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## Performance evaluation and management within multi-national companies

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**Abstract:** The success of any investment, the performance and long-term viability of the business depend to the same extent on a series of fundamental decisions, whether individual or collective, of the management team. Each of these decisions ultimately has an economic impact on the business. A common element of all decisions is the fact that they are weighed from an economic point of view, so that a decision, before it is taken, is analyzed from the perspective of the expected cash benefits, compared to the costs involved. In this context, managers must carefully evaluate the probability that the net volume of resources allocated directly or indirectly through the decision taken will be recoverable and profitable over time, through the changes that the decision-making and the allocation of funds bring to incomes and expenses. Managers are also the ones who must clearly identify the information necessary to carry out some analyses, as their effect will inevitably affect the performance and value of the business. The obtained results are then periodically analyzed, either with the help of data from the financial statements, or by using specific economic analyses.

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**JEL codes:** D21, C61

### Introduction

*Performance measurement* it is the process of determining the progress of the company and the fulfillment of objectives, in terms of efficiency (consumption of resources), quality of products and services and results of the activity.




*Performance management* is the use of performance measurement to effect changes in the processes, activities, culture of the organization and to enable the establishment of policy and objectives as well as their application.

Performance management precedes and contained also performance measurement (Albu N., Albu C., 2005, pg. 83)<sup>[1]</sup>. The result itself (performance) cannot be separated from the way of obtaining it, therefore management, performance management surpasses performance measurement in importance.

If **the financial performance** is only the "result of the race", **the global performance** is the race itself, as well as the vector of success of future races. As such, performance must be continuously tracked, measured and managed.

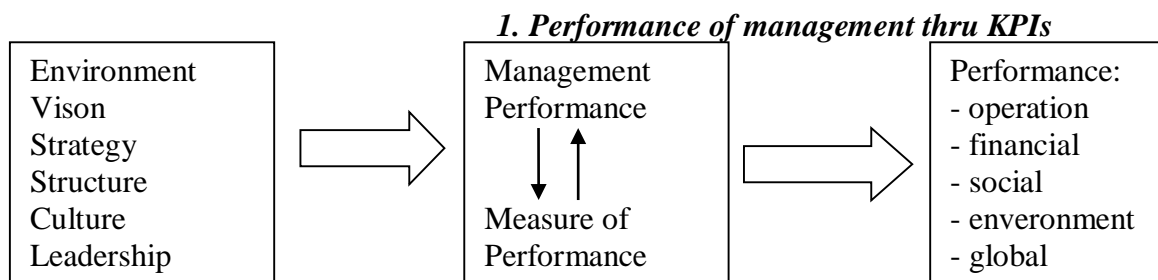
Considering the current meanings of performance, management tools must be integrated and appropriate.

To be efficient, a credit institution must take into account:

-  *dynamic planning;*
-  *quality tracking*
-  *leadership development;*

- ✚ team-work organization;
- ✚ use of technology;
- ✚ management of the change;
- ✚ tracking results through Key Performance Indicators (KPIs) connected to credit institution's strategy;
- ✚ know-how capital management;
- ✚ improving skills.

We can thus **state** that organizational performance depends on the company's environment (partners, collaborators and the general environment), on strategy and mission, as well as on the company's responses to adaptation and flexibility issues. That is indicating that the performance measurement and management tools must be based on the clarification of these relationships in **Figure no. 1**



*Source: Personal Projection*

We believe that you cannot measure, you cannot control. If you can't control, you can't manage. If you can't manage, you can't improve and you can't perform (Kueng, P. Krahn, A.J.W., 1999)<sup>[3]</sup>. Therefore, the role of management control is to ensure the performance assessment method.

In our opinion, performance measurement is a necessary condition for ensuring the progress of a company, but not sufficient. It is said that progress that is not measured does not exist, but measurement is not an end in itself; it makes success recurrent to the extent that it generates action.

We can say that information about a company's performance, especially its profitability, is important, on the one hand, to evaluate potential changes in the economic resources that the company will be able to control in the future, and on the other hand, it is useful for to anticipate the company's ability to generate cash flows using existing resources and to make judgments about the efficiency with which the company can use new resources.

## 1. Financial analysis- theoretical-methodological approach

The annual financial reporting used for the preparation of the accounting financial diagnosis "provide the database and the information necessary to assess the performance and financial position of the company, which allow two specific approaches:

1. analysis – diagnosis of performance and risks diagnostic based on profit and loss account;
2. analysis – diagnosis of financial position based on balance sheet” (Petrescu S., 2008)<sup>[7]</sup>

## 2.1. Methodology of economic-financial analysis

The changes of the main factors, those that currently determine the economic and socio-political climate, has made the economic-financial analysis to modify both its methodology and analysis techniques, so that it can respond to the requests of users of financial information.

In this direction and in order to be able to reflect the financial situation of the company at a given moment, but also to understand its evolution, the financial analysis uses a series of specific tools and means (key performance indicators), adapted to the purpose pursued by the internal or external users of the financial diagnosis.

