649 + 0,908}{15} = 1,007$$

Overall, the effectiveness of financial and economic activities of the enterprise is calculated by Formula (2) and is greater than 1; but the result shows that the efficiency of financial and economic enterprises activity increased by only 0.7 points.

In this case, looking at the calculations, it should be noted that management of the enterprise must pay attention to the negative change in such factors as:

- Return on sales (Section 1);
- Return on staff (Section 1);
- Productivity per employee (Section 2).

To the extent that specific evaluations have specific purposes that there is no one right way to conduct an evaluation and that these criteria are interdependent and not mutually exclusive, their relative meaningfulness for a specific decision-making should be assessed and trade-offs discussed in each case to ensure that key questions are addressed and to avoid unnecessary effort and expense. So based on analysis of last or considering previous results, the specialist can take some management decisions depending on a particular goal. If necessary to make further analysis, it is chosen methods, which can justify the reasons for the negative trends in indicators of the enterprise’s development. Based on the results obtained in the framework of this analysis, manager,

Table 3

**Effectiveness matrix of financial and economic activities of the enterprise**

numerator denominator	NP	I	Exp	E	A	En
NP	1	X	x	x	x	x
I	0,974	1	x	x	x	x
Exp	1,038	1,064	1	x	x	x
E	1,45	1,482	0,718	1	x	x
A	1,034	1,057	1,004	0,714	1	x
En	0,942	0,961	1,106	0,649	0,908	1

Source: the author’s calculations

Table 4

**Effectiveness matrix of financial and economic activities of the enterprise (formalized form)**

numerator denominator	NP	I	Exp	E	A	En
NP	1	X	x	x	x	x
I	$\frac{NP_1}{I_1} \div \frac{NP_0}{I_0}$	1	x	x	x	x
Exp	$\frac{NP_1}{Exp_1} \div \frac{NP_0}{Exp_0}$	$\frac{I_1}{Exp_1} \div \frac{I_0}{Exp_0}$	1	x	x	x
E	$\frac{NP_1}{E_1} \div \frac{NP_0}{E_0}$	$\frac{I_1}{E_1} \div \frac{I_0}{E_0}$	$\frac{Exp_1}{E_1} \div \frac{Exp_0}{E_0}$	1	x	x
A	$\frac{NP_1}{A_1} \div \frac{NP_0}{A_0}$	$\frac{I_1}{A_1} \div \frac{I_0}{A_0}$	$\frac{Exp_1}{A_1} \div \frac{Exp_0}{A_0}$	$\frac{E_1}{A_1} \div \frac{E_0}{A_0}$	1	x
En	$\frac{NP_1}{En_1} \div \frac{NP_0}{En_0}$	$\frac{I_1}{En_1} \div \frac{I_0}{En_0}$	$\frac{Exp_1}{En_1} \div \frac{Exp_0}{En_0}$	$\frac{E_1}{En_1} \div \frac{E_0}{En_0}$	$\frac{A_1}{En_1} \div \frac{A_0}{En_0}$	1

Source: the author’s option of writing general formulas

firstly, needs to understand the dynamics of outlined indicators and to decide the implementation of actions aimed at eliminating negative dynamics. As an example, it may be the reduction of unprofitable production (and to increase an implementation of cost-effective), improving the conditions of workers (happy employee works more willingly) and others.

#### 4. Conclusions and perspectives of further researches

The analysis of financial and economic activities efficiency shows, which areas need a special management attention (in terms of the certain management decisions

adoption to improve process and performance), makes it possible to identify the most important aspects and a weak position in the enterprise activities. Accordingly, the results answer the question what are the most important ways to improve the financial and economic situation of the company at a particular period of its activity. Thus, the main purpose of the analysis is timely detection (exactly analysis) and deficiencies elimination (adoption of certain management decisions) in the organization activity, finding reserves to improve the financial and economic situation of the company, its solvency. The condition to it is the optimal management decisions relevant to the conditions, in which the organization operates.

