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# THE FINANCIAL ANALYSIS OF THE STRUCTURE OF ASSETS, LIABILITIES AND EQUITY

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*Financial statements are like a work of art  
not yet evaluated by experts, it gives you  
confidence and skepticism in the same time.*

## Abstract

*Economic analysis is a powerful tool at the disposal of the management of any economic entity, the use of which can provide financial discipline, profitability, development and innovation. Nowadays, due to the economic, social and political dynamics, the need to adapt and to maintain on the market in profitable conditions, the leadership of a society can not be sustained only by the experience of those involved in this activity. It is imperative to use tools to analyze economic phenomena that provide the most relevant solutions to help the management take the best economic solutions.*

**Keywords:** *economic analysis, profitability, rate, decisions, performance.*

**JEL Classification:** D22, G32

## Introduction

In the economic analysis, the information in the standardized financial statements using the tax reporting forms is used. These situations are designed to be understood and read by anyone who is interested in learning about a business entity in terms of the results obtained at a given time, or in time by comparing the data of several periods, information about debts, assets, capital, but also about the possibilities for development in the near future. There are a lot of users of financial information presented in the financial statements that might be interested in the image of the economic entity they offer with loyalty and trust. The first category of users of accounting information would be primarily investors interested in profit and development of their own businesses. The second category of users can be considered as employees who would like a stable economic and social environment in the long run, and may compete with banks that need feasible customers with a clear chance of returning their loan rates to maturity.

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### **Literature review**

Anghel (2014) conducted a study on the application of a system of indicators on a company's financial statements. Anghel, (2013) has used financial analysis to study the economic evolution of entities that have activity on the Romanian capital market. Anghelache and Anghel (2016) presented the main statistical indicators used in the analysis of the company's results. Anghelache and Anghelache (2009) applied econometric models to analyze asset rates. Anghelache (2008) is a reference work in the field of economic statistics in which the main indicators used in economic and financial analyzes are presented and applied. Anghelache (2006) analyzed a number of quantitative methods that apply to financial studies. Anghelache and Anghelache (2009) analyzed some aspects of profitability and associated risk. Dumbravă (2010) presented and applied methods and models used in examining the performance of a company. Lazar and Lazar (2012) addressed aspects of economic statistics. Ghic and Grigorescu (2015) presented the basic notions of the economic and financial analysis, both theoretical and applicative, a similar theme being studied by Paveloia and collaborators (2010) as well as by Robu, Anghel and Șerban (2014). Lee and Forthofer (2005) highlighted aspects of complex data analysis.

### **Research methodology, data, results and discussions**

The standardized financial accounting reporting documents used in financial analysis are:

- The Balance sheet drawn up on the basis of the final balances of the verification balance at the end of a reporting period, semester or year.
- The Profit and Loss Account drawn up on the basis of the turnover of income and expense accounts in the incoming verification balance for the reporting periods..

#### **• Analysis of the financial structure of assets**

Using the information summarized in the financial statements published by the economic entities at the end of a tax reporting period, a number of financial indicators can be calculated that allow, through the results obtained, a pertinent analysis of economic performance and their position in the hierarchy in the field in which each .

Next, we propose a financial analysis of the assets of Alfa SRL.

From the analysis of SC Alfa SRL's balance sheet, we decipher the following information that we use in determining the individual rates for each patrimonial component.

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### Structure of assets at SC Alfa SRL

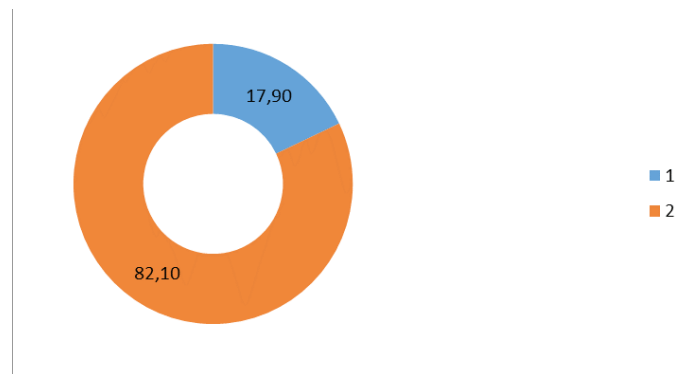
Table 1

Item name in the balance sheet	Value (thousand lei)	Share (%)
Fixed assets	129996.5	17.90
Current assets	596241	82.10
Prepayments	0	0.00
Total	726237.5	100.00

The share between assets analyzed at the level of this entity is detailed in the following graphical representation:

### Structure of economic entity assets

Figure 1



Starting from the data provided by the financial statements we determine the specific rates for each item presented in the structure of the patrimonial asset.

#### Fixed asset rate

The Fixed Assets Rate is a measure of the extent to which the assets of the property are immobilized, thus reflecting the share of assets that are permanently in the patrimony.

$$\text{Fixed asset rate} = \frac{\text{Fixed assets}}{\text{Total assets}} \times 100$$

$$\text{Fixed asset rate} = \frac{129996.5}{726237.5} \times 10 = 17.90\%$$

From the result obtained by calculating the rate of fixed assets we find that their share in the total assets is modest.

