PATRIMONIAL ANALYSIS OF FINANCIAL STABILITY

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ABSTRACT: *Patrimonial analysis of financial stability is realized with the help of some indicator determined on the balance: working capital; required working capital and net treasury. These indicators are determined and presented in evolution at two companies with different situations, and there are given conclusions and suggestions concerning achieving and maintaining the financial equilibrium or initiating corrective measures in time, before the imbalance would take irrecoverable forms.*

KEY WORDS: *financial stability; working capital, own working capital; working capital necessary; net treasury; level of liquidity.*

JEL CLASSIFICATION: *D50; G32.*

1. INTRODUCTION

The term of financial stability can be presented according to two conceptions of elaboration of the balance: patrimonial and functional. Patrimonial analysis or liquidity-chargeability emphasizes the capacity of the enterprise to pay at the maturity, the bond to the third parties, highlighting the risk of insolvency.

Building the financial balance is realized by defining some objective criteria on which the evaluation of cash and chargeability of the patrimonial elements of the enterprise. The indicators of financial stability are: working capital, working capital necessary and net treasury.

Financial stability has on its basis the fundamental relation of treasury: working capital = working capital requirement + net treasury. For defining and calculating the indicators of financial stability, assets elements and liabilities elements are grouped on duration criterion of actives and passives. Therefore, assets elements

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are grouped in fixed assets with liquidity of more than one year and assets with a high degree of liquidity, under one year. Internal structure of the balance can be presented based on duration criterion of assets and liabilities. Therefore, assets positions are structured according to liquidity, and liability positions according to chargeability.

Assets can be classified by their level of liquidity that indicates the possibility to be transformed in money, sooner or later under normal terms of use. Some assets are destined to be consumed in a longer period, more than a year, being considered assets or fixed assets, with a lower degree of liquidity. This category consists of tangible assets, intangible assets, financial assets and an intermediate type so called assets in progress.

Tangible assets include land and fixed assets. Lands are divided in two categories: lands and arrangements of lands. Lands are registered at the adding in patrimony, at the acquisition value or as a contribution, and usually are no subject to depreciation, and investments in arrangement of lands are subject to depreciation.

Fixed assets represents singular objects or a complex of objects that fulfil cumulative the following conditions: have a higher value than the limit established by law; have a normal duration of use longer than a year. For objects that are used in batches, sets or form a single body, at their classification in fixed assets are taken into account the value of the entire body, set or batch.

Intangible assets include: trading fund, constitution expenses, concessions, patents, licenses and other intangible assets.

Financial assets include equity securities, fixed receivables of portfolio activities, other fixed receivables long term receivables.

Assets in progress are formed by intangible and tangible assets in progress. In progress intangible assets represents the cost of production, respectively the cost of acquisition afferent to unfinished intangible assets till the end of financial year. Tangible assets in progress represents the unfinished investments made in own account or contracting, which is assessed by production cost, respectively acquisition cost, representing the price estimate of the investment. Tangible assets in progress are in the category of fixed assets after the reception, putting into operation.

Fixed assets are characterized by a low level of liquidity, differentiated according to their nature, capable of depreciation or not, and for those which are according to normal duration of use. The level of liquidity can be influenced by some operations like releasing some fixed assets. They are also named permanent allocation due to slower rotation of capitals invested in them.

A part of the assets are consumed in exploitation, the level of liquidity being less than one year. These assets, out of which cash availability are in the form of money, have a high level of liquidity. In this category are circulating assets, current assets being formed by various categories of stocks: raw materials, production in progress, finished products, goods, debts and cash availability.

Current assets meet the following conditions:

- are accomplished and held for sale or consumption in normal course of exploitation of the enterprise, usually under 12 months;
- are held mainly for trading;
- represents cash or cash equivalent which use is not restricted.

Debts include, firstly, commercial debts and also claims from third parties, individuals or legal entities. Trade receivables represents amounts to collect from clients, to whom have been delivered goods or services, and by contract terms it was accepted to collect the consideration at la later date. Cash availability include money held in own cash desk, availabilities in current accounts opened at credit institutions, banking deposits etc. To be qualified as current assets cash availabilities must be available for current use.

Current assets are also named cyclic allocations or temporary because the recovery of invested capitals in these, are achieved at the end of one exploitation cycle (supply – production - sale). Liabilities can be structured by the level of payment due – it falls due at a certain date. Therefore, every liability corresponds to a bond or pledge but the payment obligations are differentiated by very different due. Also some liabilities don't have any constraints to fall due, in this category being ownership equity.

