

## FINANCIAL EQUILIBRIUM MEASURED BY CASH-FLOW, UNDER CRISIS CONDITIONS AT THE ENTERPRISE LEVEL

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**Abstract:** *Under the current circumstances in the economies of countries facing complex problems of stagnation and declines in GDP, states debt rising and also with economic recovery efforts, but without much predictability, we considered that at the micro-businesses level would be appropriate a real awareness and practice of using this indicator as a tool to substantiate the managerial decision - financial equilibrium measured by cash flow.*

**Key words:** *financial equilibrium, cash-flow, enterprise*

### INTRODUCTION

The existence of profit in the company must be certified by a positive cash flow and a positive net cash, which shows that profit is not only a calculation result, but materialized in cash collected in the bank accounts. Thus ensure the continuity in the development activities of the company, the investor or entrepreneur from investments and his own work wants a certain percentage of cash reward them effort, real support for these actions to come, not only a calculation of profit not materialized in cash but on assets, often without transformation in cash. Even more some assets will generate additional recovery costs (claims in dispute, unsaleable stocks of uncertain tax liabilities).

### MATERIALS AND METHODS

The informational source underlying the analysis of the microeconomic financial equilibrium is the balance sheet as a synthetic, representative and suggestive document of the total activity of the company [5]. Although it provides extremely different information about the resources available to the company and how to use them, the balance sheet does not directly allow the establishment of a financial diagnosis, but it requires certain restatements and regroupings of positions or accounts in relation to the objectives pursued by the analysis and by the analyst's conceptions of the notion of financial equilibrium [11].

In financial theory and practice, *two approaches* to the notion of financial equilibrium have emerged over time:

- *a liquidation approach* arising from the static analysis of the activity of the company and which favours the notion of working capital;

- *a functional approach* that results from the dynamic analysis of the activity of the company and which brings to the foreground the notion of need for working capital.

The difference between the two approaches is shown by the purpose of the analysis, namely, expressing financial equilibrium in terms of patrimonial solvency at a given time, or through the evolution of operating cycles.

Starting with the balance sheet, depending on how financial equilibrium is approached, a financial balance sheet is prepared which can be:

- the liquidity balance sheet;
- the functional balance sheet.

## RESEARCH RESULTS

1) *The liquidity balance sheet* is prepared according to the creditors' view (banks or other economic agents) that the assets of the company can ensure the repayment of the contracted debts.

From this standpoint, assets are classified by the speed of their conversion into currency, and liabilities by the increasing chargeability of resources. It should be noted that, in general, the balance sheet is prepared according to this perspective [6]. The demarcation element in terms of both liquidity and chargeability is the year. Thus, the capital of the enterprise is divided into 3 categories:

- equity, the least chargeable resources;
- medium- and long-term debts, with a maturity of more than one year;
- short-term debts, with a maturity of less than one year.

The assets of the balance sheet are, in turn, divided into:

- durable assets, fixed assets with a duration of existence in the company of more than one year;

- operating assets, current assets, with a rotation duration of less than one year.

The restatements of balance sheet positions to be operated are the following [10]:

a) *in assets*:

- *non-values* such as company formation expenses, as well as research and development expenses not materialised in licenses, patents or in new products and technologies with solvent demand and which represent, in fact, fictitious assets should be excluded from intangible assets; in return, equity and assimilated capital will be diminished accordingly;

- from financial assets, loans granted that have a maturity of less than one year are reclassified in current assets;

- from current assets, receivables containing fractions greater than one year must be transferred to fixed assets;

- out of expenses incurred in advance, only those relating to the current financial year must be maintained in current assets; the others need to be transferred to fixed assets;

- conversion-asset differences (unfavourable differences from the decrease in the rate related to foreign currency debt) must be eliminated as fictitious assets; in return, potential provisions for losses included in liabilities are eliminated.

b) *in liabilities*:

- the share of profit intended for distribution in the form of dividends or incentives included in short-term debt is excluded from equity; this, because, in the liquidation concept, they are payments that must be made;

