

Financial Position – Overview of Economic Performance in the Energy Mining Industry

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Abstract *This study shall determine the economic performance of the entity in charge of mining – energy southwest region. Thus, the scientific approach is focused on the overall analysis of the financial position of the organization that operates the largest lignite deposit in Romania and contributes to ensuring the stability of the national energy system. This is an analysis of the patrimonial assets and liabilities and of the liquidity and solvency of the organization in the reference period. In this study we intend to get results that can be exploited by decision makers in the energy sector to improve the financial position of the organization with clear and strong future prospects.*

Key words Financial position, economic performance, patrimonial elements, profit, investment

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1. Introduction

In the scientific paper is taken on an objective analysis of the financial position and the influence it exerts on the economic performance of the organization responsible for the operation of coal mining in Oltenia region and electricity generation that provides a third of the country's energy needs and presented relevant information that reflects the work done by the entity during the period under review.

The objective of this study was to determine economic performance for through financial position held by the organization at a time. The analysis undertaken in this regard has been geared towards determining the financial position of influence on economic performance in the current circumstances where the requirements of competitiveness coming from Europe determined makers indigenous to adopt measures that need appropriate for the current situation in mining while optimizing costs operation in the entire system. Determining a favorable financial position is in the interest of the organization because it has unlimited access to the financing activity by various creditors. The company has constantly need financing for a smooth running of the business, among which include: execution of the investments approved for each financial year (implementation of clean technologies, upgrading machinery for the extraction and processing of coal, transportation and storage of coal premises specially arranged), optimizing inventory management of raw materials and the development of programs related to training and development workers in the unit responsible for the technological flow.

In these circumstances, getting a favorable financial position of the organization is a competitive advantage in the competition and guarantee obtaining contractual agreements consistent with financing needs planned and linked to strategic goals set in the development plan of the business.

The foundation's survey we started from the hypothesis that the activity of the organization in accordance with the legal framework, its own statute, on the one hand, and meeting the expectations of shareholders, employees and business partners on the other hand, will be able to hold a considerably improved financial position and an appropriate level of profitability and profitability necessary to

strengthen market share. These aspects contribute to ensuring business continuity undertaken in order to provide stability and prosperity in both microeconomic and macroeconomic level.

2. Literature review

The financial position of the company defines a certain state in which the undertaking is financially, giving its responsiveness to changes in the operating environment [DEX].

In literature the company's financial position is defined by the economic resources it controls, the financial structure of assets, liabilities and equity, liquidity and solvency of the economic values (Ristea and Dumitru, 2004). Professor C. Burja believes that the closest term economic performance is "economic efficiency", the scope of the two concepts but not overlap. Economic efficiency resulting from a comparison with the economic effort while performance rather aimed at certain levels of indicators compared to the same indicators levels (Burja, 2009).

According to the study conducted by Engle C.R. the financial position of an entity is determined by the strengths and weaknesses highlighted through indicators and financial ratios on activities (Engle, 2012). According to other authors financial position depends directly on financial liquidity and solvency of the organization (Siminica and Stefan, 2012). V. Miron's study reveals that "the financial position of an economic entity is a concept with different meanings, depending on the category stakeholders analyze financial situation. In the energy sector, which is considered of great importance in the national economy, we believe that the most important category of stakeholders is the state (government), because ensuring the functioning of the sector is a prerequisite for the development of other sectors of the national economy" (Miron, 2015). According to the Ospishchev and Nagornaja authors, the financial position of the company is determined by reliability, solvency and financial stability (Ospishchev and Nagornaja, 2009).

Knowing the financial position it can not be determined only after an interpretation. The level of representation is twofold: The first is a filter that transmits signals to help people build a second representation; according to their finalities they develop new images, multiform, distinct representations accounts, which include a different understanding of perceived reality (Quairel, 1989).

