

FINANCIAL ANALYSIS AND COST OF QUALITY

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Abstract The economic procedures and phenomena are characterized by the fact that their manifestation is very complex, having a wide range of aspects. This feature essentially distinguishes them from the phenomena from other areas. The remarkable complexity of economic phenomena has as causes lots of factors whose specificity depends on the context. This complexity of the social-economic area also has a cause of informational nature. The informational tides from this area have an heterogeneous nature and a relatively low degree of accuracy and relevance, because of the imperfections characteristic to the measuring process. In the decisional act is used a lot of information which has to be registered, analyzed and interpreted. The paper stresses upon the importance of the financial analysis as a tool of appreciating the performances and the financial potential of a company, cooperative statistics and new solutions of tackling with financial analysis.

Keywords: financial analysis, economic models, indicators, financial diagnosis, function, interpreting.

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1. INTRODUCTION

Due to a dynamic development of communication means during the past decades, the concept of information is assimilated, in the economic environment, as a signal that can appear at one moment on one of the communication

channels and that can be exploited in the benefit of the society or can be ignored, being considered as irrelevant.

When it comes to defining the concept of information, a relevant example is presented by F. Heylighen, on the website entitled “Web Dictionary of Cybernetics and Systems”, where he states that the answer to a question can be considered as a carrier of information as long as it diminishes the interlocutor’s degree of uncertainty.

2. A SYSTEMIC APPROACH TO THE ECONOMIC ENVIRONMENT

In the context of information systems, data are considered as a tangible object, being represented by numeric or alphanumeric symbols and can be memorised by a variety of storing mediums.

In order for financial accounting information to be useful to the users, it is necessary that they meet certain qualitative characteristics. According to the IASB general arrangement, for the elaboration and presentation of financial reports, the four main qualitative characteristics are: intelligibility, relevance, credibility and comparability.

- **Intelligibility** refers to the easy understanding of information by the users. The IASB general arrangement explicitly requires that information about complex issues, that should be included in financial reports, should not be excluded based only on the fact that they can be difficult to comprehend by certain users, because of their importance in decision-making.
- **Relevance** represents the ability of information to allow users to evaluate past, present or future events and, through their content, to facilitate the decisional activity.
- **Credibility** regards the lack of errors amidst information and their ability to present no deformities or subjective points of view, so that they can illustrate a faithful representation of reality.

- **Comparability** assumes that the financial information is compared in time and space. This objective can be accomplished by the permanency of accounting methods that evaluate, classify and present the elements described in financial reports. Any modification of these methods must allow users to identify the differences between the applied accounting methods.

The IASB [3] accounting arrangement also defines the limits of relevant and credible information. Among these we mention:

- the opportunity (referring to obtaining the information in useful time, so that it can be used in the decisional processes).
- the balance between benefit and cost (the benefits that can be quantified as a result of using information need to be bigger than the cost of supplying that information).

Attempting to develop a terminology both simple and rigorous, the initiators of the system theory defined the system as an “ensemble of interacting elements”. An abstract concept that has been developed in the economic and informatics field is that which represents systems as structures with input and output. Based on these approaches, the mathematical theory of systems was developed.

Starting with the hypothesis that elements in the system are formed from other elements, and these are organized on hierarchic levels, we can conclude that a system (also called a higher system) consists of a number of several sub-systems.

One principle stated in systems theory claims that, in time, systems evolve and have the ability of integrating in more and more complex systems. In the economic field, integrations have a complex typology.

Therefore, we can speak about:

- a genetic integration in the case of sub-systems that are part of a certain system, because they were created in a certain environment and because of certain dependencies which can not exist outside the system;
- a second type of integration is integration by coercing. In an economic system the integration by coercing assumes forcing the elements to integrate

in a certain organizational scheme and can be clearest exemplified by the fiscal regulations that impose certain restrictive norms in the financial accounting field;

- another type of integration among economic systems is the integration by dependence, that refers to certain elements' necessity to remain inside a system, because of the fact that, directly or indirectly, they have relations of dependence with other elements. Therefore, in a society with a production activity, the productive units are dependent on the supplying service that ensures their raw material;

- a form of integration manifesting especially on capital markets, in the economic field, is the integration on choice. This offers to elements (the sub-systems) the possibility of choosing the system they will integrate in.

In the perspective of a hierachic model proposed by Dumitru Oprea [1] the main components of the economic system are:

- ✓ *the institutions* (institutions of the state, but also large enterprises);
- ✓ *the organisations* (sub-systems of institutions, by example, the production units of enterprises);
- ✓ *the units* (base elements of the economic system that can not be further divided).

During the design of informatics systems, one resorts to specific shaping methods that are supposed to capture the component units and the activities taking place in an enterprize, in an integrated vision, identifying the information flows.

The classic model of presentation of information flows in an enterprize highlights the main role of the accounting department (sub-system).

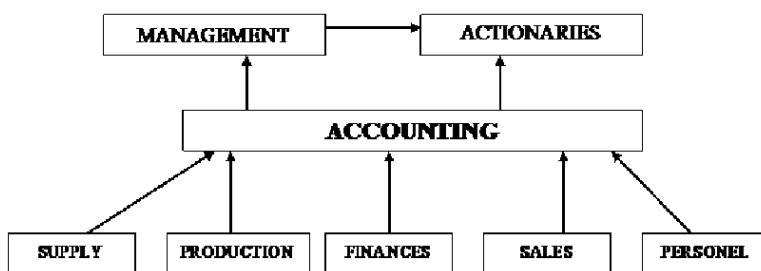


Fig. 1. The information flow in an economic enterprize.

