

## CONCEPTS, MODELS, TECHNIQUES AND PRACTICES OF ECONOMIC AND FINANCIAL ANALYSIS

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## Abstract

„Information gives you power” is the slogan that guides companies nowadays, the world competition being carried out in the field of using the most efficient information and the newest technologies and instruments of communication. The informational system of the financial- economic analysis has as purpose the satisfaction of all the information requests at the level of the society that allows a detailed information about all the activities that are developed. The modern system means the operation of a large volume of economic information from and for all the levels of activity of the enterprise. That is why, the financial and economic power of the most important companies is given by their capacity to detain, control and use information in order to reach the desired objectives.

No matter the level at which the management activity is carried out implies the exact cognition of the concrete situations from the studied unit in order to establish the complex of causes and factors that determine it, fact that claims the carrying out of an economic- financial analysis that represents a map of reality that will have to be taken into consideration in the future decisions.

*The financial- economic analysis must be approached as a discipline, profession, management instrument and preliminary process to any entrepreneurial initiative.*

**Key words:** analysis, economic analysis, financial analysis, decision-making process, financial diagnostic.

**JEL classification:** B41, D12

## INTRODUCTION

As any present process, the economic- financial analysis is submitted to the changing process. The indicators reevaluation assessment, next to the expansion of the time and space horizon, develops new capabilities and dimensions of the analysis based on historical data, statistics supplied by the accountancy.

As a discipline, the modern economic-financial analysis is a complex and rigorous activity that appeals to multidisciplinary techniques of phenomenon study that, in time and space, have a multidimensional value that submits to evaluations and interpretations through different value judgments, mainly for anticipating the clients' tendencies and expectations.

There can be identified four possible dimensions for the value of an analyzed phenomenon:

1. intrinsic value;
2. an updated value under the influence of the conjuncture factors ;
3. a real value accepted by the market at a certain moment ;
4. an anticipated value.

Exactly the multidimensional value is the one that increases the complexity degree and demands multidisciplinary techniques in the analysis activity of the financial economic phenomena.

An economic agent's evaluation of the financial – economic activities for a credit agreement is a study discipline but also a banking practice that is based on rules, principles and multidisciplinary study techniques of the phenomena that determined and/or will influence the company results and especially the reimbursement capacity.

The economic- financial analysis as a management instrument results from the need to measure. „Measuring means understanding, understanding means achieving knowledge, having knowledge means power”.

Analysis and evaluation are a necessity, not a luxury for the contemporary management. Managers must understand that if you can not measure you can not control. And if you can not control you can not administrate. Without measurement/evaluation there can not be carried out the other functions of management. From here it results the strategic importance of the evaluation

system for the organization. A good system of evaluation directs the company towards a positive and correct direction.

Analysis, as an instrument accessible to all decedents, favored the change and implicitly the human kind evolution.

Unquestionably, the economic - financial analysis is a management instrument when appears the problem of appreciation and resources measurement, including the financial ones and appealing to a bank loan.

The economic- financial analysis, as any present process, is submitted to the changing laws according to specific methods :

- reorganization, retechnologization and specialization at the level of the basic competences;
- rapid adaptation to the clients' new requests through implementing a new flexible organization, the establishment of a global logistics, the development of assistance for critical activities and the expansion of collaboration in order to capitalize the existing opportunities at the level of the world market;
- a flexible conscription that allows the successful exceeding of fluctuations or rapid modifications that appear in global the economic - financial environment.

It can be said that the modern economic - financial analysis is a discipline, a profession, a management instrument and an independent process with an antidote role of informational moderator asymmetry of the time server tendencies, reducer of moral risk that can affect the investor.

## 1. ECONOMIC AND FINANCIAL ANALYSIS - OBJECT, MAJOR CONCERNS, PERSPECTIVES OF DEVELOPMENT

Regardless of the factory's financial position, the main factor which can positively influence the running of it is the human factor, the management / the manager. Therefore, it is necessary to place real, operative, more analytical information at the management team's disposal, which will draw attention to critical points in order to intervene promptly and effectively. In providing this information, an important role is assigned to economic and financial analysis.

Economic and financial analysis is a set of concepts, methods, techniques, processes and instruments that provide treatment for internal and external information in order to formulate some relevant considerations regarding the economic and financial situation of a trader, identifying factors, causes and conditions that have caused it, as well as internal reserves to improve it in terms of efficient use of human, material and financial resources [1].

A modern definition of economic analysis has been contoured by Lionel Robbins, in 1935, which summarizes pretty well the object of the economic analysis [2]: economic analysis studies the way in which individuals or society uses rare resources for alternative uses, to meet their requirements.

Most of the contemporary economists consider their discipline such as a theory of human behavior defined by the care for satisfy their needs with the scarcity of resources. In the second half of the twentieth century was the extension economists concerns about human behavior issues, so there is an economic analysis of marriage, crime, policy, religion , etc..