Financial position expressed "a company's ability to generate liquidity and other liquidities (cash equivalents such as stocks and receivables that become cash through sale and collection) in a reporting period called financial year or accounting period. Such capability translates liquidity and solvency of the company ie the ability of the payment of employees, suppliers, debts to the budget and other public bodies to pay interest, to repay loans and to remunerate shareholders organization. Liquidity refers to the availability of cash in the near time horizon, after taking into account the financial obligations related to this timeframe. Instead solvency concerns on cash over a longer period which is to honor outstanding financial commitments" (Pătrașcu, 2008).

3. Methodology of research

In this study actions are taken in order to achieve a quantitative research combined with qualitative research effectively granting a study undertaken considerable value. Thus, the theoretical research work was developed in conjunction with applied research (practice) in the enterprise.

The qualitative research study undertaken allow deductive approach, based on concepts, theoretical concepts and specific regulations of the study area and continuing with practical applications based on accounting data recorded in the company. Research methods commonly used in the paper are different, among which are highlighted: the observation group and comparison.

The scientific approach of this work was conducted by consulting various bibliographical materials consisting of books, articles published nationally or internationally oriented bibliography legislative issues studied.

The current state of knowledge on economic performance is highlighted by applying scientific documentation, the itinerary in this regard consisting of information presented on bibliographical sources existing data collection, study sources previously identified and synthesis by the information gathered, that assessment results synthesized to carry out a critical analysis on the current state of knowledge on the issues studied.

4. Analysis of the structure of the assets

I. Anghel said that “analyze patrimonial structure ensures the relevance of comparative assessment of the financial position in terms of significance elements. In this method resorting to using rates considered relevant for assessing the allocation of capital and the ability of their setting, structural changes caused by the policies adopted and changes in the conduct of the activity. Structural analysis allows relativization with competitors and the media sector” (Anghel *et al.*, 2014).

Analysis of the structure of the assets is realized through the asset structure rates, determined as the ratio between an item/group of assets and Group/total assets, being developed specific structural construction. Thus, the structures of the asset rates are shown in Table 1.

Table 1. Rates of the structure of the assets

Name of the rate	Formula	Indicators	Explanations and interpretations
I. Rai= The rate of fixed assets	$R_{ai} = \frac{A_i}{TA} \times 100$	A_i = Fixed assets, TA = Total assets	The indicator shows the share of assets in total assets. Reflect the level of capital investment entity.
1.1. Rin= The rate of intangible assets	$R_{in} = \frac{I_n}{TA} \times 100$	I_n = Intangible assets TA = Total assets	The indicator shows the share of intangible assets in total assets. Basically reflects the share of investments in development.
1.2. Ric= The rate of tangible assets	$R_{ic} = \frac{I_c}{TA} \times 100$	I_c = Tangible assets TA = Total assets	The indicator shows the share of total tangible assets.
1.3. Rif= Financial assets rate	$R_{if} = \frac{I_f}{TA} \times 100$	I_f = Financial assets TA = Total assets	The indicator shows the share of financial assets in total assets. Is the rate of investment in financial services.
II. Rac= The rate of current assets	$R_{ac} = \frac{A_c}{TA} \times 100$	A_c = Current assets TA = Total assets	The indicator shows the share of current assets to total assets. Indicator in industry approaches 40%.
2.1. Rst= The Stocks rate	$R_{st} = \frac{S_t}{TA} \times 100$	S_t = Stocks TA = Total assets	The indicator shows the share of stocks in total assets. The indicator depends on the activity of the entity.
2.2. Rcc= The rate of trade receivables	$R_{cc} = \frac{C_c}{TA} \times 100$	C_c = Trade receivables TA = Total assets	The indicator shows the share of trade receivables in total assets.
2.3. Rdsp= Availability rate (Treasury)	$R_{dsp} = \frac{Disp}{TA} \times 100$	$Disp$ = Availability TA = Total assets	The indicator shows the share of deposits in total assets. The normal value is between 5% -25%.
2.4. Rits= The rate of short-term investments	$R_{its} = \frac{Inv}{TA} \times 100$	Inv = short-term investments TA = Total assets	The indicator shows the share of short-term investments in total assets.

Source: Processing after Mărginean R., Recovery accounting information for analyzing economic performance in the furniture industry and identify ways of growth, 2015 - Thesis

Structural analysis of the balance sheet in the company analyzed, which operates in the mining and energy sector in Oltenia region, allows emphasizing rates of asset structure as contained in Table 2.