3. CATEGORIES OF ACCOUNTING INFORMATION

According to accounting treaties [2], the accounting informations can be classified in four categories:

- ✓ operational information;
- ✓ information supplied by the financial accounting;
- ✓ information supplied by the administrative accounting;
- ✓ accounting information regarding the satisfaction of fiscal needs.

Accounting epistemology refers to the way the accounting is organized, in the sense of separating the organization of financial accounting and that of the administrative accounting, thorough the notions of accounting monism and dualism.

In a formal definition, monism or the single-circuit accounting system is the organization form through which the administrative accounting is completely integrated in the accounting system. Formal monism can manifest integrally, where accounting is held entirely by means of accounts or attenuated, where parts of the administrative accounting are treated without using the accounts system, through a number of separate tables.

Accounting dualism is the form of organization that assumes the net dissociation between the financial accounting and the administrative accounting, that is exclusively assigned to the supply of information for the internal environment of the enterprize.

In Romania, the organization of the accounting system is made according to the dualist concept, so that, at the enterprize level, one can distinguish two separate sections of accounting: financial and administrative (or managerial).

4. THE IMPORTANCE OF THE ECONOMICAL-FINANCIAL ACCOUNTING ANALYSIS AND DIAGNOSIS

The economical-financial analysis represents an ensemble of concepts, techniques and tools that ensure the handling of internal and external information, in order to formulate pertinent opinions regarding an economic agent's situa-

tion, the level and quality of his performance, the degree of risk imposed by the evolution in a dynamic competition environment.

The process of reporting finances imposes on the enterprize that they complete a full set of financial informing situations. The balance sheet, the loss and gain account, the presentation situations of financial modifications (the treasury flow situation) and the explicative notes are compulsory elements of these reports.

The approach of the economic systems, in the sense of diagnosing them, assumes a specific measure, that integrates the classic vision, based on the knowledge of causality relations and the internal laws of the formation and evolution of phenomena. The practical usefulness of financial analysis meets difficulties in approaching the problem in an accurate and unique manner. The reason for these difficulties resides, most of the time, in the fact that the ensemble of tools and methods required by the financial analysis do not represent a theoretical discipline, but have a specific content.

The results of the economic activities run by an enterprize must be analyzed not only as values, but also with respect to a reference criterion. Analysis methods, as noticeable in the regression analysis method, are methods that use mathematical formulas to enable their definition. Therefore, the interpretation of the results obtained will take into account the mathematical interpretation, in correlation with the economical facts described by the results.

The method of regression analysis. Also known as correlation method, this method can be used when the phenomenon and the factors that are being analyzed are of the stochastic type. Applying this method assumes:

- performing a **qualitative analysis** in order to establish the economic content of the analyzed phenomenon (y) and of the influence factors (x_1, x_2, \dots, x_n);
- identifying the causality relations between the phenomenon and the factors, followed by the mathematical formalization (regression equation).

A regression equation can be fit into one of these categories:

linear, $y = a + bx$; hyperbolic, $y = a + \frac{b}{x}$; parabolic, $y = a + bx + cx^2$;
exponential, $y = a * b^x$;

- determining, by calculation, the value of the regression equation parameters (you apply the least squares method);
- establishing the intensity of the relation between the analyzed phenomenon and the influence factors, by means of the correlation ratio (r_{xy}) or the correlation rapport, according to the formula

$$r_{xy} = \frac{n \sum xy - \sum x * \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2]} * \sqrt{[n \sum y^2 - (\sum y)^2]}};$$

- quantifying the factors' influence over the analyzed phenomenon through the determined coefficients (dy_x);

There is a series of indicators that can be grouped into:

- indicators calculated on the basis of the accounting balance sheet:
 - net patrimony;
 - revolving fund;
 - necessary capital;
 - net treasury;
 - cash flow;
- indicators calculated on the basis of the results account:
 - turnover;
 - commercial margin;
 - production of the year;
 - the added value;
 - gross operating surplus;
 - the capacity of auto-financing;
 - profit/loss.

The aggregation of data, in a first step, can refrain to cumulating as future "facts" in the data deposit scheme. We must mention that, for the "time" dimension, the aggregation by cumulating will only be done for income and expenses accounts.

5. CONCLUSION

The concept of shaping an enterprise's financial accounting activity assumes a systemic approach that will allow the identification of all the elements that are interacting and are generating influences over the enterprize.

Following a detailed study of the decisional processes characteristic to the financial accounting field and analyzing the activities in the Business Intelligence category that circumscribe to these on different managerial levels, we can classify these activities as:

- activities of report on the information regarding the situation of the indicators that reflect the evolution of the organization;
- the creation of predictions based the historic data extracted from the transactional systems of the enterprize and the external sources data, organized, most of the cases, in the shape of Data Warehouse or Data Mart;
- data analysis activities that, in the field of informatics systems dedicated to assisting the decision based on the Data Warehouse and OLAP technology, are gradually replaced by the multidimensional analysis, which opens new perspectives on exploring the data and has the role of permanently supplying new information to the decision factors;
- identification of correlations between the factors that influence the activities run by the enterprize.

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