Any subject which involves the human rights are now a potential object of economic analysis, so the selection of a material subject can not make distinguish between economy and other humanities and social science, but the method of analysis can.

Economic and financial analysis, as a discipline study phenomena and processes of economic and financial field, at the micro level, which in terms of studying the decomposition factors, quantitatively and qualitatively; establish causal relationships between factors, quantitative qualitative influences they have on this phenomenon: on this base, conclusions are formulated in the summary, appreciating the concrete situation of the analyzed phenomenon and proposing variants of necessary correction to ensure the amplification of positive influences and reduce or eliminate the negative influences, for print the desired, normal behavior on the phenomenon.

For example the quantification of the influences caused by factors witch compose turnover below factorial model are presented in Table. no 1.

**Table no.1. Influence of changing the use of human resources and of production recovery degree o turnover**

Nr. crt.	Specification	UM	Period		
			2006	2007	2008
1	Personal no. (Np)	pers.	296	285	258
2	Turnover (Ca)	Lei	25.823.769	23.225.272	23.072.059
3	Labor productivity ( $\overline{W}$ )	Lei/pers.	87.242,46	81.492,18	89.426,59
4	Working days no. (z)	days	278	280	278
5	Average daily productivity (w <sub>z</sub> )	Lei	313,8218	291,0435	321,6784
6	Quantifying the influence of factors		2007-2006		2008-2005
7	Np influence	Lei	- 959.667,90		- 0,7
8	$\overline{W}$ influence, in witch	Lei	- 1.638.829,1		-153.212,3
9	- z influence	Lei	- 1.220.139,88		-2.350.467,3
10	- w <sub>z</sub> influence	Lei	- 1.378.357,12		+2197255,01
11	Total	Lei	- 2.598.497		-153.213
	CA <sub>n</sub> – CA <sub>n-1</sub>	Lei	- 2.598.497		-153.213

$$Ca = Np \times \overline{W} = Np \times z \times w_z \quad (1)$$

**2007/2006**

Absolute change :

$$\Delta Ca = Ca_{2007} - Ca_{2006} = 23.225.272 - 25.823.769 = -2.598.497 lei$$

1) influence of Np change:

$$\Delta Ca(Np) = (Np_{2007} \times \overline{W}_{2006}) - (Np_{2006} \times \overline{W}_{2006}) = (285 \times 87.242,46) - 25.823.769 = -959.667,9 lei$$

2) influence of  $\overline{W}$  change:

$$\Delta Ca(\overline{W}) = (Np_{2007} \times \overline{W}_{2007}) - (Np_{2007} \times \overline{W}_{2006}) = 23.225.272 - (285 \times 87.242,46) = -1.638.829,10 \text{ lei}$$

but  $\overline{W} = Z \times_W Z$ .

2.1) *influence of z change:*

$$\Delta Ca(z) = (Np_{2007} \times z_{2007} \times w_{z_{2006}}) - (Np_{2007} \times z_{2006} \times w_{z_{2006}}) = (280 \times 280 \times 313,8218) - (280 \times 296 \times 313,8218) = 24.603.629,12 - 25.823.769 = -1.220.139,88 lei$$

2.2) influence of  $w_7$  change:

$$\Delta Ca(w_z) = (Np_{2007} \times z_{2007} \times w_{z2007}) - (Np_{2007} \times z_{2007} \times w_{z2006}) = 23.225.272 - 24.603.629,12 = -1.378.357,12 lei$$

Total change:

$$\Delta Ca = \Delta Ca(Np) + \Delta Ca(z) + \Delta Ca(w_z) = -959.667,9 + (-1.220.139,88) + (-1.378.357,12 = \\ = -2.598.497 lei$$

2008/2007

Absolute change :

$$\Delta Ca = Ca_{2008} - Ca_{2007} = 23.072.059 - 23.225.272 = -153.213 lei$$

1) influence of Np change:

$$\Delta Ca(Np) = (Np_{2008} \times \bar{W}_{2007}) - (Np_{2007} \times \bar{W}_{2007}) = (285 \times 81.492,18) - 23.225.272 = 23.225.271,3 - 23.225.272 = -0.7 lei$$

2) influence of  $\overline{W}$  change:

$$\Delta Ca(\bar{W}) = (Np_{2008} \times \bar{W}_{2008}) - (Np_{2007} \times \bar{W}_{2007}) = 23.072.059 - (285 \times 81.492,18) = -153.212,3 \text{ lei}$$

$$\text{but } \bar{W} = z \times w_z$$

2.1) influence of  $z$  change:

$$\Delta Ca(z) = (Np_{2008} \times z_{2008} \times w_{z2007}) - (Np_{2007} \times z_{2007} \times w_{z2007}) = (258 \times 278 \times 291,0435) - (285 \times 280 \times 291,0435) = 20.874.803,99 - 23.225.271,3 = -2.350.467,31 \text{ lei}$$