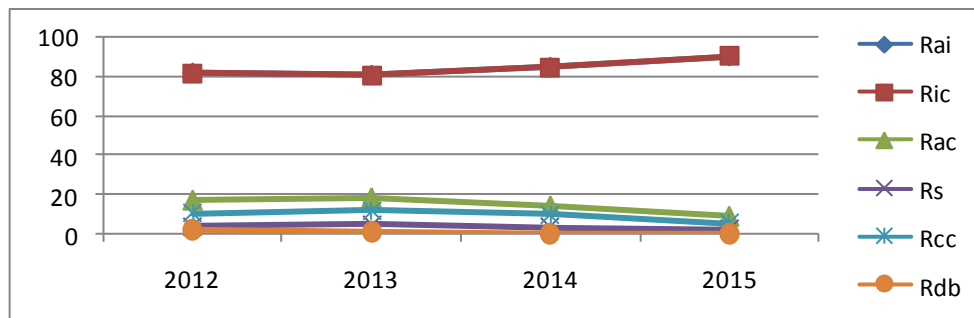
Table 2. Rates of balance sheet structure in the company analyzed (%)

Indicator	Period			
	2012	2013	2014	2015
The rate of fixed assets (R_{ai})	82.2	81.1	85.1	90.6
The rate of tangible assets (R_{ic})	81.9	80.8	85	90.6
The rate of intangible assets (R_{in})	0.1	0.1	0.05	0.02
The rate of financial assets (R_{if})	0.2	0.2	0.05	0.06

Indicator	Period			
	2012	2013	2014	2015
The rate of current assets (R_{ac})	17.2	18.4	14.4	9.3
The rate of Stocks (R_s)	4	4.9	3.6	2.5
The rate of trade receivables (R_c)	10.5	11.9	10.3	5.7
The rate of availability (Treasury) (R_{db})	2.7	1.6	0.3	0.7
The rate of short-term investments (R_{its})	0	0	0.2	0.2

Source: Own processing based on the organization's financial statements

Dynamic analysis indicators balance sheet structure in the period 2012-2015 is shown in Figure 1.



Source: own processing

Figure 1. The evolution of the balance sheet in the period 2012-2015

After analyzing the data in Table 2 and Figure 1 can draw the following conclusions on the balance sheet structure and its evolution over time in the organization:

- In terms of assets, they have a high share of over 80% in total assets due to the specific economic sector in which the business operates. Increase its share over the time period analyzed reflects the implementation of a significant investment plan to optimize production costs and reduce environmental footprint. Tangible assets represent the largest share in the property, the development rate substantially rate approaching their assets. Regarded evolving rate of tangible reaches 90.6% at the end of 2015 by nearly 10 percentage points higher than at the end of 2012. The increasing was manifested amid supplementing resources for acquisition of machinery, equipment and transport means useful production process. Extremely low weight of less than 1% of intangible assets and financial assets is due to cover needs related to the company's total assets for intangible assets that diminish the economic interests in the entities that serve the company's activity.

- Regarding the current assets of the company they show a downward trend from 17.2% in 2012 to 9.3% at the end of 2015. This decrease occurs amid diminishing stocks of coal extracted from the mining perimeters. Another reason for the decrease in current assets is diminishing cash reserves due to sums falling due to various creditors on the one hand, and on the other hand due payments to finance the current needs of the company. The rate of credit in 2015 reaches 5.7% down 6.2 percentage points from the level recorded at the end of 2013. This indicator remains at a relatively high level due mainly coal heating delivered to various agents in the country and unpaid until the end of the year under review. Rate stocks show a slight decrease from 4% in 2012 to 2.5% in 2015 on account of the difficult operating conditions in the coal resource exploitation perimeters.

5. Analysis of the structure of liabilities

Rates structure of financing sources of the company analyzes the relative importance and the time evolution of different sources of financing used by the firm. Main rates patrimonial liability structures are presented in Table 3.

