# MODEL OF DIAGNOSTIC ANALYSIS OF THE COMPANY'S RESULTS

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#### **Abstract**

The company operates in time with the goal of achieving the best results. Of course, the owners, shareholders or management of the company must be concerned that the entire economic and commercial activity of the company should be in line with the current market requirements, and in this way ensure positive results. Diagnostication is merely a financial analysis of a period of time duly appreciated from the point of view of the characteristics of that period in order to ascertain how that company succeeded in capitalizing on the factors of its production (capital, human and financial-material resources) to achieve the best results. Of course, a number of factors may hinder the development of a company's business, but it must be interpreted on the basis of a system of statistical and economic indicators to be carried out in close correlation between each other and thus to identify the definite perspectives on the basis of which improvements may occur. Diagnostic analysis should be based primarily on financial analysis, ie turnover, income and expense structure that, through correlation and parallel presentation, give a clear picture of how the company is achieving its intended purpose. In this analysis, an analysis of interim management stocks should be considered, which should be consistent with the business continuity needs of the business. A number of indicators are specific to this financial diagnosis and they are presented in this

**Keywords:** diagnosis, trading company, assets, liabilities, financial structure, receivables

JEL Classification: D12, O12

## Introduction

This article is based on identifying the conditions that can improve the financial activity of any trading company. In fact, when we say diagnosis, it's not wrong to think about the diagnosis that a doctor exposes about the health of a person or group of people. In the article, the financial situation of a company is broadly presented, commercial unities, of course the example taken on the basis of the data of that company is one that can be replaced by any other because the evolution and interpretation of the data is identical. Thus, in each case, we can talk about fixed assets, circulating assets or other assets. We can calculate indicators based on these sizes. Further, the role of current assets dynamics in the strategy and stability of a company as well as the diagnostic situation of the existence of some special debts at the level of the respective company is shown. The article makes a fair interpretation of the debt structure of suppliers, creditors, state budget, bank loans and other bonds precisely to highlight the directions in which the decision-maker's activity should be directed. Analysis of financial results is the basic pillar of the analysis that is made at the level of a company. The data on which marginal coefficients have been calculated to highlight the situation of the entity under review are presented in this respect. Interpretation of the result of exploitation or gross result is essential in establishing a diagnosis as accurately as possible as possible on the activity of a company. The article is accompanied by a series of graphs and data tables that have been interpreted suggest the model to be used in a diagnostic analysis of the financial results of the company.

#### Literature review

Anghel (2015), as well as Anghelache, Anghelache and Kralik (2012) addressed aspects of company results analysis. Anghel (2014) applied a system of indicators on the activity of an economic entity. Anghelache, Pagliacci and Mitruţ (2015) used the statistical-econometric instrument in the analysis of a commercial company. A similar theme is studied by Davis (2002) and Gheorghiu (2012). Anghelache (2006) highlighted methods of analyzing a company's performance analysis. Boshnakov and Iqelan (2009) presented elements of the time series. Chetty (2009) presented aspects of the welfare study. Neslehova (2007) analyzed aspects of the correlation. Yin (2009) studied the application of econometric models in economic analyzes.

## Methodology, data, results and discussions

On the basis of the company's annual balance sheets as well as the economic and financial results for the N+N+2 period, the evolution of the company during this period could be characterized. It can be appreciated that this scoreboard represents the end of all the economic and commercial activity of society, being the most faithful image of the whole activity of the society. At macroeconomic level, this period was the crucial stage in the evolution of the whole activity in Romania and was full of turbulence at all levels, including the economic one.

The objective assessment of the performance of society is very difficult to do because its integration into the national economic system has

as a trait the bearing of all the influences generated by the connections in the system. This period marked a decline in economic activity in Romania.

