



DIAGNOSIS OF GLOBAL COMPANY. ECONOMIC–FINANCIAL ANALYSIS TOOL, BASIC OF ELABORATING THE BUDGET OF INCOME AND COSTS

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Abstract *Financial practice, structured on actions to analysis, planning, management and short-term financial strategy, is mainly aimed at identifying and allocating capital resources through various methods and techniques of action. To identify and track major objective of a business is maximizing its value, previously invoked action must be well correlated. In this way the financial analysis carried out, will highlight the company's performance in terms of profitability and risk, and financial planning and strategy to design possible trajectories for the overall company growth and shareholder wealth in particular.*

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Global diagnosis, economic and financial analysis, budget of incomes and expenses

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1. Introduction

Financial practice, structured on actions to analysis, planning, management and short-term financial strategy, is mainly aimed at identifying and allocating capital resources through various methods and techniques of action.

To identify and track major objective of a business is maximizing its value, previously invoked action must be well correlated. In this way financial analysis carried out, will show the company performances in terms of profitability and risk, and financial planning and strategy to design possible trajectories for the overall company growth and shareholder wealth in particular.

In context of those specified, achieving a global diagnostic the company can be an effective tool of economic and financial analysis, which can be basis for the income and expenses.

To get an overview of economic and financial situation of the company, there is a need diagnostic component synthesis (production, quality, competition, turnover, financial situation, personal etc.), a global diagnosis, that summarizes the situation of the company. The diagnosis is set strengths and weaknesses of the company activity, malfunctions that occur in business activity and their causes.

The global diagnosis is intended as a summary form and in an operative way to help achieve the above functions. The global diagnosis is to reveal how the major objective of the firms' activity is done.

We define the major objective ensuring the viability in terms of internal and international competition with

the restrictions required by the sustainable development.

Building global diagnosis involves fixing certain criteria meant to reveal the company in its complexity. In this sense we mention the following criteria after which can we guide in compiling a global diagnosis:

- the company functions in connection with the attributes of leadership;
- definition of the company in the structuralism concept;
- criteria of 5M;
- other criteria.

• The first criterion is that each the company functions is done by all the management attributes or, in other words, each of the attributes of management covers all the company functions. In the field of links analysis appears, as an indispensable tool.

• The second criterion, respectively the definition of enterprise in structuralism concept, contains the following elements: resources, relationships, activities, results and efficiency. At relations with the external environment can not be missed environmental problems (pollution, waste, recycling etc.).

From case to case each of these elements in their turn can be detailed. On these basic considerations can be built a global diagnostic hat has in its structure all mentioned above elements including their detailing, where such an approach is necessary.

• The third criterion of the 5M has the following meaning:

- Men - represents the human potential (with a number of issues such as: size, structure, quality, professional competence, etc.);
- Money - representing potential financial with its many aspects;
- Marchandise - refers to the quality, quantity and stock assessment;
- Materials - concerns the quantitative and qualitative assessment of fixed documents, particularly as a technological level, reliability, performance;
- Market – means diagnosis of the position on the market, the destination of production and services.

Of course, can be discuss and other criteria, but essential is as an important areas of a business activity may not be omitted, and approach have a systemic character.

2. Global diagnostic models

In world theory and world practice can be found many global diagnostic models:

- SWOT (strengths, weaknesses, opportunities and threats);
- Rolland Berger;
- A.G. (Alexandru Gheorghiu);
- CEMATT;
- B.C.R.;
- Histogram;
- Scoring.

A. SWOT model (strengths, weaknesses, opportunities and threats) strengths, weaknesses, opportunities and risks.

Examples of Annex 2 can be developed he pointed out specifics of enterprise. In order to assess how more correct the strong points, weaknesses, the opportunities and risks in relation to the specifics of enterprise is useful to operate and with the factors of importance and so, to determine the average score as a weighted average by the relation:

$$\bar{I} = \frac{\sum_{x=1}^n xi}{\sum x} \tag{1}$$

Where:

x_1, x_2, \dots, x_n = parameters considered, with the note;
i = importance coefficient on each parameter (or the number of points given on each parameter, after a certain scale);

\bar{I} = the average score or average score per enterprise, to allow the characterization average of business situation.