Table 3. Rates of the structure of liabilities

Indicator	Formula	Explanations and interpretations
I. Financial stability rate (Rsf)	$\frac{\text{Permanent capital}}{\text{Total liabilities}} \times 100.$	Rate indicates the degree of stability in funding the company and hence its financial security.
1.1. Global financial autonomy rate (Rafg)	$\frac{\text{Own capital}}{\text{Total liabilities}} \times 100.$	The indicator reflects the extent to which it can meet payment obligations. The general assessment is that a level over 33% is a normal situation. Below this level the company has a high risk of insolvency.
1.2. Financial autonomy rate futures (Raft)	$\frac{\text{Own capital}}{\text{Permanent capital}} \times 100.$	Indicator allows an assessment of permanent capital structure. The minimum accepted level is 50%, a level below which the company has high solvency risk.
1.3. Financial security rate (Rsecf)	$\frac{\text{Own capital}}{\text{Med/long term debt}} \times 100.$	The indicator reflects the degree to which capital provides financing activity. The minimum permissible value of this rate to ensure the financial independence of the company must be at least 100%.
II. The rate of overall debt (Rig)	$\frac{\text{Total debt}}{\text{Total liabilities}} \times 100.$	The indicator shows the share of total debt in the company's patrimony.
2.1. Term borrowing rate (Rit)	$\frac{\text{Long/med. term debt}}{\text{Own capital}} \times 100.$	The indicator shows the share of medium and long-term debt or equity to permanent capital:
2.2. Financial liabilities rate (Rdf)	$\frac{\text{Financial debt}}{\text{Own capital}} \times 100.$	The indicator measures the share of total financial liabilities to equity.

Source: taken after Robu et al., (2014), economic and financial analysis firm, Economic Publishing House, Bucharest

Given the organization's balance sheet analyzed in the period 2012-2015, we computed the rate structure of liabilities and the results are summarized in Table 4.

Table 4. Rates of the liability structure within the organization analyzed (%)

Indicators	Period			
	2012	2013	2014	2015
Financial stability rate (Rsf)	89.4	89.4	87.7	64.4
Global financial autonomy rate (Rafg)	65.7	62.8	56.3	50.9
Financial autonomy rate futures (Raft)	73.5	70.3	64.2	79.2
Financial security rate (Rsecf)	332.7	327.6	253	380.4
The rate of overall debt (Rig)	29	29.8	34.6	35.9
Term borrowing rate (Rit)	27.9	30.5	39.5	26.3
Financial liabilities rate (Rdf)	31.6	36.6	49.1	70.3

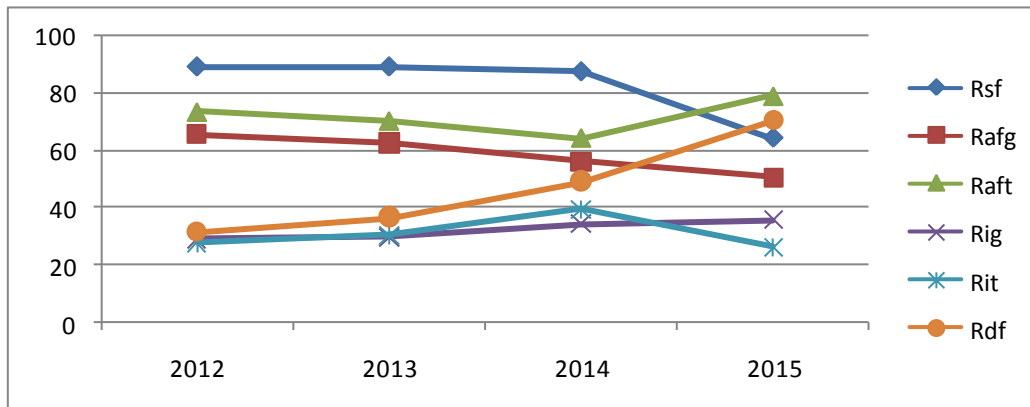
Source: own processing based on the financial statements of the organization

The dynamics analysis of the structure of liabilities in the period 2012-2015 is shown in Figure 2.