In a first comparison, we can analyze the company's assets and liabilities over the lifetime, resulting in the following data:

# The analysis of the asset structure of Alpha Auto S.R.L.

Table no. 1

Specification	N	N+1	N+2
Total active	100%	100%	100%
a) fixed assets	9,53%	11,53%	12,32%
b) current assets	87,69%	87,64%	87,68%
c) other assets	2,78%	0,83%	0%

A first finding that can be made is that due to the object of the company's activity, the share of circulating assets is high, being around 87% in the N+N+2 years and maintaining approximately constant, while fixed assets are 9.53% -12.32% of total assets. There is an increase in fixed assets, but not by lowering current assets but by reducing other assets.

The total asset of the company was at 31.12.N + 2 of 11,732 thousand lei with 908,054 thousand lei less than the value registered at the end of the previous year, interrupting the ascending trend started in the previous years. The company's situation therefore reflects a significant reduction in total assets; for the correct assessment of the evolution of the patrimonial uses it is necessary to analyze the basic groups that contribute to this state of the patrimony:

- fixed assets: increase in year N+1 as compared to year N as a result of the investments made on the group of buildings, the grouping of cars and means of transport (plus 176,348 thousand lei net amount) and the group of other tangible assets, as well as the increase in the value of financial assets with 982 thousand lei. In N+2, increases in the value of intangible assets and the value of financial assets have occurred. The non-current assets are represented by 85% of the tangible assets, in which the land holds a weight of 54%.
- circulating assets: recorded an inconsistent dynamics, increasing in N+1 as compared to N, respectively, decreasing in N+2 as compared to N+1, yet decreasing by 1.6% in the range N N+2.
- other assets: the zeroing of the analyzed range, from ROL 331.7 thousand to N and ROL 105.4 thousand in N  $\pm$  1, representing, for the most part, settlements from operations undergoing clarification.

Different value gains at certain balance sheet items have resulted in structural changes in patrimonial masses.

Thus, the share of total fixed assets increases from 9.5%, as recorded in year N to 11.5% in year N + 1 and 12.3% respectively) in year N + 2. This weight is specific to companies operating in the trade, this activity requiring assets of the nature of furniture for the presentation of goods and means of transport and carried out in rented spaces. Under these circumstances, the assets that impressed the decline of the company's assets were the current assets, requiring a closer analysis of them.

## **Dynamics of current assets**

Table no. 2 - thousand lei-

Specification	N	N+1	N+2
Total Circulating Active	104.577,38	110.775,93	102.862,40
a) stocks	69.773,75	89.963,60	88.126,76
b) receivables	28.519,21	14.925,27	10.882,46
c) availability	6.284,42	5.887,06	3.853,18

As can be seen, the largest decreases were registered by receivables and cash availability, which made the share of the stocks in the total assets increasing from 66.72% (as recorded in N) to 81.21% (in the year N + 1), respectively, to 85.67% in year N + 2.

The situation is explained by the fact that during the analyzed period the company reduced its volume of sales and, in order to protect itself against exchange rate fluctuations, it constituted larger stocks, which did not generate high storage costs (Auto parts did not requires special storage conditions, with low volume and high value, and the frequency of supplies is low). Also, the company carried out a better receivable collection policy, with the volume decreasing considerably in real terms.

From the previous table there is a decrease of the current assets of 1.64%), to lei 10,286.24 thousand in N + 2, compared to 10,457.73 thousand lei in the year N.

From the structural point of view, the largest share in N-N + 2 is the stock (85.67%) of current assets in N + 2, with a tendency to increase this share from 66.72% year N). Receivables (10.58% of N + 2 current assets, down from 27.27% in N year) occupy a second place in order of magnitude, and money disposals (3.75% of current assets in year N + 2, with a decrease of 6.01% in the year N) being on the last place.

Evolution should be interpreted according to factors of influence. Thus, stocks with the majority share record a 21-day slowdown in the speed of rotation from 170 days (N) to 191 days (N + 2). At the same time, the

receivable collection period decreases by 46 days (from 70 days in year N to 24 days in year N + 2) as a result of the reduction in purchased quantities but also as a result of the management's implementation of a policy strict supervision of compliance with payment deadlines.