Next, we will detail the share of the fixed assets of the total assets presented.

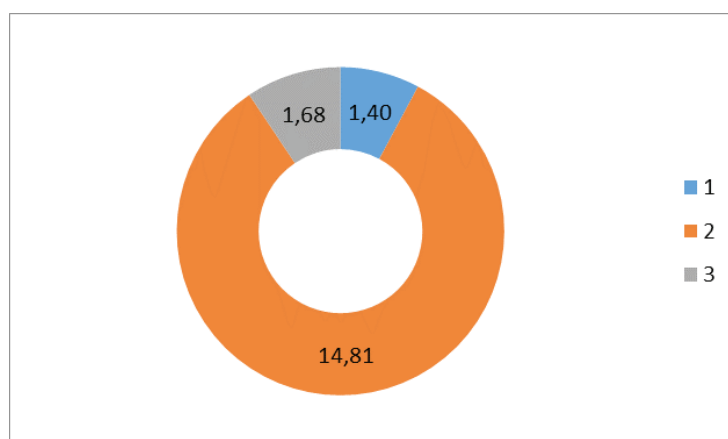
#### Structure of fixed assets

Table 2

Item name in the balance sheet	Value (thousand lei)	Share (%)
Intangible assets	10202.65	1.40
Tangible assets	107572	14.81
Financial assets	12219.75	1.68
Total	129994.4	17.90

#### Share of fixed assets in total assets

Figure 2



We calculate the following rates:

$$\text{Rate of intangible assets} = \frac{\text{Intangible assets}}{\text{Total assets}} \times 100$$

$$\text{Rate of intangible assets} = \frac{10202.65}{726237.5} \times 100 = 1,40\%$$

$$\text{Rate of tangible assets} = \frac{\text{Tangible assets}}{\text{Total assets}} \times 100$$

$$\text{Rate of tangible assets} = \frac{107572}{726237.5} \times 100 = 14,81\%$$

$$\text{Rate of financial assets} = \frac{\text{Financial assets}}{\text{Total assets}} \times 100$$

$$\text{Rate of financial assets} = \frac{12219.75}{726237.5} \times 100 = 1,68\%$$

#### Current asset rate

This indicator is very important in analyzing the activity of an economic entity.

#### Structure of current assets

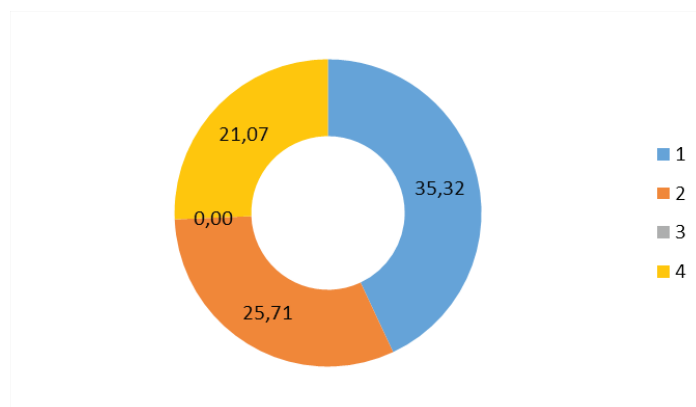
Table 3

Item name in the balance sheet	Value (thousand lei)	Share (%)
Stocks	256485	35.32
Receivables	186739	25.71
Short-term investments	0	0.00
House and accounts with banks	153017	21.07
Total	596241	82.10

In order to better highlight the positive situation presented by the economic entity by high value of the current assets held below, we read below the following graph.

#### Share of current assets in total assets

Figure 3



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$$\text{Current asset rate} = \frac{\text{Current asset}}{\text{Total assets}} \times 100$$

$$\text{Current asset rate} = \frac{596241}{726237.5} \times 100 = 82,10\%$$

We will further detail the structure of circulating assets by calculating this indicator for each of the components of the circulating assets to obtain relative structure sizes.

$$\text{Stock rate} = \frac{\text{Stocks}}{\text{Total assets}} \times 100$$

$$\text{Stock rate} = \frac{256485}{726237.5} \times 100 = 35,32\%$$

$$\text{Commercial receivables rate} = \frac{\text{Customers and Commercial receivables}}{\text{Total assets}} \times 100$$

$$\text{Commercial receivables rate} = \frac{186739}{726237.5} \times 100 = 25,71\%$$

$$\text{Rate of availability} = \frac{\text{Banking Stocks and Placement Titles}}{\text{Total assets}} \times 100$$

$$\text{Rate of availability} = \frac{153017}{726237.5} \times 100 = 21,07\%$$

• **Analysis of the financial structure of equity and debt**

We continue to use, as in the case of the analysis for the patrimonial asset, the data in the balance sheet, relevant indicators for the patrimonial items included in the part of debts and equity.