- provisions for risks and expenses are treated differently, as follows:

- if justified, they will be transferred to the category of short- or long-term debts as the risk or expense will be met in less or more than one year;
- if they are without a real object, to be transferred to income, they will be included in equity after they have been deducted with the related corporate income tax, which is reflected in the category of short-term debts;

- debts are grouped into short- or medium- and long-term debts, depending on maturity (less or more than one year);

- advance income is treated synthetically as expenses incurred in advance: if it refers to the following year, it is included in short-term debts, and, if it refers to future years, it is included in the medium- and long-term debts;

- passive conversion differences (favourable differences related to the growth of the debt rate in foreign currency or the decrease of the debt rate in foreign currency), if likely

to be realised, are included in the category of equity for their amount diminished by the latent tax.

Based on the balance sheet – liquidity thus prepared, we can determine a **liquidity working capital (FR<sub>l</sub>)** by two calculation methods:

$$\begin{aligned} \text{FR}_l &= C_p - \text{AI}_n \\ \text{FR}_l &= \text{AC}_c - \text{Dt}_s \end{aligned}$$

where:

- $C_p$  = permanent capital (equity and debt in the medium and long term);
- $\text{AI}_n$  = net fixed assets (gross fixed assets minus depreciation);
- $\text{AC}_c$  = corrected current assets;
- $\text{Dt}_s$  = short-term debt.

The analysis presented involves two *observations*:

- although it assumes the stopping of the operation and the liquidation of the company, the possible plus- or sub-values that would result from the liquidation process are not considered, which would be possible if the necessary information was known;
- in the liquidity balance sheet, the cash flow does not appear distinctly.

The purpose of the liquidity analysis is, therefore, to examine the solvency of the enterprise, the analysis targeting above all the risk of the creditors of the enterprise. Solvency is highlighted by the existence of a positive working capital because:

- short-term solvency is ensured, assets less than one year being higher than the debts less than one year;
- it allows dealing with a possible deterioration of the rotation of assets and liabilities of less than one year.
- it is a presumption of light cash flow allowing to absorb delays in the collection of short-term receivables or the acceleration of short-term debts.

However, the liquidity analysis has certain *limitations*, as follows:

- it does not highlight the optimum level of working capital;
- it is placed in a liquidation angle, which is not characteristic of most companies.

2) *The functional balance sheet* responds to the interests of wider categories of recipients: investors, shareholders, managers, suppliers, staff. It places the company in a context of business continuity and not liquidation, from where the term ‘functional’, and emphasises that it is not enough to finance fixed assets with permanent capital and thus have a positive working capital, but the financing of the need generated by the operation, as a real investment, must also be ensured. In this approach, the size of the working capital has a relative importance because the financial equilibrium is defined by its relation with the need for financing the operation, respectively the need for working capital [12].

Therefore, this conception entails:

- a new definition for cash flow in terms of *utilisation-resources*, instead of *receipts-payments*. Cash flow is the difference between the advanced resources and the needs of resources incurred by the activity;
- a new perception of the balance sheet, as follows:

Utilisation	Resources
The need for working capital Positive net cash flow	Working capital Negative net cash flow

- a new approach to financial equilibrium, as follows:

$$T = \text{FR} - \text{NFR}$$

where:

- T** = cash flow;  
**FR** = working capital;  
**NFR** = the need for working capital.

