Analysis Model of the Company’s Patrimonial Elements

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Abstract
This paper reveals the most significant aspects pertaining to the financial analysis on a company’s patrimony. Among the items analyzed, the authors focused on the structure of assets and liabilities, the financial structure of capitals. The analysis model is based mostly on ratios, and the results are presented in an easily readable manner, with extensive use of charts and tables.

Key words: ratio, balance, patrimony, capitals, figures,

Based on the balance sheet on December 31st, 2011, we have realized the analysis of the structure for assets and liabilities, pursuing, mostly, the determination of certain ratios that characterize the relations existing between various patrimonial elements.

This way, the structure of assets in the company patrimony can be synthesized as in the table below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Value (lei)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>51,998,6</td>
<td>17,89%</td>
</tr>
<tr>
<td>Circulating assets</td>
<td>238,496,4</td>
<td>82,11%</td>
</tr>
<tr>
<td>Expenses in advance</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>290,495</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The relationship existing at the level of analyzed economic entity between the level of various assets categories is represented in the following chart:
Also, based on previously presented patrimonial elements, we have determined the specific ratios for each component of company asset.

1. Fixed assets ratio

This ratio reflects the weight of patrimonial elements that are to be permanently found in the patrimony and measures the degree of fixation for capital elements.

\[
\text{Fixed assets ratio} = \frac{\text{Fixed assets}}{\text{Total assets}} \times 100
\]

\[
\text{Fixed assets ratio} = \frac{51,998,6}{290,495} \times 100 = 17.89\%
\]

From previous calculation, it can be seen that fixed assets have a slightly reduced weight (17.89%) in total company assets. Detailing the fixed assets ratio will be made upon intangible, tangible and financial fixed assets, resulting:

\[
\text{Intangible assets ratio} = \frac{\text{Intangible assets}}{\text{Total assets}} \times 100
\]

\[
\text{Intangible assets ratio} = \frac{4,081}{290,495} \times 100 = 1.41\%
\]

The intangible assets ratio, for economic entities acting in developing countries, is extremely low (below 25% of total assets), but in the case of analyzed company, its value is 1.41% (almost non-existing).

\[
\text{Tangible assets ratio} = \frac{\text{Tangible assets}}{\text{Total assets}} \times 100
\]

\[
\text{Tangible assets ratio} = \frac{43,028.8}{290,495} \times 100 = 14.81\%
\]

\[
\text{Financial fixed assets ratio} = \frac{\text{Financial fixed assets}}{\text{Total assets}} \times 100
\]

\[
\text{Financial fixed assets ratio} = \frac{4,887.9}{290,495} \times 100 = 1.68\%
\]

In the following table, we have synthesized data regarding the structure, in absolute and relative figures, of the structure of fixed assets.

<table>
<thead>
<tr>
<th>Item</th>
<th>Value (mil. lei)</th>
<th>Weight in total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets</td>
<td>4,081.0</td>
<td>1.41%</td>
</tr>
<tr>
<td>Tangible assets</td>
<td>43,028.8</td>
<td>14.81%</td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td>4,887.9</td>
<td>1.68%</td>
</tr>
</tbody>
</table>

Calculated data, for greater suggestivity, are presented in the following chart:

**Weight of fixed assets in total assets**
2. Circulating assets ratio

This ratio has a major significance in the activity of a company. Therefore, by capitalizing the theoretical methodology, we will apply this methodology to the balance sheet data of analyzed company and will achieve significant indicators.

\[
\text{Circulating assets ratio} = \frac{\text{Circulating assets}}{\text{Total assets}} \times 100
\]

Circulating assets ratio = \( \frac{238,496.4}{290,495} \times 100 = 82,11\% \)

The analyzed company has an extremely high weight of circulating assets in total assets (over 80%).

In the case of the circulating assets ratio, we will detail it on main component items as well, in order to achieve relative structural measures. We envision the rate (weight) of inventories, commercial receivables and cash and cash equivalents at the analyzed company.

\[
\text{Inventories ratio} = \frac{\text{Inventories}}{\text{Total assets}} \times 100
\]

Inventories ratio = \( \frac{102,594}{290,495} \times 100 = 35,32\% \)

\[
\text{Commercial receivables ratio} = \frac{\text{Customers and similar accounts}}{\text{Total assets}} \times 100
\]

Commercial receivables ratio = \( \frac{74,695.6}{290,495} \times 100 = 25,71\% \)

\[
\text{Cash and cash equivalent ratio} = \frac{\text{Cash + Placement titles}}{\text{Total assets}} \times 100
\]

Cash and cash equivalent ratio = \( \frac{61,206.8}{290,495} \times 100 = 21,08\% \)

In the following table, the data resulted from calculations for the structure of financial assets are presented.