We may consider under these circumstances that the reduction in the liquidity of the assets of "Alpha AUTO" S.R.L. Bucharest can still be improved.

# Analysis of the liability structure of "Alpha Auto" S.R.L.

Table no. 3

Specification	N	N+1	N+2
TOTAL PASSIVE	100,00%	100,00%	100,00%
a) equity	3,03%	14,90%	16,05%
b) liabilities (current liabilities)	96,97%	85,10%	83,90%
c) other liabilities	0%	0%	0,05%

Another finding is that the share of equity in total liabilities recorded an increase in the N+N+2 range due to the sharp increase in own funds in year N+1, due to the distribution of the profits obtained by the company, but also by the increase with 23.5 million of the registered capital in year N+1. Their share in total asset financing sources therefore experienced a stronger evolution over the period considered (from 3.03% in N to 14.9% in N+1 and 16.05% in N+2 respectively ).

The Company did not provide risk and expense provisions during the period under review.

Temporarily attracted sources (current liabilities) decreased during the analyzed period both in absolute and relative terms, accounting for 83.90% of total liabilities (from 96.97%) in N and 85 in N + 2, 10% in N + 1), which imply significant risks in assessing the capital participation attracted to business financing.

#### **Dynamics of current liabilities**

Table no. 4 -thousand lei-

Specification	N	N+1	N+2
Current obligations-total	11.564,186	10.756,368	9.842,551
Suppliers	5.402,876	4.908,379	5.281,312

There is a decrease in the N+2+ ratio by 14.89% of current liabilities (from 11,564,186 thousand lei in year N to 9,842,551 thousand lei in year N + 2). This decrease is more pronounced than the decrease in the current

assets (which decreased in the same period by 1.64%) reflects the fact that the invstment policy in the last and the last years was supported mainly by the company's own funds. The evolution is also marked by the evolution of the fiscal and social debts.

## **Debt situation at 31.12.N+2**

Table no. 5 - thousand lei-

No. Crt.	Specification	The amount	% in liabilities
1.	Suppliers	5.281,312	53,66%
2.	Various creditors	132,394	1,35%
3.	Debts to the state budget	80,842	0,82%
4.	Other Obligations	4.223,003	42,90%
5.	Short term bank loans	125,000	1,27%
	TOTAL LIABILITIES	9.842,551	100,00%

Regarding the debt structure, the company permanently recourse in the analyzed period to the financing of assets with short-term bank loans in a small proportion, their level in N + 2 being 125,000 thousand lei, respectively 1,27% of the total debts of the company . in N + 1, short-term bank loans accounted for 14.61% of the company's total liabilities, this being the highest share of the analysis period. These issues characterize the company's bank lending policy as a low-risk policy, and the company is turning to these loans only to deal with exceptional situations. The company did not encounter difficulties in repaying these loans (the installments were paid at the due dates, without any late payment penalties). There is also a 6.94% increase in the trade burden in the N-N + 2 range.

#### **Debt structure**

Table no. 6 - percent -

Specification	N	N+1	N+2
Suppliers	46,72%	45,62%)	53,66%
Various creditors	0,00%	3,72%0	1,35%
Debts to the state budget	0,00%	4,46%	0,82%
Other Obligations	47,89%	31,58%	42,90%
Short term bank loans	5,39%	14,62%	1,27%
TOTAL LIABILITIES	100,00%	100,00%	100,00%

Although the volume of liabilities is significant (10,756 thousand lei in year N+1) there are no outstanding payments, the company paying on time debts.

The evolution of the relative trade-offs of trade obligations, as compared to turnover, led to a decrease in the duration of debt payments to suppliers over the analyzed period, from 132 days in N to 105 days in N + 1 and 115 days in N + 2. The company has concluded contracts with suppliers, stipulating payment terms ranging from 30 to 60 days, the necessary funds for the payment of the commercial obligations on time, covered by the working capital (working capital) and the current assets with very high liquidity account availability, house, etc.).

The evolution of liquidity ratios as a measure between the specific values of current assets and liabilities is shown in the table below.