Also, can introduce a scoring system (for example, from 1 to 5 for finally fixed to an average).

B. Rolland Berger model. In this model, used by consulting firms, main components are: products, competition, distribution, manufacturing, finance and management. On each of these components have been established “criteria” through which make the details to capture the essential aspects.

Next characterizations are made in the form of questions allowing assessment by a scoring system with grades from 1(when does not meet the all criteria) to 5 (when fulfills the criteria very well).

After assessments follows the main measures considered necessary for remedies.

These measures serve as a background in short-term plans and business strategy (long and average term).

Finally, it sets an average after were be noted "the criteria" for the selected components.

C. The A.G. model (Alexandru Gheorghiu), establishes the division importance component factors together. For example:

- Financial	0,18
- The market and the competition	0,14
- Research&Development	0,14
- Products	0,14
- Management	0,14
- Manufacture	0,10
- Commercial	0,10
- Staff	0,06

Total	1,00
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As can be seen like in other models, financial component has the highest rate of importance. Those 8 components are further divided based on which to highlight the most important aspects of the component.

The scoring system is different from other models, in the sense that it operates with 9 notes, respective with notes that marks the mid-range (respective 1.5; 2.5; 3.5; and so on).Such a scoring system derived from the fundamental objective of the company, i.e. measuring national competitiveness (maximum score 4), but also international (maximum score 5).

D. CEMATT model (Management and Technology Transfer Center)

The model is published in the book “Diagnostic analysis of commercial companies in transition. Technical Publishing, 1994 under the coordination of C. Mereuță Global level synthesis is presented in Table 1:

Table 1

Classification with 5 stars	Rating	Recommended restructuring strategy
1 star	Insolvency masked	
2 stars	Critic situation	
3 stars	Difficult balance	
4 stars	Satisfying adaptation	
5 stars	Viability in the competitive environment	

The component elements called DDA (an i.e. direction of diagnostic analyzes) of the global diagnosis was established the number of 6 and have fixed coefficients of the weighting as follows:

1. Financial	0,21
2. Marketing	0,17
3. Technology	0,15
4. Quality	0,17
5. Management	0,15
6. Staff	0,15

Total	1,00
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In the CEMATT model financial diagnosis was divided into 10 divisions as follows:

- The share of borrowed capital in relation to turnover;
- Evolution of working capital;
- The evolution of net debt;
- Remuneration of labor factor;
- Rate financial autonomy;
- The patrimonial liquidity;
- Rotational speed of stocks of products.

Each of the other elements (respectively DDA) decomposition for a thorough examination. The scoring is 1-5 and middle notes are established for each component.

Overall average assessment and classification of enterprise resulting from a weighted average with coefficients of importance all averages for each of the 6 DDA components.

E. BCR model (Romanian Commercial Bank), was first published in the instructions of the loans no. 1/1993 edited by the bank. The banks follow especially the creditworthiness of customers given by a series of financial indicators: liquidity, solvency, profitability and financial balance indicators.

In the essential lines, the general concept of BCR model contains the same ideas:

- division of company's business on criteria and under criteria;
- adopting a scoring system;
- establishing a value chain based on the number of points.

The number of criteria is 13, and in the criteria have been determined under criteria. The score ranges generally from 1 to 3, but are under criteria that go up to 4 points. Value chain includes 5 categories as follows:

- less than 25 points - E category;
- 25 to 37 points - D category;
- 37 to 49 points - C category;
- 49 to 61 points - B category;
- over 61 points - A category;

The bank crediting takes the decision if the company falls at least in the category C. A detailed analysis of BCR model reveals that a number of judgments and, respectively, Awarding of points is made from the position of bank interests.