2.2) influence of  $w_z$  change:

$$\Delta Ca(w_z) = (Np_{2008} \times z_{2008} \times w_{z2008}) - (Np_{2007} \times z_{2007} \times w_{z2007}) = 23.072.059 - 20.874.803,99 = +2.197.255,01 \text{ lei}$$

Total change:

$$\Delta Ca = \Delta Ca(Np) + \Delta Ca(z) + \Delta Ca(w_z) = -0,7 - 2.350.467,31 + 2.197.255,01 = -153.213 \text{ lei}$$

The decrees of personal number from 298 persons in 2006 at 285 persons in 2007, and at 258 persons in 2008 has an decreasing effect on industry turnover. This effect was more marked in 2007-2006 period, when it was - 959.667,90 lei. In 2008-2007 period I observed an improvement of quantitative factor's influence, the influence on turnover is just -0,7 lei.

The decrees of labor productivity from 87.242,46 lei/pers. in first year, at 81.492,18 lei/pers. In second year analyzed cause a decrease in turnover with 1.638.829,1 lei/pers. in 2006 -2007 period, and the productivity growth in 2008 cause a decrease in turnover with 153.212,3 lei/pers. in 2007-2008 period.

The influence of working days number remains negative throughout the period of analysis, mainly due to decrease in the indicator level throughout the period of analysis.

It notes the important contribution of labor productivity in the reduction of turnover in 2006 - 2007 period, and the number of working days have a negative influence on turnover just as in 2006 - 2007, but in 2007-2008 they are at a level managing low enough to offset the positive effects generated by the average daily productivity.

Analysis, as a general research of the natural and social phenomena, means the decomposition into their component parts to be studied and discovered causal relationships. Economic analysis aims the economic activities which consume resources and generate results [3] in meanwhile financial analysis is a methodical study of of an enterprise's situation and evolution on its financial structure and profitability, based on the balance sheet, the result and all other information offered by the company or can be obtained about the company and it's future [4].

Part of economic and financial analysis, financial analysis is included in the special purpose tests, which appeared and developed especially in the last 20 years and are in permanent evolution. Among the factors that imposed and stimulated the financial analysis's development and improvement can remember: development of anonymous stock, increase the role of banks and financial institutions in the economy.

If the first financial analysis performed by the shareholders of limited companies are limited to verification of financial balances, sufficient for repayment of loans granted by banks, regardless of developments in the financial situation, the main criterion for granting loans remained just the assets of the company. The financial analysis was limited to the study of rates on the financial solvency of the enterprise.

This approach has proven limited, which required a modern approach to financial analysis, which tends to become a system for handling information able to provide the data required by manager for financial decisions. The role of this discipline has increased, meaning that it is not only limited to financial data, but integrates economic data and stock, and analysis are integrated in the models required to prepare financial forecasts.

The developments of financial analysis in recent years is due to several causes [5]:

1. The concentration tendency of firms has led to the development of large-sized investments, whose returns are spread over several years, which required banks and financial institutions develop and use methods of analysis developed for the grant or refusal of credit .

2. Failure of banks to require guaranties to cover risk of non-payment it imposed to make analysis of economic and financial risk, because the concept of liquidity has become scarce for long-term commitments.

3. The development of modern financing means required to deepen the study of financial balance and of the capital cost, regardless of its origin.

4. Credit policy constraints, high interest rates, inflation, exchange rate variations have acute financial problems of the enterprise.

5. International development of companies led to search for techniques suitable for making comparisons between financial statements and accounts of various countries.

The complexity of economic phenomena analysis prints a double character, namely [6]:

1. discipline character with a theoretical background, a set of general principles that can be applied in the interpretation of the economic past and present problems;

2. practical activity that provides answers to the questions on about causal relationships between factors and phenomena.

In carrying out its object of study, analysis has some stage, which gives the content of this process. Regardless of the phenomenon or process addressed in the study, analysis has the following stages [7]:

a) the exact delimitation of the analyzed object, which means facts, processes, phenomena, results.

b) identification of components, factors, causes which could help achieve a certain level of phenomena.

c) establishing the causal relationship between factors and phenomena, and it 's inclusion in a model used in analysis. The model is based on the causal , objective relationship between factors and phenomena, such as applying different methods of quantitative analysis to identify the contribution of each factor and the effect size on the level recorded phenomenon.

d) measuring the influence of each factor on the level and on the change of the phenomenon. In this phase will apply a technical process, depending on the relationship between factors and phenomena.

e) synthesizing the results of quantitative analysis and revaluation using the qualitative analysis of the influences table.

f) development of corrective measures in order to increase positive influences and to reduce or eliminate negative influences.