# **Evolution of liquidity indicators**

Table no. 7

Indicator	N	N+1	N+2
Current liquidity	0,86	0,90	1,03
Rapid liquidity	0,29	0,17	0,15
Liquidity on sight	0,052	0,048	0,039

In this context, the liquidity of the company involved favorable levels and trends in the analyzed range, however, the values recorded at 31.12.N + 2 were, however, lower than the safety margins recommended in the literature (general liquidity of the company = 1.03 compared to a safety margin equal to 1.6-2; fast liquidity = 0.15 compared with safety margin equal to 0.8-1). These levels generate high risks, as fast liquidity confirms coverage of only 15%.

The turnover in the year N+2 was 16,580,000. lei, against a turnover of 16,828 thousand. ROL in year N+1. The major contribution to turnover is normally the sale of goods (99.5%).

As a share in total revenues, turnover represents 98.3% in N + 2, compared to 99.6% as it was a year ago, the level being influenced by the higher volume than N + 2 of extraordinary revenues and of the financial ones.

#### Revenue structure

Table no. 8

- percent -

Specification	N	N+1	N+2
Total revenue	100%	100%	100%
1. Exploitation	99,073%	99,647%	98,356%
- Fiscal value	99,073%	99,647%	98,301%
- Stored production	0%	0%	0%
- other incomes	0%	0%	0,055%
2. Financial	0,927%	0,305%)	0,494%
3. Extraordinary	0%	0,408%	1,149%

The structural analysis of revenues highlights the slight decrease of turnover in total revenues in the analyzed period. The share of financial income is low, oscillating around 0.5%>. Interest income is the main category of financial income.

The dynamic analysis of the company's results shows a real decrease in turnover, with 8.2% in year N+1 as compared to year N and 43.1% in year N+2 as compared to year N+1, the overall decrease in activity volume in N+N+2 was 47.4%.

The turnover dynamics in the N-N+2 period is shown in the table below:

## **Dynamics of turnover**

Table no. 9 -thousand lei-

Specification	N	N+1	N+2
Fiscal value	14.741	16.828	16.580
Total income	14.879	16.888	16.867

Total spending was in N+2 of 16,190,000. lei, increasing by 13% compared to the expenses incurred in year N+1 (14.309 thousand lei). The highest share is, of course, the operating expenses, which represent over 80% of the total costs over the entire analyzed period.

Given that total revenues declined by 0.1% (in nominal terms), the increase in total spending by 13% resulted in a sharp reduction in the gross profit margin.

The increase in total expenditures was mainly determined by the increase in financial expenditures, which grew by 88%) in the year N+2 as compared to the previous year due to the negative influences determined by

the exchange rate evolution (the expenditures generated by the exchange rate differences increased in N + 2 of 2.45 times, from 897.773 thousand lei - N + 1 to 2.200.516 thousand lei -N + 2). The level of financial expenditures fluctuated between 9.5% and 15.8% of total expenditure in the N + N + 2 period, with an overwhelming share of the expenditure generated by exchange rate fluctuations.

Expenditure on exploitation increased by 6.7% in the year N+2 as compared to the year N+1, and the extraordinary expenses decreased by 21.9% o (from 634.481 thousand lei in N+1 to RON 495,530 thousand in N+2).

On the basis of the evolution of operating revenues and expenditures, the efficiency of operation in year N+2 was determined compared to year N+1, in year N+1 as compared to N, respectively in year N compared to 2006.

The marginal coefficient level (operating income / operating expense) was only overnight in the N year of the analysis period, with values in the following years reflecting lower operating efficiency due to the slower adjustment of expenditures to changes in revenues.