F. The model form of the histogram. It is presents a partial histogram, meaning only with reference to the financial potential, but in the same way it may present for all components.

G. The Scores method (Scoring) it was and it is used especially by the investors and creditors of the company to determine the risk they are exposed. Score function is based on a linear combination of a significant group of indicators, each having a weighting factor based on the statistics.

Application of the method involves observing for a period of time (for example, 15 years) assembly of companies consists of two distinct groups: one with a financial difficulties and another one with a normal activity. For each of the two groups is determining the best linear combination of rates to distinguish of the two groups.

Distribution of different scores to classify companies in terms of view of the financial health. Z score allocated to each company's is determined by the function:

$$Z = a_1X_1 + a_2X_2 + a_3X_3 + \dots + a_nX_n \quad (2)$$

Where:

x= rates involved in the analysis;

a= the weighting coefficients.

In international economic theory and practice have been developed a number of models, of which the best known are: Altman model, the Canon and Holder model, the Bank of France model and so on.

a) Altman Z function is determined by the following formula:

$$Z = 3,3x_1 + 1,0x_2 + 0,6x_3 + 1,4x_4 + 1,2x_5 \quad (3)$$

where:

x_1 = the current result before tax / total assets;

x_2 = turnover / total assets;

x_3 = market capitalization / loans;

x_4 = reinvested profit / total assets;

x_5 = circulating active / total assets.

b) The Canon and Holder model is expressed by function:

$$Z = 16 x_1 + 22x_2 - 87x_3 - 10x_4 + 24x_5 \quad (4)$$

Where:

x_1 = liquidity partial of ratio;

x_2 = rate financial stability;

x_3 = rate of financial charges;

x_4 = staff remuneration rate (the share of staff costs in the added value);

x_5 = share of gross operating surplus in the added value.

Bankruptcy risk dependent on the score value.

Distinguish 3 areas:

- the bad area - for $Z < 4$;
- the area of uncertainty - for $Z < 9$;
- the favorable zone - for $Z > 9$.

On this basis has been established the probability of bankruptcy depending on the value score:

Z score	The probability of bankruptcy
Negative	> 80%
0-1,5	75-80%
1,5-4,0	70-75%
4,9-8,5	50-70%
9,5	35%
10,0	30%
13,0	25%
16,0	15%

c) Score function established by the Central balance of the Bank of France sheet includes a battery of 8 notes with weight coefficients as follows:

$$Z = -1,25x_1 - 2,003x_2 - 0,824x_3 + 5,22x_4 - 0,689x_5 - 1,164x_6 + 7,06x_7 + 1,408x_8 \quad (5)$$

Indicators (rates) and weights are established based on statistical shown in Table 2.

Depending on the value of Z are 3 areas:

- unfavorable area: $Z < - 0,25$;
- area of uncertainty;
- $0,25 \leq Z \leq 0,125$;
- favorable area: $Z > 0,125$.

Table 2

Rates nr.	Rate name	The relation of calculation	Coefficient of weighting
R ₁	The rate of financial spending	Financial expenses/EBE	-1,255
R ₂	Coverage rate of capital invested	Permanent capital/capital invested	-2,003
R ₃	The rate of repayment ability of debt	Self-financing capacity/debt	-0,824
R ₄	Gross operating margin rate	EBE/CA	+5,221
R ₅	(Average balance-Suppliers/ Purchases of merchandise) xT	(VA1-VA2)/VAp	-0,689
R ₆	The average duration of the credit	(Average balance/ Sales)xT	-1,164
R ₇	The growth rate of added value	Investment / VA	+0,706
R ₈	The average duration of customers physical rate		+1,408

3. Conclusions

Scores method complements traditional methods of risk analysis bankruptcy being a method mainly predictive.

Finally we note that in our country, situated in the transition period, are not the conditions for the method scores with weights set in other countries, expressing the specific situation of those countries.

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