Analyzing the data in Table 4 and Figure 2, refer to the following rates on the level and dynamics of the liability structure of society:

- Financial stability rate shows a downward trend from 89.4% in 2012 to 64.4% in 2015. This decrease comes amid decline in equity during the reported period.

- Global financial autonomy rate is a decrease from 65.7% in 2012 to 50.9% in 2015. The downward trend of this indicator is due to the decrease in equity during the reported period on account of property items of which nature reserves and results are reduced from 4,211,312 thousand for the year 2012-2637176 thousand recorded in 2015.



Source: own processing

Figure 2. Evolution of rates structure of liabilities in the period 2012-2015

- Financial autonomy rate futures show a downward trend from 73.5% in 2012 to 64.2% in 2014. The decrease was due to the decrease in equity due to lower profit from 118.328 thousand recorded in thousands 2012-4591 lei registered in 2013. In 2014 the company recorded a loss of 693 635 thousand, resulting in a considerable drop in equity. In 2015 the indicator value of 79.2% recorded an increase of 15 percentage points from 2014 amid permanent capital decrease due to the repayment of medium and long-term borrowing contracted.

- In terms of financial security rate in the range of analysis goes beyond its 100% record but also a decrease from 332.7% in 2012-252% in 2014. The downward trend is due on the one hand drop equity from year to year because of lower profit and loss record in 2014 and secondly due to the growth medium and long term loans to fund investment and operational activities. In 2015 the indicator reaches 380.4% increase by 128 percentage points over the previous year due to reimburse some of the medium and long term loan contracted from various credit institutions.

- Leverage the overall trend shows a growth in the examined time amid increases in short-term loans contracted from various creditors and the total liability reduction due to the loss recorded in the year ended;

- Pointer term borrowing rate depreciates in the period 2012-2014 due to borrowing at several credit institutions. In 2015 the indicator is 26.3% down 13.2 percentage points from the previous year due to the repayment of medium and long-term debt contracted from various creditors.

- Analyzed the latest indicator - financial liabilities rate depreciates also from year to year due to higher financial liabilities total equity while reducing financial result on account of sharply dropping.

6. Analysis of liquidity and solvency of the organization

Liquidity and solvency analysis is performed using financial ratios that reflect the organization's ability to honor its obligations. They compare debt to assets that allow honoring those debts, interest on various levels. The main operational liquidity and solvency ratios in the financial analysis of the company are presented in Table 5.

Table 5. The liquidity and solvency rates

Name rate	Formula	Explanations and interpretations
I. Current liquidity ratio (Rlc)	$\frac{\text{Current assets}}{\text{Current liabilities}}$	The rate shows the correlation between current assets and current liabilities (short-term). It is considered that values size 1.5 – 2.0 insurer is a level of that rate.
II. Interim liquidity ratio (Rli)	$\frac{\text{Current assets} - \text{Stocks}}{\text{Current liabilities}}$	The indicator reflects the extent of a company's ability to honor its due obligations. It measures how many units almost liquid monetary assets back to a monetary unit current liabilities. Optimal level is between 0.8-1.0.

III. Liquidity ratio sight (Rlv)	$\frac{\text{Cash} - \text{Short} - \text{term} \text{ fin. inv.}}{\text{Current liabilities}}$	This is the most conservative measure of a company's internal liquidity, to the extent that it materialized only consider assets in cash.
IV. General solvency ratio (Rsg)	$\frac{\text{Total asset}}{\text{Total debts}}$	The indicator reflects the degree to which a firm can cope with debt. The minimum value of the overall solvency rate is considered 1.4.
V. The solvency ratio patrimonial (Rsp)	$\frac{\text{Own capital}}{\text{Own capital} + \text{bank loans}}$	A good level exceeds 0.5, while a level between 0.3 and 0.5 show a satisfactory situation.