The favorable dynamics of the result of the exploitation was manifested throughout the analyzed period, as shown in the following table:

## Coefficient of efficiency and rate of return

Table no. 10

			- percent
Specification	N	N+1	N+2
The marginal coefficient	1,006	0,941	0,924
Return on exploitation	31,12%	26,82%	20,80%
Efficiency ratios (% of income, exploita	ation)		
a) materials	2,47%	3,96%	4,38%
b) Goods	48,24%	48,98%	45,56%
c) utilities	0,15%	0,33%	0,50%
d) taxes, fees	0,69%	0,21%	0,53%
e) salaries	3,32%	4,57%	4,69%
f) depreciation	0%	0%	0,29%
g) services provided by third parties	13,59%	14,92%	23,18%
h) other operating expenses	0,41%	0,22%	0,06%

The cost structure includes the following components (N+2,% in operating income):costul mărfurilor vândute (45,56%), în scădere ușoară față de anul anterior (48,98%) reflectând o scădere a costului mediu al mărfurilor vândute;

• The cost of services rendered by third parties (23.18%) is experiencing a strong share of the share in the analyzed period (from 14.92 in N + 1 to 23.18 in N + 2). The large share is specific to companies operating in leased spaces;

• personnel costs (4.69%), slightly increasing compared to the previous period (in N + 1 these costs accounted for 4.57%).

The gross result in N + 2 was 677,404 thousand lei, down from the previous year, when gross profit was 2,578,867 thousand lei. The negative impact in a significant proportion exercised both the financial result and the extraordinary result during the analyzed period, which diminished the result of the exploitation during the analyzed period. Note the majority share of the operating result in determining the gross profit of the company in the N + N + 2 period.

#### **Evolution of the result**

Table no. 11 -thousand lei

Specification	N	N+1	N+2
The result of the exploitation	4.587,531	4.512,982	3.451,080
Financial result	-1.268,764	-1.307,819	-2.471,933
The extraordinary result	-386,705	-626.296	-301,743
Gross result	2.932,062	2.578,867	677,404

On the basis of the information analyzed, an unsatisfactory dynamics of the intermediate management balances results:

- $\bullet$  Trade margin is reduced due to a decrease in cost efficiency, and represents 25.82% in year N + 2, compared to 31.66% in year N + 1 and 35.42% in year N.
- Gross operating surplus (EBE) has a decreasing trend over N+N+2, from 31.41% in N to 26.88% in N+1 and 20.60% in N+2 respectively.
- The gross result is impacted by the financial result and the extraordinary (negative) result, with the gross result margin recording a decrease of 11.24% in year N+2 compared to year N+1.

Changes in patrimonial structures and economic and financial outcomes, both as a result of the unstable economic environment and of financial management and policy, have destabilized unsatisfactory developments in N+N+2.

Return on total costs recorded a downward trend over the period under review, more pronounced in N+2 as compared to N+1 (from 10.47% in N+1 to 2.43% in N+2).

Return on assets had a downward trend following the same trend as cost-effectiveness (a more pronounced fall in N-N + 2 from 20.4% to 5.77%), falling (below N + 2) of at least 10%.

The return on equity is recorded at good levels, the value of this indicator being influenced by the volume of activity and the level of the company's capital.

One way of factorial analysis (used in the Anglo-Saxon system) highlights three factors of influence on the rate of return on equity:

- a) the market position of the company, as well as the specificity of the sector of activity (regulations in the field, competition concentration index, entry / exit barriers, access to resources, etc.) through the income margin indicator on revenue = Net profit /
- b) the quality of management, through the ability to achieve a rotation of the total asset that maximizes the value of the enterprise, and implicitly the rate of profitability = Total Income / Total
- c) use of foreign financial sources for financing and increasing activity = Total Asset / Own Capital.

## **Evolution of financial profitability**

Table no. 12

Specification	N	N+1	N+2
Financial profitability	696,51%	79,54%	20,84%
1. Profit margin	16,94%	8,87%	2,33%
2. Asset rotation	1,25	1,34	1,44
3. Financial leverage	32,96	6,71	6,23

It is noted that the contribution of factors and their dynamics is different in achieving the return on capital. An important role belongs to the profit margin factor, which recorded dramatic drops in the analyzed period. The "financial leverage" indicator shows that the company has recourse in significant proportions to the attracted and borrowed capital.