#### References:

- Balabanov, I. (2009). *Osnovy finansovogo menedzhmenta* [Fundamentals of Financial Management], 2 ed., Moscow, Finansy i statistika, 635 p.
- Blank, I. (2007). *Osnovy finansovogo menedzhmenta* [Fundamentals of Financial Management], 3 ed., Kiev, Nika-Tsentr, Elga, 648 p.
- Brigham, Eu., Ehrhardt, M. (2011). *Financial management: Theory and practice*, Maso, South-Western Cengage Learning, 669 p.
- Honcharov, Yu. ed. (2014). *Vyrobnychy menedzhment* [Production Management], Kyiv, Kafedra, 512 p.
- Ibarra, H. (2015). *Act Like a Leader, Think Like a Leader*, Harvard Business Review Press, 200 p.
- Ivakhnenko, V. (2004). *Kurs ekonomichnoho analizu* [The course of economic analysis], 4 ed., Kyiv, Znannia, 190 p.
- Kovalev, V. (1999). *Finansovyy analiz: Upravlenie kapitalom. Vybory investitsiy. Analiz otchetnosti* [Money Management. The choice of investments. Statements Analysis], 2 ed., Moscow, Finansy i statistika, 512 p.
- Mnykh, Ye., Buriak, P. (1998). *Ekonomichnyi analiz na promyslovomu pidpriemstvi* [Economic analysis on industrial enterprise], Lviv, Svit, 208 p.
- Rusak, N., Strazhev, V., Migun, O. (1999). *Analiz khozyaystvennoy deyatel'nosti v promyshlennosti* [Analysis of economic activity in the industry], 2 ed., Minsk, Visheytal shk, 398 p.
- Savitskaya, G. (1999). *Analiz khozyaystvennoy deyatel'nosti predpriyatiya* [Analysis of economic activity of the enterprise], 4 ed., Minsk, Novoe znanie, 688 p.
- Sheremet, A. (2005). *Metodika finansovogo analiza deyatel'nosti kommercheskikh organizatsiy* [Methods of financial analysis of commercial organizations], Moscow, INFRA-M, 237 p.
- Sopko, V., Benko, M., Honcharenko O. (2016). *Dystsyplinarna matrytsia upravlinskoi zvitnosti* [The disciplinary matrix of management reporting], Kyiv, Kyiv. nats. torh.-ekon. un-t, 456 p.
- Tebekin, A. (2013). *Metody prinyatiya upravlencheskikh resheniy* [Methods for making management decisions], Moscow, Izdatelstvo Yurayt, 572 p.

#### Наталья БЕЛЯЕВА

#### ОЦЕНКА ЭФФЕКТИВНОСТИ ФИНАНСОВОЙ И ЭКОНОМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ КАК УСЛОВИЕ ПРИНЯТИЯ РЕШЕНИЙ В ОБЛАСТИ КОРПОРАТИВНОГО УПРАВЛЕНИЯ

**Аннотация.** *Целью работы* является обоснование, на реальных данных, необходимости проведения анализа финансово-экономической деятельности предприятия как условия принятия управленческих решений для его успешной деятельности. *Методология.* Исследование основано на сравнении и анализе данных высшего руководства организации. Таким образом, используя в работе матричный анализ, была оценена эффективность финансово-хозяйственной деятельности предприятия. На основе этих расчетов можно сделать выводы о необходимости принятия определенных управленческих решений относительно будущей деятельности компании. *Результаты.* Ежедневно менеджеры различных уровней управления принимают сотни и тысячи решений относительно кажущихся незначительными проблем организации. В то же время каждое такое решение, особенно касающееся деятельности всей структуры, должно быть явно обоснованным. Такая необходимость связана с тем, что каждое решение приводит к определенным последствиям. Если необходимо принять решение, касающееся будущего предприятия (например, слияние, реорганизация и т. д.), оно должно основываться на данных всей структуры в целом.

И это, как правило, очень трудно сделать. Многие факторы усложняют возможность всесторонней оценки деятельности компании. В то же время анализ основных показателей предоставит специалисту определенные направления, в соответствии с которыми может быть выбрано приоритетное, более важное направление анализа, и/или может быть принято соответствующее управленческое решение.

*Практическое значение.* В работе построена матрица эффективности финансово-хозяйственной деятельности предприятия. Анализ финансово-хозяйственной деятельности позволяет разработать необходимый стратегический и тактический план развития предприятия, выявить его резервы повышения эффективности производства. Таким образом, целью статьи является оценка эффективности финансово-хозяйственной деятельности компании на основе матричного анализа как условие принятия необходимых управленческих решений для успешного функционирования компании. *Значение/оригинальность.* Полученные данные обеспечивают лучшее понимание необходимости проведения анализа финансово-экономической деятельности предприятия. Определены основные результаты оценки и предложения о возможности принятия управленческих решений в рамках рассматриваемой ситуации.