Ownership equity represents the residual interest in the assets of the enterprise after deduction of all debts, containing net, cumulative result, of all transactions and previous events. In the category of ownership equity are: primary capital, bonuses linked to capital, reserves, re-evaluation reserves, reported result, other ownership equity. Primary capital represents an important element of ownership equity being equal with the nominal value of the shares, respectively with the value of capital contribution, bonuses and reserves incorporated or other operations that lead to a change.

Current regulations compel or give the possibility to enterprises to establish some types of reserves: legal reserves; statutory reserves; re-evaluation reserves; other reserves. Therefore, those that mandatory constitutes, on the basis of some Decisions of General Meeting of Shareholders are non-deductible.

Ownership equity has a low exigibility level and is named permanent sources or stable. Some liabilities, like debts involve a firm obligation to refund, and the level of chargeability is different according to their payment due date.

So these medium and long term debts are also in the permanent or stable sources, their chargeability degree being longer than one year.

Long and medium term debts include credits for financing investments and other debts. According to the source or origin of those who lend, borrowed sources for long term can be categorized in: debenture; loans from specialized public institutions; loans from the state; credits from credit institutions.

Long term credits are various in their nature and object. Short term debts or current debts include exploitation debts and short term credits. They are characterized by a high level of chargeability, also named cyclical or temporary sources, contracted usually for exploitation cycle. Current liabilities fulfil some criteria: are settled in the normal course of exploitation cycle of the enterprise, with payment to fall on 12 months; the firm does not have irrevocable right to postpone the payment after 12 months from balance sheet.

Exploitation liabilities include obligations resulted in exploitation cycle: liabilities to suppliers, to employees, obligations to public budget; liabilities to shareholders; other liabilities. Short term credits represents credits contracted from credit institutions for cycle exploitation necessities. Liabilities are grouped in permanent capital that include ownership equity and other liabilities with payment to fall more than one year and short term debts with payment to fall in less than one year.

Permanent allocations, in fixed assets are usually covered by permanent sources. If permanent sources are higher that permanent necessities for fund allocation, this surplus issued by financing cycle of investments can be circulated for renewal of stocks and debts; this potential use determined its name – working capital.

2. PROBLEM FORMULATION

2.1. Working capital

Working capital is the expression of financial balance achievement for long term and its contribution to gain short term financial stability (Stancu, 1997, pp 446). Working capital is determined by the relation:

Working capital = permanent capital – permanent allocations = (ownership equity + long and medium term debts) – (fixed assets)

This determination by calculation of working capital is the most relevant, from the point of view of its mean.

Working capital can also be determined:

Working capital = circulating assets – short term debts

Working capital determined on the basis of patrimonial balance is named net global working capital. If the working capital is positive that means the permanent sources are overlapping for financing permanent allocations. In the situation where working capital is negative, permanent sources does not assure fully financing of fixed assets, where there is insufficient working capital. So, a positive working capital reveals a state of financial balance because of fixed assets are financed, in a sustainable manner, by using stable sources, mainly ownership equity, and also long and medium term credits.

The negative working capital indicates a state of financial imbalance because the permanent sources are insufficient for financing permanent allocations, and in this situation there is a demand for short term sources, at the expense of exploitation cycle necessities.

In the stage of market economy transition, many enterprises especially those with state capital or privatized with negative working capital due to the end with losses of several financial exercises that lead to diminishing of ownership equity. Under these circumstances they were forced to turn for cyclic sources help for necessities of permanent allocation and mostly these sources were unpaid liabilities to fall due by suppliers and especially to state budget, local budget, state social security budget, special funds. This phenomenon is shown, under some circumstances, but according to market economy mechanisms these enterprises will enter inevitably in bankruptcy procedure.

Working capital can be analyzed according to the structure of permanent capitals, respectively ownership equity and long and medium term debts. This analysis gives us the opportunity to highlight in which measure the financial stability is achieved by ownership equity, respectively the degree of financial autonomy of the enterprise. The indicator that reveals this level of autonomy is named own working capital and highlights the surplus of ownership equity from fixed net assets.

Own working capital (FRP) is determined:

$$FRP = ownership\ equity - fixed\ assets$$

Likewise can be determined working capital loan (FRI) as a difference between working capital and own working capital.

$$FRI = FR - FRP$$

Working capital loan (foreign) expresses the amount of resources loaned on long term, destined for financing short term fixed assets.

2.2. Working capital needs

The financing necessities of exploitation cycle are generally covered from temporary sources also named exploitation debts or liabilities. The financing necessities of exploitation cycle, which are also named cyclic or temporary uses represents short term allocations that the enterprise must do for formation of stocks of raw materials, production in progress, finished products, goods and also to pay different dues to the clients.