The functional approach is based on the **theory of cycles**, a cycle being defined as a sequence of operations having a certain regularity and corresponding to a function of the enterprise. Cycles are classified into: the cycle of investment operations, the cycle of current operations (operating activities) and the cycle of cash flow operations. Therefore, the functional balance sheet groups the balance sheets positions in relation to these cycles, highlighting for each the uses, resources and indicators, as follows:

Cycle	Utilisation	Resources	Indicators
Investment	Gross fixed assets	Equity (including self-financing)	FR
		Medium- and long-term debt	
Operating	Gross current assets	Operating debts	NFR
Cash flow	Cash assets	Current bank loans	T

The transposition of the balance sheet into a functional balance sheet requires the following deductions:

- asset positions are taken at their gross values, and, in return, in liabilities, in equity, depreciation and amortisation provisions are added. In this way, fixed assets reflect investments made;
- the fictitious assets materialised in subscribed and unpaid capital or in expenses recorded in advance are eliminated from the asset, and, in return, deducted from equity;
- the differences of conversion are cancelled, all the operations in currencies being reflected at the value according to the historical course;
- the dividends of payment do not diminish the equity because in the functional acceptance they are liabilities that can be postponed;
- no categorisation of assets and liabilities is made according to the criterion less or more than one year.

The functional balance sheet is composed of the following masses:

1. sustainable utilisation → stable resources;
- gross operating current assets → operating current liabilities;
3. financial and extraordinary assets → financial and extraordinary liabilities;
4. positive cash flow → negative cash flow

Their comparison results in:

$$\text{Stable resources - Durable utilisation} = \mathbf{FRNG}$$

$$\text{Gross operating current assets - Operating current liabilities are} = \mathbf{NFRE}$$

$$\text{Active fin. si extraordinare - Pasive fin. si extraordinare} = \mathbf{NFRAE}$$

$$\mathbf{NFRG = NFRE + NFRAE}$$

$$\mathbf{T = FRNG - NFRG [12]}$$

**FRNG** = global net working capital;

**NFRE** = need for operating working capital;

**NFRAE** = need for working capital outside operations;

**NFRG** = need for global working capital;

**T** = cash flow.

The functional analysis places the NFR financing at the centre of concerns, and assesses financial equilibrium in terms of cash flow. In a functional balance sheet, utilisation is represented by the invested capital materialised in gross fixed assets and

NFRE. Financial equilibrium is observed when the stable resources cover the gross fixed assets and the NFRE. One can then calculate the **margin of security (MS)** as a difference between stable resources and gross fixed assets plus the need for working capital, or  $MS = FRNG - NFRE$  [3].

In order to be complete, the analysis of the financial equilibrium must be continued by calculating and interpreting other instruments, namely the different categories of rates.

Thus, the rates of liquidity (general, immediate) and the rate of financial autonomy are determined based on the liquidity balance sheet, and the rates of imbalance (cash flow in days from the turnover, margin of security in days from the turnover, bank loans in days from the turnover, percentage ratio between the working capital and the need for working capital or between bank loans and the need for working capital) and the turnover rates (need for operating working capital in days from the turnover, duration of the commercial loan granted to clients, duration of the commercial loan received from suppliers, turnover rates of stocks of raw materials, finished products, etc.) are determined based on the functional balance sheet [9].

Since fixed assets are financed from permanent capital, in the end, the issue of the financial equilibrium of the company comes down to ensuring a match between the working capital and the need for working capital. Knowing the financial status, namely resources surplus or imbalance over the period, is, however, of particular interest [15].

## CONCLUSIONS

In practice, the most frequently used and most important rates calculated based on the operating cash flow, which allow the assessment of the financial position of the company, are the following:

a) *The operational cash flow rate*, which is calculated as a ratio between CFE and current liabilities, and the ratio is multiplied by 100. The rate measures the liquidity of the company by evaluating how current liabilities are covered by the operating cash flow. The level of this rate depends on the sector in which the analysed company operates [2].

b) *The rate of coverage of current financial liabilities*, calculated as a ratio between CFE and current financial liabilities; the ratio is subsequently multiplied by 100. The rate measures the degree to which the CFE covers the current financial liabilities during the analysed period, an improper value highlighting a capacity of the enterprise to generate sufficient cash from the operation to cover current financial liabilities [7].

c) *The financing rate of investments* is calculated by subtracting the costs related to the interest paid from the CFE, the value obtained being related to investments made, and the final result is multiplied by 100. In the case of reduced investments, in order to maintain the current productivity level, the rate must register an improper value. If the company has made major investments in order to expand the productive potential, the available resources will not be sufficient, and the company will certainly resort to external resources, which is why the rate may also record subunit values, but it needs to be maintained at a reasonable level [8].