In foreign literature it can be found the following steps of the process of economic and financial analysis [8]:

a) Setting objectives:

b) Identify alternatives for achieving the objectives;

c) Formulation of hypotheses:

d) Estimated costs and benefits - involves estimating all costs and benefits for each alternative for entire duration of the project;

e) Comparison of costs and benefits with pre-established values;

f) Realize a "sensitivity analysis" (the foreign literature is called "what-if");

g) Reporting results and making recommendations.

Attention of economic and financial analysts are focused mainly on three major aspects of business entity taken in the study [9]:

(1) study on financing - the nature and composition of resources, stability, financial costs and risks.

(2) study the use of resources - allocation, structure, level and variability,

(3) study the results which allow the release of economic risks.

Confrontation between financing decisions and the decisions of resource allocation leads to query and variable responses on the adjustment:

a) Structural adjustment between liquidity uses resources exigibility.

In common terms the company's financial fundamental adjustment presupposes harmonization between duration/maturity/ falling due, as term attached ti resources and uses.

(b) Adjustment functional use - resources

The second approach requires a significant change of criteria and conditions of adjustment, defined not by reference liquidity/chargeability, but by reference to cut down that lead to the separation of uses and resources by the way for their participation in the four fundamental financial cycles operations of a business structure (current operations, the operations of accumulation cycle, the process of sharing revenue and earnings results).

c) Global adjustment of cost efficiency and resource uses.

Vision recently developed in theory considers the financial system as an open and stable sistem put in value the resources as input - output of capital - resources - cash within the meaning of adequate mobilization of efficiency and effectiveness criterion.

## 2. THE ROLE OF ECONOMIC ANALYSIS IN ACHIEVING FINANCIAL MANAGEMENT FUNCTIONS IN CONTEMPORARY ECONOMY

Some authors consider that we deal, in the contemporary economy, with a trend of economic and financial analysis's emancipation regarding to it's the accounting sources.

According to Cohen, the factors which determinate this emancipation are [10]:

- Development of financial markets (which leads to development of portfolio management tools, based largely on statistical methods of analysis);

- In traditional analysis (type analysis of credit in the savings bank based on financing), the focus is on prospective information, so we are looking after economic, commercial, political, social informative elements, to help achieve forecasts;

- Providers of information have an increasingly rich offers in contemporary business environment (financial databases, information extra accounting), which relax the analysis dependence of accounting source.

We can add to the factors listed by Cohen, the development of intangible elements in a knowledge-based economy.

Users are an important category in the design and communication information process. In time this category has suffered various changes, reflecting the social, cultural, economic aspects and the system of government.

Analysis is important for all parties participating in the operation:

- management company: interested by analysis conclusions for substantiation financing and investment decisions in order to increase enterprise value;

- investors, creditors, shareholders - are interested in company capacity, seen as a current or potential investment option, to cover current and future liabilities and how are resources allocated and controlled by the management enterprise;

- business partners (suppliers, customers, employees) interested in the future development of the business, financial security and employment;

- State: interested in the company performance for determining fiscal objectives and for formulating economic policies and assessing the macroeconomic performance etc..

But the company's functions, held by all the leadership attributes, and each of these attributes is achieved through a specific type of analysis.

Economic and financial analysis realizes, in management process a series of functions:

a) the information function, ensure that the data from the entire economic system of records in order to inform decision centers on how to achieve economic and financial performance and the causes that have generated any disorder in the settlement in the following period, position of states compared with normative levels of competition in different markets, etc..

b) the assessment of technical and economic potential of the company, although defined as the autonomous, it's role is to implement in practice the function presented above.

c) the decision substantiation on grounds of efficiency, is an objective requirement of the activity in any area of economic and social life.

d) the function of reflecting the effective management of assets and assessment of management performance are made by accounting.

e) the function of making connection with the external economic and financial environment involves analysis of relationships with: providers of capital (shareholders and their advisers, investors in banks and other investors, the stock exchange), business partners (suppliers, customers etc.), the state (fisk, government and quasi-governmental organizations, local authorities), other users (professional organizations, analysts and external consultants, auditors, the prosecution or the courts, the public).

Satisfy this requirements is subject to the provision by undertaking economic and financial information as an expression of activity.

Diagnosing the business serves as a base for economic and financial decisions.

## CONCLUSION

A global image of the company, an explanation of the way of functioning on the whole can not be counted than taking into account the specific of economic social, financial environment. Analysis should not stop only at the financial aspects, should be assessed also the strategic, social elements, taking into account their consistency both within and outside the enterprise.

Currently, "new international economic environment have made the information to become a strategic weapon. Those who know how to obtain, interpret and to exploit to acquire a rapid development of high capacity and strengthens its competitive advantages."

## NOTES

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