Therefore, the enterprise must source with goods to resell if it has trade activities with raw materials for making finished products and also with auxiliary materials for deploying the trading activity, and also to storage these.

Also, in trading relations with the clients we must have some payment deadlines, accumulating debts that generate financing necessities.

In the same time, by deployed activity the enterprise records debts to suppliers from which obtained certain payment deadlines of supplied goods consideration or services from them. Among short term debts there are some enterprise liabilities toward the employees, shareholders, state, etc. Till the due of mentioned liabilities, these represent financing sources or current activities. The difference between necessities of exploitation cycle financing and exploitation liabilities is named necessary working capital (NFR).

$$NFR = cyclic\ allocations - cyclic\ sources = (stocks + debts) - exploitation\ liabilities$$

Interpreting the positive or negative values of working capital must also consider the causes that led to these situations. Therefore, if the difference between cyclic allocations and cyclic sources is positive, that means a surplus of necessities of exploitation cycle reported to its formation sources. This situation can be appreciated as normal if is due to growing financing necessities, determined by development of the activity, or it can be the result of a negative gap between stocks and debts liquidity and chargeability debts.

If the difference between cyclic allocation and cyclic sources is negative, that means a surplus of temporary sources reported to circulating assets needs. This situation can be seen as normal if is due to rotation acceleration of circulating assets and some debts with more relaxed due, otherwise can be the result of some temporary interruption in supplying and renewal of stocks and increasing if exploitation liabilities because unpaid dues.

2.3. Net treasury

The components of net treasury are the assets and liabilities of the treasury, where cash availability take a special place. Out of financial assets we mention: investment securities, received commercial effects, bonds. The treasury liabilities represent short term credits: cash credit, current account credit balance, mobilization loans receivable.

The formula of treasury is:

Net treasury (TN) = active treasury – passive treasury

Treasury can be determined on the basis of equation of financial stability:

$$FR = NFR + TN$$

where: T = FR – NFR

A positive treasury is the result of deploying an efficient activity and reflects a state of financial stability of the enterprise that assures financial autonomy on short term. According to the surplus of treasury there is the problem of efficiently placing in the financial – monetary market. Negative net treasury highlights a potential financial imbalance and translates to a monetary deficit that must be covered by short term credits that have a higher cost and in the same time high level of payment due.

Between profitability and treasury there are inter-conditioning relations. So, deploying profitable activities creates the premises of obtaining positive treasury, and a positive treasury directly influences the possibility to obtain the demanded level of profitability.

A profitable enterprise does not necessary has a positive treasury, this depending on financial necessities variations and also the favourable or unfavourable gap between the dues of collections and the dues of payments.

In an enterprise, the static analysis of financial stability can be realized on three levels:

- long term equilibrium where is used indicator of working capital through which are compared permanent resources with permanent uses;
- short term stability where id used the indicator of working capital necessary by which are compared temporary resources with temporary uses;
- current equilibrium where it follows the level or treasury, by comparing the availabilities with the level of temporary banking credits.

3. SOLUTION/CASE STUDY

For the analysis of financial equilibrium in two companies with different situations, assets and liabilities are structured according to liquidity and chargeability level presented, in evolution, in tables 1 and 2.

Table 1. Assets and liabilities for company 1

No.	Specification	U.M.	Year		
			2008	2009	2010
1	Fixed assets	lei	1420153	1561420	1580520
2	Stocks	lei	461460	464220	430150
3	Debts	lei	540611	531420	420610
4	Cash availability	lei	251006	236421	260801
5	Ownerships equity	lei	1570121	1620160	1650610
6	Long term credits	lei	240162	220150	180261
7	Exploitation liabilities	lei	640170	620140	610561
8	Short term credits	lei	222777	333031	250649
9	Working capital	lei	390130	278890	250351
10	Own working capital	lei	149968	58740	70090
11	Working capital necessary	lei	361901	375500	240199
12	Net treasury	lei	28229	-96610	10152

Table 2. Assets and liabilities for company 2

No.	Specification	U.M.	Year		
			2008	2009	2010
1	Fixed assets	lei	1421667	1405234	1306435
2	Stocks	lei	416315	390134	321543
3	Debts	lei	489017	467123	456732
4	Cash availability	lei	183665	10145	7560
5	Ownerships equity	lei	1405544	1354124	1105780
6	Long term credits	lei	150056	135126	101280
7	Exploitation liabilities	lei	441238	493621	764320
8	Short term credits	lei	513826	289765	120890
9	Working capital	lei	133933	84016	-99375
10	Own working capital	lei	-16123	-51110	-200655
11	Working capital necessary	lei	464094	363636	13955
12	Net treasury	lei	-330161	-279620	-11333