In the view of Professor Petrescu S., presented in the work *Financial-accounting analysis and diagnosis*, a financial analysis, in order to be as eloquent as possible and to be able to provide the information desired by the multitude of users, must go through a series of methodological steps, whose sequence could be the following (Petrescu S., 2008)<sup>[7]</sup>:

1. **Comparing key indicators or the results** it is considered to be a qualitative analysis method, the objective of which is to obtain a deviation from a reference value (Radu F., Radu V. Croitoru G., 2011)<sup>[8]</sup>.

Any result of the company's activity is analyzed and valued not by its own results, but in relation to a criteria, basis of comparison, which can be represented by: the level of forecasted objectives, the results of the previous period, the results of other competitors, the results of companies from other countries, norms, standards and depending on which we can have:

- a) analyses over time, are those that serve for dynamic analysis and within which the results of the current period are compared with those belonging to one or more previous periods
- b) analyses over similar entities, by which the activity of a company is balanced, compared to other internal or external organization units;
- c) mixt analyses, are those that combine the first two categories;
- d) different analyses, which target other criteria.

Within this method, it is critical that the data to be comparable, they must have a homogeneous character, be expressed in a single standard and be determined according to a unitary methodology, and the deviation resulting from the comparison be separated into generating causes and interpreted through the view of influencing factors.

2. Starting from the perception that qualitative analysis follows the essence of the phenomenon, its essential properties, the factors that are of the same nature as the phenomenon and compete for its determination, we can affirm that the role of qualitative analysis is that of developing models that capture the essential elements of the phenomenon, process achievable by passing from a less profound essence to another deeper one.

In order to achieve the objective mentioned above, the economic-financial analysis process requires the completion of another methodological step, which also falls into the category of qualitative methods, represented by the **breakdown of indicators or results**, considered a deductive method, which allows detailing and separating the factors that determine the indicator. By means of this method, the causes that contribute to the change of the analyzed indicator are identified through the view of the factors that must be selected and interpreted, it being the one that gives depth to the study carried out.

According to the same studies, the breakdown can be carried out according to several criteria (Petrescu S., 2008)<sup>[7]</sup>:

- a) after **time results**, when the aim is to highlight the deviations from their general level;

b) after **center of the results**, when the aim is to identify the driven of factors which have led to the appearance of deficiencies.

c) according to the structural elements of the analyzed phenomenon, when the determined elements or factors are followed.

Within this method, it is of critical importance to know, before the breakdown of the result, the factors that determine it, as well as how this impacts it.

Since there is a diversity of factors that determine the analyzed key indicators, in the specialized studies we find several criteria according to which they are grouped (Niculescu M., 2003)<sup>[6]</sup>, as follows:

- a) by **nature**: technical, technological, economic, social-politic factors;
- b) by **character**, within causal relationship and following analyses structure: quantitative, qualitative and structure factors;
- c) by **action mode**: direct and indirect factors;
- d) by **driven influence**: depending on direct factors and independent factors;
- e) by **degree of complexity**: simple or complex factors;
- f) by **probability**: predictable and unpredictable factors;
- g) by **measurement option**: quantifiable and non-quantifiable factors;
- h) by **importance**: main and secondary factors.

Additionally, it should be mentioned here that when we are dealing with complex factors, which determine the analysed indicators, they must be split successively until we obtain the simplest factors, a phenomenon that involves the division into steps and aggregated factorial models.

3. **Establishing the factor' influences** represents the third methodological step, which is completed in the economic-financial analysis process and which constitutes the central element of the factor analysis, through which the direct connection between the theoretical analysis and reality is made.

In its capacity as a methodological level of knowledge, **establishing the influence of factors** represents the link of two sides: specifying the system of causal links between factors and quantifying their influence.

Depending on the type of causal link, the appropriate calculation procedure is chosen to quantify the influence of the factors, knowing that there can be two types of links:

- deterministic (functional or mathematical) types of product, ratio, sum, difference, which, thanks to the strictly defined dependencies between factors and indicators, allow the precise calculation of factorial influences;
- correlation (stochastic or statistical), which due to the fact that dependencies can only be estimated statistically through regression analysis, implies a greater or lesser degree of probability and certainty in the interpretation of the resulting influences.

Finally, to quantify the influence of the factors, a series of technical calculation procedures can be used, among which we mention: substitution in the chain, balance technique, operational research, statistical correlation, and others.

The results obtained from the economic-financial analysis are subject to a last methodological step, that of **the generalization of the results**, which is an inductive research method from the particular to the general, leading to the merge of the component parts into a unitary whole, simultaneously with a split of the elements essential from insignificant ones.

A factorial analysis must be completed with a report, which includes, in addition to the final conclusions, concrete, logical objectives based on clear and correct calculations, as well as measures to remove the causes that led to negative results, or to improve performance.