Source: own processing

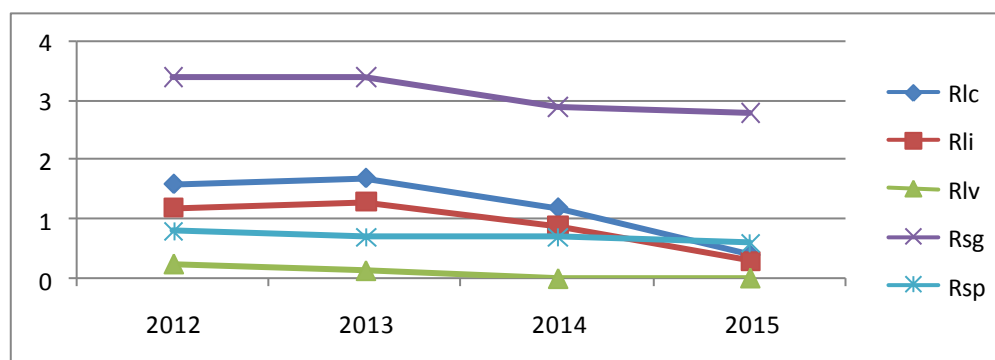
After analyzing liquidity and solvency indicators based on data provided by the organization under review according to the data in Table.

Table 6. Liquidity and solvency ratios of the organization analyzed

No.	Indicator	2012	2013	2014	2015
1	Current liquidity ratio (Rlc)	1.6	1.7	1.2	0.4
2	Interim liquidity ratio (Rli)	1.2	1.3	0.9	0.3
3	Liquidity ratio sight (Rlv)	0.25	0.14	0.01	0.02
4	General solvency ratio (Rsg)	3.4	3.4	2.9	2.8
5	The solvency ratio patrimonial (Rsp)	0.8	0.7	0.7	0.6

Source: own processing on the basis of annual financial statements of the company

Dynamic analysis indicators of liquidity and solvency of the organization in the period 2012-2015 is shown in Figure 3.



Source: own processing

Figure 3. Evolution of liquidity and solvency rates in 2012-2015

Analysing the dynamics and liquidity and solvency rates in the analyzed company, according to Table 6 and Figure 3, we can draw the following conclusions:

- Liquidity values are above par in the period 2012-2014 which reveals the company's ability to meet its short-term obligations. In 2015 the indicator to register a below par value which means the alarm on the organization's ability to repay short-term obligations.

- Regarding the indicator "interim liquidity", result analysis highlights the fact that in 2012, returning 1.6 monetary units per monetary unit of short-term debt obligations in 2013 and 1.7 monetary units. In 2014 the situation changes considerably by the fact that returning 0.9 monetary units per unit short-term debt obligations 0.3 and 2015 due to contract new loans to finance the work.

- on the indicator "liquidity sight" analysis result provides a continuous decline in the share of availability in the company's current liabilities from 0.25 in 2012 to 0.02 in 2015.
- General solvency ratio values are at least 2.8 during the same period which demonstrates that the company is solvent.
- Economic solvency ratio shows a declining trend from 0.8 in 2012 to 0.6 in 2015, the upper limit values of 0.5 to solvency organization becomes unsatisfactory. The results for this indicator in the period under review show a good solvency with uncertain prospects being necessary remedies.

7. Conclusions

Determining the financial position materialized in a sustained analysis of the elements presented in the balance sheet drawn up by the unit at the end of each financial year in question. The results obtained showed a positive financial position of the company due to an equity holding that fully cover total debt while the indebtedness of the enterprise is on the rise. Total assets recorded at the end of the analysis show a downward trend influenced by the decrease in current assets such as stocks and cash reserves. Also, total liabilities show a downward trend compared to the previous financial year by the influence of a considerable decrease of the profit recorded during the reported period.

Volume activities of the company and their diversity has led the contracting of new loans and foreign currency from domestic and foreign credit institutions in order to ensure the continuation of financing needs and investment process started. Determining a position relevant financial enterprise involved conducting a separate both the patrimonial structure of assets and the structure of patrimonial liability to highlight the qualitative changes in the situation of economic means and sources of financing, on the one hand that the appreciation of property and financial policy and strategy and financial foundation, on the other hand. Analysis performed on the structure of property asset in the company highlighted a share of over 80% assets in total assets due to the nature of his business. Further analysis of the assets revealed that the structure of tangible assets a share of over 85% in total assets being located on an upward trend due to investment-oriented purchase of machinery, equipment and transport means useful production process.