d) *The adequacy rate of cash flow*, which is calculated as a ratio between CFE and the sum between short-term investments, the variation of stocks, the payment of dividends and commercial debts, the ratio obtained being multiplied by 100. This rate highlights the ability of companies to generate enough cash from the operating activity to cover capital expenditures, short-term investments, the variation of stocks and commercial debts, but its value is improper [4].

e) *The rate of long-term debt coverage*, calculated as a ratio between CFE and long-term debt, a ratio multiplied by 100, which highlights the ability of the company to cover long-term debt in its entirety given that the recorded value is improper [1].

f) *The rate of total debt coverage*, calculated as a ratio between CFE and total debt, a ratio multiplied by 100, which highlights the ability of companies to cover total debts if the recorded value is improper [13].

g) *The turnover rate of total assets*, calculated as a ratio between the CFE and total assets, a ratio multiplied by 100, which highlights the ability of the company to obtain the cash using the assets provided.

h) *The rate of coverage of net profit*, calculated as a ratio between the CFE and the net profit, the resulting ratio being multiplied by 100. The rate highlights the influence of the cash generated by the operating activity on the net profit. We propose this rate because it allows us to analyse the impact of the surplus of the operating activity on the net profit, practically highlighting the share of the profit covered by the CFE and the weight of the operating activity in achieving the net profit [14].

### REFERENCES

- [1]. **AVARE PH. G., LEGROS L.LAVARY, LEMONNIER P.**, 2002, *Gestiune si analiza financiara*, Ed. Economica, Bucuresti
- [2]. **AVARE PH., EGROS G. L., RAVARY L., LEMONNIER P.**, 2002, Ed. Economica, Colectia Romexco
- [3]. **BATRANCEA I., ARDELEAN I., BATRANCEA L.**, 2010, *Trezoreria si ratngul entitatii economice*, Cluj-Napoca
- [4]. **BREATLEY R. S., MAYERS A., MARCUS**, 2001, *Fundamentals of Corporate Finance*, Third Edition, Mc Graw Hill Publishing
- [5]. **BREZEANU, P.**, 2003, *Diagnostic financiar*, Ed. Economica, Bucuresti
- [6]. **BUGLEA ALEXANDRU** *Analiza situatiei financiare a intreprinderi*, Editura Mirton Timisoara, 2004
- [7]. **FOSTER GEORGE, HORNGREN CHARLES T., SRIKANT M DATAR**, 2006, *Contabilitatea costrurilor o abordare manageriala*, editia a IX-a, Editura Arc
- [8]. **HELFERT E**, *Financial Analysis Tools and Techniques, A Guide for managers*, New York: Mc Graw Hill Publishing, 2006
- [9]. **LEZEU, D.N** *Analiza situatiilor financiare ale intreprinderii*, Editura economica, Bucuresti, 2004
- [10]. **PANTEA I.P., DEACONU A.**, 2004, *Ghid pentru intelegerea si aplicarea IAS 7 "Situatiile fluxurilor de numerar"*, Editura CECCAR, Bucuresti
- [11]. **PETRESCU. S.**, *Analiza si diagnosticul financiar-contabil*, Ed. CECCAR, Bucuresti, 2008
- [12]. **POPA ION LALA, MICULEAC MELANIA**, 2016, *Analiza economica si financiara*, Editura Mirton, Timisoara
- [13]. **RAVARY L., LEMONNIER P.**, 2002, , Ed. Economica, Colectia Romexco
- [14]. **REIRER R., HEYLER P. B.**, 2003, *Managing cash flow. An operational focus*, Ed. John Wiley&Sons, inc. 2003, New Jearsey, USA
- [15]. **STANCU I.**, 2015, *Finante corporative*, Editia a treia, Ed. Economica, Bucuresti