### 3. Bankruptcy risk analysis – major contribution to analyzing the financial performance of multinational companies

An important place in the capitalism economy is occupied by the risk of bankruptcy (Niculescu M., 2003)<sup>[6]</sup>.

Achieving and maintaining the economic-financial balance, an expression of the state of health of multinational companies, is conditioned by the determinations and correlations between the success factors and those that lead to bankruptcy (insolvency).

In the category of failure factors that are a real danger for the outlook of the multinational companies can be considered:

- + poor management of the company's activity and equity;
- + hazard expansion, without precise objectives;
- + lack of mobility, conservatism, in business direction;
- + improper use of credit;
- + unrealistic salary policy and in disagreement with the requirements of multinational companies;
- + the unsatisfactory qualification of the staff in relation to the needs of the company;
- + migration, resignation of top professionals and bureaucracy.

For the overall characterization of the company's state of health, certain groups of models for analysis and evaluation of the situation have been highlighted in economic practice, namely:

- economic-financial models based on economic-financial analysis with the specification that the application of the proposed models is relevant only at the level of the branches/markets in which the studies were done;

- graphic models that use the information provided by economic-financial analysis, but supplemented with a series of statistical-mathematical methods

This group includes the so-called Scoring method

“The purpose of the Scoring method is to provide predictive models for evaluating the bankruptcy risk of a company” (Tole M., 2002)<sup>[11]</sup>. Its application involves observing a number of companies with financial difficulties and another group with good results. The "Z" score appears as a linear function of several variables (rates), characterized by average coefficients, determined by the least squares method, following observations on representative companies and grouped from the beginning into "normal" and "abnormal".

The General Equation is:  $Z = a_1x_1 + a_2x_2 + \dots + a_nx_n$ , where  $a$  = the weighting coefficient of each rate, and  $x$  = the rates used in the calculation. Depending on the weight coefficients, ( $a_1 \dots a_n$ ) and the significance of the rates, specialized literature and practice present several models.

The applicability of a score function is limited to the economic environment (period and area) that were the basis for the development of the respective model, and therefore it is a questionable idea to use a score

function for decision making, belonging to other economies or periods. As a result, along with the Conan and Holder model, applicable to more companies, we also used the Angel model (model A) for bankruptcy prediction.

**Model Conan- Holder**, composed from five variables, as presented below:

$$Z = 16 x_1 + 22 x_2 - 87 x_3 - 10 x_4 + 24 x_5$$

where,

$$X_1 = \frac{\text{Shareholders' Equities}}{\text{Liabilities \& Equities}}$$

$$X_2 = \frac{\text{Receivables + Cash}}{\text{Total assets}}$$

$$X_3 = \frac{\text{Financials Expenses}}{\text{Turnover}}$$

$$X_4 = \frac{\text{Personal Expenses}}{\text{Annual Income}}$$

$$X_5 = \frac{\text{Operating Profit}}{\text{Total Liabilities}}$$

The risk of bankruptcy depends on the value of the score. 3 areas are distinguished:

- 1) unfavorable zone for  $z < 4$ ;
- 2) uncertainty zone for  $4 < z < 9$ ;
- 3) favorable area for  $z > 9$ .

The probability of bankruptcy depending on the value of the score is:

**Tabel no. 2. Prediction of the bankruptcy risk after model Conan Holder**

Scor (z)	Bankrupcy probability (%)
Negative	>80
0-1,5	75-80

1,5-4	70-75
4-8,5	50-70
9,5	35
10	30
13	25
16	15
>	10

Source: Niculescu, M., op.cit., pg. 351

In his article (Anghel I., 2002)<sup>[2]</sup>, he presents the limits of research on the risk of bankruptcy. For example, it is found that the issue of the age of bankrupt companies has been little analyzed, given that it was observed that half of the bankrupt companies have less than 5 years of activity.

Also, *the field of activity and the size of the company are essential*. A reference model for the Romanian economy is represented by the score function created by Ion Anghel.

**MODEL A-ANGHEL** consist in four financial variables:

$$Z = 5,676 + 6,3718 x_1 + 5.3932 x_2 - 5,1427 x_3 - 0,0105 x_4$$

$x_1$  = the rate of net return on income;

$x_2$  = debt coverage ratio with cash flow;

$x_3$  = debt ration of the assets;

$x_4$  = the payment period of the liabilities

$Z > 2,05$  favorable position,  $Z < 0,00$  bankruptcy position,  $0 < Z < 2,05$  uncertainty;

The function built has an a priority success rate of 97% and is likely to be effective for a wider population of companies as well (Moroşan I., 2006)<sup>[5]</sup>.

### Conclusions

The measurement and analysis of financial performance at multinational companies are presented through the financial statements used by its managers to support their decisions. Even if financial statements are considered the main means of transmitting financial and accounting information to users, however, through specific and sometimes difficult to understand language, complex accounting terminologies, they have lost ground in favor of other tools more accessible to managers such as: the dashboard, reports audit, so many others reporting tools.

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