<table>
<thead>
<tr>
<th>Item</th>
<th>Value (lei)</th>
<th>Weight in total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories</td>
<td>102,594</td>
<td>43,02%</td>
</tr>
<tr>
<td>Receivables</td>
<td>74,695,6</td>
<td>31,32%</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cash and bank accounts</td>
<td>61,206,8</td>
<td>25,66%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>238,496,4</strong></td>
<td><strong>100,00%</strong></td>
</tr>
</tbody>
</table>

The weight of circulating assets in total company assets is presented in the following chart:
Similarly, based on the same methodology and using data from the company’s balance sheet, we have calculated the relevant indicators regarding liabilities. Thus, the liabilities of the company, as presented in the 2011 balance sheet, can be synthesized in the following table and chart. These (the table and the chart) are realized based on absolute and relative data regarding the liabilities included in the company balance sheet.

### Structure of liabilities, S.C. AUTOAERO S.R.L.

<table>
<thead>
<tr>
<th>Item</th>
<th>Value (mil. lei)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debts: sums that are to be paid within a year</td>
<td>183.669,1</td>
<td>63,22%</td>
</tr>
<tr>
<td>Debts: sums that are to be paid within a period longer than year</td>
<td>42.777,9</td>
<td>14,73%</td>
</tr>
<tr>
<td>Own capitals</td>
<td>64.048</td>
<td>22,05%</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>290.495</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Debts: sums that are to be paid within a year
#### Debts: sums that must be paid during a period of more than one year
#### Own capitals

![Structure of liabilities S.C. AUTOAERO S.R.L.](image)
From the analysis made, based on data (indicators) calculated, it can be seen that debts with reimbursement term below one year hold a significant weight (63,22%) in total company liabilities.

For better characterization of the structure of economic entity’s liabilities, the determination of specific ratios is recommended.

   a) Financial stability ratio
   The ratio reflects the weight of financing sources remaining at the disposition of commercial company for a period more than one year in the total sources of covering economic means. Subsequently, we have calculated the financial stability ratio, by using the relationship:
   
   \[ \text{Financial stability ratio} = \frac{\text{Permanent capital}}{\text{Total liabilities}} \times 100 \]

   \[ \text{Financial stability ratio} = \left( \frac{64.048}{290.495} + \frac{42.777.9}{290.495} \right) \times 100 = 36.77\% \]

   b) Indebment ratios
   These ratios show the weight of debts with exigibility term below one year in the total company liabilities and financing sources attracted, in total company liabilities. Applying calculation relationships and using the data from company balance sheet, we have achieved:

   \[ \text{Short - term debts ratio} = \frac{\text{Short - term debts}}{\text{Total liabilities}} \times 100 \]

   \[ \text{Short - term debts ratio} = \frac{183.669.1}{290.495} \times 100 = 63,22\% \]

   From previous calculation it can be seen that short-term debts have an extremely high weight in total liabilities of the analyzed economic agent. Such situation can be considered extremely unfavorable for the company, as it is exposed to the risk of occurrence of further difficulties, following the concentration of due terms for various debts within a very short time (less than one year).

   • **Global autonomy ratio** presents the weight of own source in total means used to finance the activity of an economic entity. In practice, it is recommended that the weight of own financing sources to be minimum 33% of total financing sources used by the company.

   \[ \text{Global autonomy ratio} = \frac{\text{Own capital}}{\text{Total liabilities}} \times 100 \]

   \[ \text{Global autonomy ratio} = \frac{64.048}{290.495} \times 100 = 22,05\% \]

   The value recorded by this indicator (22,05%) is lesser than the recommended one, (33%), raising a first question mark on the future evolution of analyzed economic agent. This situation is due to under-dimensioning company’s own capital compared to the total value of liabilities, appealing mostly to attracted sources to finance the economic activity, situation that leads to the occurrence of non-justified additional costs.
• **Total debts ratio** reflects the weight of attracted financing sources in total company liabilities.

\[
\text{Total debts ratio} = \frac{\text{Total debts}}{\text{Total liabilities}} \times 100
\]

\[
\text{Total debts ratio} = \frac{42.777.9 + 183.669.1}{290.495} \times 100 = 77.95\%
\]

Total debts ratio records a very high value compared to the optimal level recommended of 67%, a high weight of external financial sources attracting the occurrence of significant additional costs. The management of the company considered that the level of these costs can be supported upon the optimum use of acquired tangible assets.

• **General solvability ratio** measures the risk of payment incapacity for debts to which the analyzed economic agent is subjected. The minimum value of solvability ratio is considered 1,4 (if the minimum weight of own capital in total financing sources is 30%). If the global solvability ratio is lower than unit, the company is not solvable.

\[
\text{General solvability ratio} = \frac{\text{Total assets}}{\text{Current debts}} = \frac{290.495}{183.669.1} = 1,58
\]

• **Financial autonomy ratio** gives the weight of own resources in the long-term resources attracted by the company.

\[
\text{Financial autonomy ratio} = \frac{\text{Own capital}}{\text{Permanent capital}} = \frac{64.048}{64.048 + 42.777.9} = 0,6
\]

\[
\text{Inventories financing ratio} = \frac{\text{Permanent working capital}}{\text{Inventories}} = \frac{54.827.3}{102.594} = 0,53
\]

**References**


