Analysis on the Balance Sheet of a Company

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Abstract

This paper is focused on the financial analysis upon the figures reflected in the balance sheet of a company. The model proposed by the authors takes into consideration the evaluation of the working capital, necessary working capital, net treasury. Liquidity and rotation speed indicators, also analyzed inside the article, provide useful information for financial and top management of the company.

Key words: capital, rotation, liquid, financial situation, treasury

Based on the data from the balance sheet at December 31st, 2011 and by taking into consideration the liquidity of assets and exigibility of liabilities items, for the studied company, the financial (patrimonial) balance sheet can be drawn.

By using information presented in the financial balance sheet, applying the proper models from the recognized analysis methodology, we have determined the main indicators of patrimonial situation analysis, that is: working capital, necessary working capital, net treasury, net financial situation.

1. Working capital

Working capital is a safety margin of the composed by the differences existing between receivable and payable cash amounts, but also by the gap between the term of asset liquidation and average duration in which debts become exigible.

With the help of information included in the upper half of the balance (patrimonial) of the company, working capital can be determined as such:

\[
\text{Permanent working capital} = \text{Permanent Capital} - \text{Fixed Assets} = \text{Own Capital} + \text{Long-term financial debts} - \text{Fixed assets}
\]

\[
\text{Permanent working capital} = 64.048 + 42.777.9 - 51.998.6 = 54.827.3 \text{ mil. lei}
\]
The positive value of the working capital reflects a state of long-term equilibrium at the level of the analyzed economic entity, it having the possibility to support the gap between the term of asset liquidation and the average duration of time in which company debts become exigible.

To analyze the real patrimonial situation of the company, the determination of the own working capital is possible.

**Own working capital = Own capital - Fixed assets**

\[
\text{Own working capital} = 64.048 - 51.998,6 = +12.049,4
\]

The existence of a positive proper working capital demonstrates that the studied economic entity is in a state of long-term financial equilibrium, given by the own capital.

The value of working capital can be determined also with the help of the elements from the second section of the patrimonial balance sheet, that is balance elements with higher liquidity (circulating assets) and lower exigibility (short-term debts)

\[
\text{Working capital} = \text{Circulating assets} - \text{Short-term debts}
\]

\[
\text{Working capital} = 238.496 - 183.669,1 = +54.827,3 \text{ mil. lei}
\]

Working capital records a positive value, meaning that the company is in a state of short-term equilibrium, having at hand high-liquidity assets whose value is superior to the sum needed to pay all debts with exigibility term below one year.

### 2. Necessary working capital

This indicator reflects the value of short-term assets, regardless the nature of inventories and receivables, that are not financed from short-term attracted sources. By applying the calculation relations, we achieve:

\[
\text{Necessary working capital (NFR)} = \text{Short-term assets} - \text{Short-term liabilities}
\]

\[
\text{NFR} = \frac{102.59}{4} + \frac{74.695}{6} - \frac{183.669}{1} = -6.379,5 \text{ lei}
\]

The necessary working capital records a negative value, meaning that short/term assets are totally covered by financial sources with increasing exigibility, that, furthermore, partially finance the permanent assets (current debts are exclusively operational debts). Such situation is considered favorable to the company when it is the consequence of the application of a correlation strategy of the period needed to transform circulating assets into cash with the terms of debts’ payment.

### 3. Net treasury

Net treasury allows to reflect the correlation between the working capital and the necessary working capital, by identifying the financial situation of the studied economic entity, on both long and short term.

For the analyzed society, net treasury can be determined as such:
Net treasury = Working capital - Necessary capital

Net treasury = +54,827,3 - (-6,379,5) = +61,206,8

Net treasury records a positive value and represents an equilibrium status at the level of the company. Such value of net treasury is the direct consequence of a financial excedent recorded during 2009 and, implicitly, of a profitable activity of the company during the analyzed company.

- **The net situation** of the company is important because it reflects the solvability of the company at a given moment and for that we use the relationship:

\[
\text{Net situation} = \text{Total assets} - \text{Total debts} = \text{Own capitals}
\]

A positive value of the net situation reveals that the analyzed economic agent is solvable.

Net situation = 290,495 – (42,777,9 + 183,669,1) = 64,048 mil. lei

**4. Indicators regarding liquidity and rotation speed**

Financial analysis, performed based on the information included in the accounting balance sheet at the end of 2011, can be realized by calculating some specific indicators, regarding liquidity and rotation speed of capital into the turnover:

- **Current liquidity** measures the capacity of the economic entity to pay his short-term debts by using the short-term assets from the balance sheet:

\[
\text{Current liquidity} = \frac{\text{Current assets}}{\text{Current debts}} = \frac{238,496,4}{183,669,1} = 1,29
\]

The value recorded by the current liquidity represents a warning signal on the possibility of the company to deal with its short-term due obligations (the optimal value being 1,5-2). In this situation, the company needs to borrow itself or sell some fixed assets to pay its debts.