One of the indicators that can ensure the increase of profitability is the "asset rotation" factor, ie the provision of a sales volume that allows over 2 rotations per year of the total asset (based on the recommendations of the theory and the economic and financial practice for this sector of activity), a level that has not been reached, as we can see, throughout the analyzed period.

Together with other profitability indicators: return on assets, cost-effectiveness, earnings per employee, we conclude a reduced return on N+2 for the appropriate financial support of production factors. Sure levels were reached in year N and even in year N+1 (profit margins of 17% and 9%, respectively, above the average of the sector).

The economic and financial analysis carried out over  $N \div N + 2$  led to the following conclusions:

- Strengths: achieving the short-term financial equilibrium by correctly correlating the duration of receivables collection with the duration of debt settlement; adjusting the volume of current assets and liabilities to the volume of activity activity (a real decrease by 47.4% of the turnover in the N+N+2 period, there is a real decrease of 56.8% of their current assets and by 62, 6% of current liabilities), the company did not resort to long-term bank loans; the total debt ratio reflects the ability of the company's assets to cover attracted temporary sources and loans.
- Weaknesses: Real decline in company turnover and total revenue both in year N+1 and N+2; high indebtedness of equity; the tendency towards the non-correlation of the evolution of the operating costs with the revenues generated by the company's activity registered in period  $N\div N+2$ ; the heavily unfavorable impact of the financial result (due to exchange-rate expenses) on the company's arm's output over the period under review.

Building on the achievements of previous years as well as the revenue and expenditure budget for the N + 3 year, revenue and expenditure for the N + 3  $\div$  N + 4 period, ie the net profit obtained, were projected, given the objective principal of the management of "ALPHA AUTO" SRL to return to the evolution of the company N  $\div$  N + 1, year N + 2 being considered an exception

- Taking into account the prerequisites for defining the future development of the trading company, as well as the main factors of influence of the sales that are foreseen in the perspective were elaborated levels of the forecast.
- From the analysis of the revenue and expenditure forecast for years  $N+3 \div N+4$ , the following results:
- The overwhelming weight in the revenue structure continues to be the sale of goods;
- No major changes in the structure of expenditures in the N + 3  $\div$  N + 4 range are foreseen, with the largest share of expenditure on goods (60.40% in total expenditure in year N + 3, respectively 60.90% in year N + 4);
- the future evolution of activity under this forecasting scenario foresees an increase of the company's market in the years  $N+3 \div N+4$ , the turnover achieved this year being 21.24% higher than the achieved turnover in year N+2, the year N+3 is intended to be a year of relaunching the company. starting with N+4, it is intended to continue to grow, with turnover increasing by 12% compared to year N+3; the company wants to increase its turnover by 11-12% per year.
- On the whole, an improvement in the company's profitability is foreseen due to the slight reduction in the share of expenditure on services

rendered by third parties and financial expenses;

- The amount of depreciation calculated corresponds to the amount of depreciable fixed assets and their normal life, estimated at the level of the amount recorded in year n + 2;
  - The number of employees is maintained;
  - No new loans are foreseen;
  - The tax rate of the profit considered is 16%.

#### **Conclusions**

From this article we draw a series of conclusions, which mention that diagnostic analysis has become more and more a way to analyze the microand macroeconomic level of the financial situation. Of all the components (factors of production) it is very clear that all are important but the most important role is played by the financial and material resources of a country, a branch, an economic agent or, if you want, an organization with different functions in the activity state. The bottom line is that it is periodically why, not annually, this diagnostic analysis of financial results must be an end-of-year, but also a start-up for the next financial year. Another relevant conclusion is that a diagnosis of financial results can only be achieved on the basis of a system of well-correlated indicators that highlights how the economy evolves in a particular trading company or at the level of a branch or the entire national econothousand. On the basis of the diagnostic analysis, it is possible to predict trend elements regarding the future evolution of the economic agent, the commercial company subject to the analysis.

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