### The structure of the liabilities of SC Alfa SRL

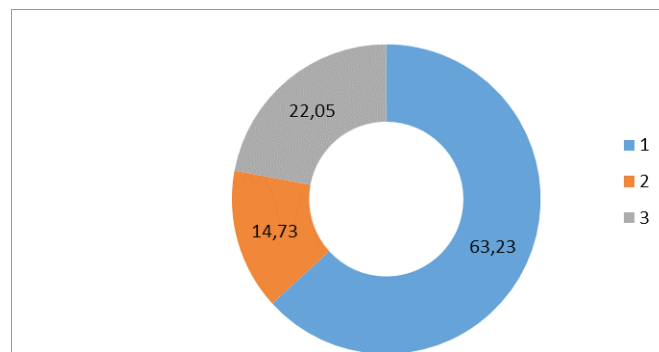
Table 4

Item name in the balance sheet	Value (thousand lei)	Share (%)
Short term debts	459172.75	63.23
Medium and long term debt	106944.75	14.73
Equity	160120	22.05
Total pasiv	726237.5	100

As far as the structure of liabilities is concerned, for a more suggestive presentation, we draw the following graph:

### The structure of liabilities of SC Alfa SRL

Figure 4



From the data presented in Table 4 it is noted that the debts that the company has to pay in a short period of time have the largest share in the total liabilities.

It is advisable to proceed, as in the case of actions, to a breakdown of the patrimonial liabilities structure by determining the rates specific to each component element as follows:

#### Financial stability rate

The financial stability rate reflects the share of the financing sources in use for medium and long periods in the total resources held by the economic entity to cover the economic means and is calculated according to the formula:

$$\text{Financial stability rate} = \frac{\text{Permanent capital}}{\text{Total equity and liabilities}} \times 100$$

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$$\text{Financial stability rate} = \frac{\text{Equity} + \text{medium and long term debt}}{\text{Total equity and liabilities}} \times 100$$

$$\text{Financial stability rate} = \frac{160120 + 106944.75}{726237.5} \times 100 = 36,78\%$$

#### *Debt rates*

The *short-term debt ratio* is calculated as the ratio between the total amount of debt with a chargeability of less than one year and the total of the sum of the equity and the total attracted financing sources, the result being the share of these short-term liabilities in the total liability balance sheet.

$$\text{Short-term debt ratio} = \frac{\text{Short term debts}}{\text{Total equity and liabilities}} \times 100$$

$$\text{Short-term debt ratio} = \frac{459172.75}{726237.5} \times 100 = 62,23\%$$

The high weight of short-term debt in the total balance sheet liability is not a favorable situation for our company. The simultaneous debt exigibility in a given period could lead to financial difficulties or even the impossibility of settling debts at maturity.

The *rate of global autonomy* calculated as a ratio between equity and the total of the sum of equity and the total attracted funding sources used to finance the activity.

$$\text{Rate of global autonomy} = \frac{\text{Equity}}{\text{Total equity and liabilities}} \times 100$$

$$\text{Rate of global autonomy} = \frac{160120}{726237.5} \times 100 = 22,05\%$$

In the ideal practice, this share of own resources used to support the core business should not be less than 33% of the total funding sources accessed by an economic entity.

The result obtained in our analysis, namely 22.05%, justifies us to express the opinion that in the coming period our company will face additional costs due to the subdimensioning of the equity compared to the total value of the liability.

Total debt rate calculated as the ratio between Total Debt Recovered and Total Liabilities as follows:



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$$\text{Total debt rate} = \frac{\text{Total debt}}{\text{Total equity and liabilities}} \times 100$$

$$\text{Total debt rate} = \frac{459172.75 + 106944.75}{726237.5} \times 100 = 77,95\%$$

The resulting share of 77.95% is higher than the recommended level of 67%. The situation could be a difficult one to cover additional costs if the management of the company did not foresee their coverage from the optimal use of the assets held and acquired from these attracted resources.

The general solvency rate, calculated as the ratio between the total assets held and the total current liabilities as follows:

$$\text{General solvency rate} = \frac{\text{Total Assets}}{\text{Current Debt}}$$

$$\text{General solvency rate} = \frac{726237.5}{459172.75} = 1,58$$

The result obtained from our analysis, namely 1.58, is well above the limit of 1, considered by the specialists the limit of the insolvency and dangerously close to the minimum value of this rate of 1.4.

*The rate of financial autonomy*, calculated as a ratio between equity and permanent capital, as follows:

$$\text{Rate of financial autonomy} = \frac{\text{Equity}}{\text{Permanent capital}}$$

$$\text{Rate of financial autonomy} = \frac{160120}{160120 + 106944.75} = 0,6$$

This rate expresses our own resources in all the resources our company has attracted in the medium and long term.

Stock rate financing rate

$$\text{Stock rate financing rate} = \frac{137068,25}{256485} = 0,53$$

### Conclusion

The decomposition of the patrimonial items presented in the financial statements of SC Alfa SRL, in less complex components, their study and analysis by means of known indicators, led to the establishment of causal relations between them, to understanding, explaining and interpreting the economic problems of the past, the present and the most important, will

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support the leadership of society in making the best decisions on economic performance in the future.

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