- **Immediate liquidity** measures the capacity of the company to pay its short-term debts by using assets with the greatest degree of liquidity from the balance sheet.

\[
\text{Immediate liquidity} = \frac{\text{Current assets} - \text{Inventories}}{\text{Current debts}} = \frac{238,496,4 - 102,594}{183,669,1} = 0,73
\]

Also, in the case of this indicator, the sub-unit value recorded (compared to the optimum unit value) represents an unfavorable aspect for the company, that is the assets with high liquidity are not enough to cover the short-term debts, regardless the real value of inventories.

\[
\text{Liquidity on sight} = \frac{\text{Treasury assets}}{\text{Current debts}} = \frac{61,206,8}{183,669,1} = 0,33
\]

This indicator shows that treasury assets are only 33% of the total current debts. It must be taken into consideration that flash liquidity to be more severely controlled, to avoid
creating difficulties to the company in its relations with creditors (the ones to whom concurrent debts exist).

- **The rotation speed of debits-customers** allows to evaluate the performances of economic entities regarding their relationships with their beneficiaries, having a special importance in the case of companies that perform credit sales (commercial credit). The duration of a rotation of debits-customers is calculated as a ratio between the average balance of customers account and the turnover destined to cover the patrimonial element “debtors-customers”, ratio multiplied by 365 (calendar days of the year).

Debts customers rotation speed = \( \frac{\text{Customers balance} \times 365}{\text{Turnover}} = \frac{74.695.6 \times 365}{197.230,1} = 138 \text{days} \)

- **The rotation speed of the fixed assets** through the turnover evaluates the capacity of the economic entity regarding the use of these elements to achieve incomes.

Rotation speed of fixed assets = \( \frac{\text{Turnover}}{\text{Fixed assets}} = \frac{197.230,1}{51.998,6} = 3,79 \text{times} \)

The recommended value for this indicator must be greater than 1, so a favorable situation is observed for the company, as the value recorded is 3,79.

- **The rotation speed of total assets** is an indicator that reflects the efficiency to use the assets in the patrimony of an economic entity.

Rotation speed of total assets = \( \frac{\text{Turnover}}{\text{Total assets}} = \frac{197.230,1}{290.495} = 0,68 \text{times} \)

### 5. Analysis of company’s profitability

- **Return on equity (ROE)** for the proprietary capital emphasizes the efficiency of the proprietary capital, respectively the placement made by the shareholders of a company by buying company’s shares. Profit, important financing source for the development of an activity, represents a component part of the capitals of a company, remunerating, mainly, the participation of shareholders, through dividends.

Financial profitability ratio = \( \frac{\text{Net profit}}{\text{Own capital}} \times 100 = \frac{3.542.5}{64.048} \times 100 = 5,53\% \)

The value recorded by this indicator must be greater than 5% so it can be stated that the activity run inside the company was efficient from the point of view of proper capital management.

- **Return on advanced capital** is established as ratio between current annual profit and the advanced capital (fixed and circulating).

Advanced capital profitability ratio = \( \frac{\text{Current result}}{\text{Fixed assets} + \text{Circulating assets}} \times 100 = \frac{4.172,6}{290.495} \times 100 = 1,43\% \)

Based on the value recorded by this indicator in 2011, an insufficient value of the advanced capital is observed during the analyzed period.

- **Gross commercial margin ratio**

Gross commercial margin ratio = \( \frac{\text{Gross profit}}{\text{Turnover}} \times 100 = \frac{4.172,6}{197.230,1} \times 100 = 2,11\% \)

By taking into account that the value recorded by the company is greater than the value recommended for this indicator (>1,8), it can be stated that its activity in 2011 was profitable.

- **Economic profitability**
Economic profitability ratio is calculated based on EBIT.

\[ EBIT = \text{Earning Before Interest and Taxation}, \text{ thus } \]

\[ EBIT = \text{Total Incomes} - \text{Total expenses} \] (excluding interest expenses and profit taxation.

\[
\text{Economic profitability ratio} = \frac{\text{EBIT} - \text{Profit taxation}}{\text{Economic asset}} \times 100
\]

\[
\text{EBIT} - \text{Profit taxation} \times 100
\]

\[
\text{Fixed assets} + \text{Net current assets}
\]

Also, the following calculation formula can be used:

\[
\text{Economic profitability ratio} = \frac{\text{Net profit} + \text{Interest}}{\text{Own capitals} + \text{Financial debts}} \times 100
\]

For 2011, the value of the indicator was:

\[
\text{Economic profitability ratio} = \frac{4.822,130 + 458,039}{65,612,095 + 70,281,052 + 37,456,787} = 2.78\%
\]

References