In the analysis of the correlation between working capital and circulating assets can be used a series of rates like:

*Financing rate of circulating capital = (working capital / Circulating assets) * 100*

*Rate of stocks coverage = (Working capital / Stocks)*100*

In the next tables are presented the rates determined for the first company

Table 3. Financing rate of circulating capital

No.	Specification	U.M.	Analysed period		
			2008	2009	2010
1	Circulating assets	lei	1253077	1232061	1111561
2	Working capital	lei	390130	278890	250351
3	Financing rate of circulating capital	%	31.14	22.64	22.53

This rate reflects the proportion of working capital that covers circulating assets. The normal size of this rate must be over 50%. After calculations we can see that in the analysed period this rate has obtained abnormal lower values.

Table 4. Rate of stock coverage

No.	Specification	U.M.	Analysed period		
			2008	2009	2010
1	Stocks	Lei	461460	464220	430150
2	Working capital	Lei	390130	278890	250351
3	Financing rate of circulating capital	%	84,55	60.08	58.20

This rate reflects the proportion of which working capital finance the stocks. After calculations results that the company situation in good, in the sense that indicators are in normal limits. To note the fact that the stocks can be covered mostly by permanent sources.

In the following tables are presented the determined rates for the second company.

Table 5. Financing rate of circulating capital

No.	Specification	U.M.	Analysed period		
			2008	2009	2010
1	Circulating assets	lei	1088997	867402	785835
2	Working capital	lei	133933	84016	-99375
3	Financing rate of circulating capital	%	12.3	9.69	-12.65

Here we can see that in the analysed period this rate has obtained very low values, and in 2010 they are negative.

After making the calculations results that the situation of company is not good because the indicators are not in the normal limits.

Table 6. Rate of stock coverage

No.	Specification	U.M.	Analysed period		
			2008	2009	2010
1	Stocks	lei	416315	390134	321543
2	Working capital	lei	133933	84016	-99375
3	Financing rate of circulating capital	%	32,18	21,54	-30,91

4. CONCLUSIONS

The situation presented in the table no. 1reflects a state of financial stability, in a company, realized on the working capital that records positive value for all years taken into study, inclusively at the level of own working capital. Therefore, permanent sources constituted by ownership equity and long term credits, assures the financing totally of allocations in fixed assets, making a surplus that can be used for covering some necessities of exploitation cycle.

The recorded values follow descending trend mainly because of reducing balance of long term credits, as a result of payment of dues, when the company is in a capitalization process, and the profits assigned for development have as an effect the increasing of ownership equity.

Working capital necessary records, as well, positive values, with an increasing trend in 2009 that can be explained by reducing the level of payment due of exploitation liabilities, mainly the debts to suppliers of goods and services.

In 2010 the working capital necessary is reduced by a better correlation between current assets liquidity and exploitation liability chargeability, mainly due to improvement of the gap between medium duration of collection of debts and medium duration of payment of liabilities. We put up the fact that the company does not have any remaining debts.

The fact that the company has an overall profitable activity, recording profit in all analyzed year creates the premises of recording a positive net treasury. Therefore, there are recorded positive values in 2008 and 2010 due to accomplishing a positive advance between current assets liquidity and chargeability of exploitation liabilities especially a positive gap between medium duration of debts collection from clients and medium duration of liability payment to suppliers.

It can be observed, that in 2009, net treasury records negative values because of a unfavourable gap between debts liquidity and chargeability of exploitation liabilities, by increasing the average debt collection from clients – beneficiary of delivered goods.

Situation presented in table 2 reflects, in 2008, a state of financial balance achieved by working capital by contracting some short term credits, for financing some investments, resulting a surplus that can be used for covering some necessities of exploitation cycle. This situation is maintained over the year 2009, even though there is a descending trend, reflected in the negative values of own working capital and because reducing ownership equity by recording losses.

In 2010 are also recorded losses, the process of disinvestment being continued, and the negative values express a state of financial imbalance. Permanent sources do not assure financing anymore to long term assets, and due to the fact that the company cannot access new credit because it records losses, it's constrained to call short term sources.

This situation is observed by following the evolution of working capital necessary, the descending trend is due to the incapacity of the company to pay the debts at due assumed to the third parties. Otherwise this unfavourable evolution is also reflected at the level of net treasury. For improving the financial stability, before it takes irrecoverable forms, there are needed urgent measures, or the company will enter bankruptcy. It is necessary urgent capitalization by increasing the capital, achieved by new contributions of the shareholders and some efficient measure for make it profitable.

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