Intangible and financial assets have a share of less than 1% in total assets due to optimal sizing of components necessary to conduct the business activity of reducing the holdings in entities that serve the company's activity. Regarding the current assets of the company they show a decreasing trend in the period under review due to diminishing stocks of coal extracted from the operation perimeters and dwindling cash reserves due to sums falling due to various creditors, on the one hand, and on the other part due to payments for financing current needs of the company. Regarding the analysis made over the patrimonial structure of passive highlights a decrease in equity account patrimonial elements of nature reserves and results which are significantly reduced during the analysis leading financial security decreasing as a result of lower profits and record losses at end of period analysis and growth medium and long term loans to fund investment and operational activities.

In this study was analyzed liquidity and solvency of the company in relation to the volume and nature of the activities it carries. Thus, the company has a current liquidity which recorded above par value which determines its ability to meet its short-term obligations. Regarding the indicator "liquidity sight" analysis shows a continued decrease in cash related to the company's current liabilities on account of operating costs and those charged by credit institutions in liabilities. Total debt is about one third of the total assets recorded on the balance sheet resulting that the company is solvent.

References

1. Anghel I., *et al.*, (2014), *Analiza economico-financiară a firmei*, Editura Economică, București, pag. 428.
2. Burja C., (2009), *Analiză economico-financiară – Aspecte metodologice și aplicații practice-*, Casa Cărții de Știință Publisher, Cluj Napoca, p. 298.
3. Engle, C.R. (2012), *Assessing the financial position of an aquaculture business: using balance sheets*, SRAC publication no. 4401, Stoneville, Mississippi, March 2012.

4. Miron V.C.I, (2015), *Financial position and its relevance to stakeholders*, Article provided in Constantin Brancusi University Annals from Targu Jiu, Economy series, no. 2/2015.
5. Ospishchev, V. I., și Nagornaja, I. V., (2009), *Theoretical Substantiation Of Main Constituents Of Financial Position Of An Enterprise: Reliability, Solvency And Financial Stability*, Article provided by Danubius University of Galati in its journal Euroeconomica, Issue 1(22), pp. 35-39.
6. Pătrașcu L., (2008), *Situațiile financiare-suport informațional în decizia managerială*, Editura Tehnopress, Iași, p. 108.
7. Quairel F., (1989) *Representations financiers et comptes du bilan*, Encyclopedie de gestion, Editura Economica, Paris, sub coordonarea P. Joffre, Y. Simon.
8. Ristea M., Dumitru C., (2004), *Contabilitate aprofundată*, Second edition revised and enlarged, University Press, pp. 15-17.
9. Siminica, M. și Stefan, I. O. (2012), *The Impact Of The Financial Crisis On The Financial Position Of Companies Listed On Bucharest Stock Exchange*, Article provided by University of Craiova, Faculty of Economics and Business Administration in its journal Annals of Computational Economics, Volume 3, Issue 40, pp. 17-30.
 - Accounting Law number 82 of December 28, 1991, republished in the Official Gazette of Romania, Part I, no. 629 of August 26, 2002;
 - Law no. 420 of 25 October 2004 approving Government Ordinance no. 70/2004 amending and supplementing the Accounting Law no. 82/1991;
 - Order no. 65/2015 on the main aspects of preparing and submitting annual financial statements and annual accounting reports of economic operators to the local offices of the Ministry of Public Finance;
 - Order no. 3055 of 29 October 2009 approving the Accounting Regulations compliant with European Directives, published in the Official Gazette no. 766 / 10.11.2009;
 - PhD thesis, Marginean R. Recovery accounting information for analyzing economic performance in the mobile industry and identify ways of growth in 2015 supported the 1 December 1918 University;
 - Processed by DEX, the term "position": place it occupies something or someone (relative or someone else); way, way in which someone or something is sitting (in space); way that one reacts, behaves etc. in a given circumstance, situation