

THE TREASURY ANALYSIS BASED ON THE FINANCIAL RATES, A METHOD OF ASSESSING THE PROFITABILITY AND EFFICIENCY OF THE ECONOMIC AGENTS

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Abstract

The main objective of each firm is to achieve an increased profitability, by determining the quantity of the profit. This indicator is not sufficient to assess the degree of efficiency, profitability or business profitability. It becomes useful, therefore, through the determination of the financial rates, as these companies provide information about the direction towards the business moves.

The financial rates are tools through which firms can make a series of tests and may also determine which strategies to pursue in order to achieve certain objectives.

Based on these considerations, the purpose of this study is to determine a number of financial rates specific to the company treasury, having as a reference point the cash flow statements, and to perform an analysis on the obtained results.

Key-words: *cash flows, financial rates, operating cash flow, profitability, current financial liabilities*

JEL Classifications: M₂₁, M₄₁

The reconstitution of the cash flows on the three categories (operating, investing or financing) allows to obtain some comments regarding the possible treasury difficulties. The financial results reflected through the profit and loss account, on one hand, are often not found in the form of a surplus of money because of the gap between receipts and payments, and on the other hand, due to the financial and investment operations of the company. In these circumstances a firm may be profitable, can make profit, but is not creditworthy because of the lack of liquidity. This fact increases the importance of the cash flow statement.

Based on the information provided by the cash flows statement, we may calculate a series of financial rates that allow a more accurate assessment of the firm's position. Among them we can mention:

1. **The rate of return of cash flows** reflects the information needs of managers and is determined using the relationship:

$$Rr = \frac{CF_e}{K_{inv}} \times 100$$

Where:

R_r = rate of return of cash flows;

CF_e = the operating cash flows;

K_{inv} = the invested capital.

This indicator expresses the revenue generated by operating activities at 100 lei invested capital. It is considered as a favourable situation when this indicator records a higher level than the economic rate of return. This reflects a cash flow superior to profit, on the account of sustained working capital requirements or even reducing it.

2. *The operational cash flow rate* is calculated as the ratio of operating cash flows and current liabilities of the enterprise.

$$R_{CFo} = \frac{CF_e}{D_c} \times 100$$

Where:

R_{CFo} = operating cash flow rate;

CF_e = operating cash flow;

D_c = current liabilities.

This rate expresses the company's ability to meet current obligations due to the cash flow generated by the operating activities. The level of this indicator varies from one organization to another depending on the sector in which it operates, its commercial policy, the level of liabilities of the company etc.

3. *The rate of recovery of current financial liabilities* is determined as the ratio between cash flow generated from operating activities and the company's current financial liabilities.

$$R_{DFc} = \frac{CF_e}{DF_c} \times 100$$

Where:

R_{DFc} = rate of recovery of current financial liabilities;

DF_c = current financial liabilities.

This indicator reflects the company's ability to pay on time the interest-bearing liabilities. The level of this indicator is higher if the company has a better situation.

4. *The rate of interest coverage* is calculated as the ratio of cash flow from operating activities and interest paid on loans.

$$R_{Dob} = \frac{CF_e}{D_p} \times 100$$

Where:

R_{Dob} = rate of interest coverage;

D_p = the paid interest.

A supra unitary level of this indicator means that cash flows from operating activities are sufficient to cover the interests. The level of interest coverage through cash flows is an indicator more relevant than the net profit because the accounting profit is not always found in the form of surplus cash.

5. *The rate of covering the capital cost* is determined by comparing the cash flow from operating activities with the amount of interest and dividends paid.

$$R_k = \frac{CF_e}{D_p + Div_p} \times 100$$

Where:

R_k = rate of covering the capital cost;

D_p = paid interest;

Div_p = paid dividends.

It is considered a favourable situation if this indicator is supra unitary, in a contrary case the firm has to appeal to other amounts in order to paid back the capital.

6. *The rate of investment financing* can be determined as:

$$R_F = \frac{CF_e - D_p}{INV_r} \times 100$$

Where:

R_F = rate of investments financing;

INV_r = the realized investments.

The level of this rate depends on the investments made by the company. A supra unitary level of this indicator signifies that investments were financed through operating cash flows. A sub unitary level of this rate indicates that the firms made large investments to expand the productive potential, their resources are insufficient and the company is obliged to resort to loans.

For example, we present the calculation of these rates for the Neptun Society, based on cash flows statement prepared by the direct method, the data being presented in the following situation:

Table 1

The cash flows statement

- Thousand lei -

The direct method	Year N	Year N+1
Operating activity		
Receipts from sales and services ...	18,128	25,550
(+) advance receipts from clients for the sale of products	613	1,945
(+) other receipts	185	65
(-) payments for suppliers of raw materials and materials	9,004	11,507
(-) payments for suppliers of services	2,012	3,828
(-) payments for suppliers of water, electricity and gas	823	1,486
(-) advances to suppliers of materials and services	481	271
(-) payments regarding the salaries	1,380	1,907
(-) payments regarding the meal tickets	110	266
(-) restraint payments from salaries in benefit of third persons	91	218
(-) payments regarding the social insurances	947	1,257
(-) payments regarding the income tax	292	259
(-) payments regarding the profit income	431	138
(-) payments regarding the VAT	1,087	1,509
(-) payments regarding the local taxes	45	33
(-) payments regarding contributions to special funds	27	33
(-) payments regarding the bank's commissions	115	69
(-) other payments	143	128
Cash flow from operating activity (1)	1,938	4,651
Investment activity		
(-) payments for the tangible assets acquisition	6,468	5,493
(-) payments for the production of assets	358	596
(+) receipts from the tangible assets sale	-	-
(-) payments for the acquisition of the financial assets on short term	-	-
(+) received dividends and interests	2	24
Cash flow from investment activity (2)	-6,824	-6,065
Financing activity		
(+) incomes from shares emission	-	3,058
(+) incomes from subventions	18	74
(-) paid dividends	-	-
(+) incomes from contracted credits	5,141	31
(-) repayments of bank loans	97	1,090
(-) payments regarding the interests	219	338
(-) payments regarding leasing instalments	68	167
Cash flow from financing activity (3)	4,775	1,568
Total cash flow	-111	154
Cash at the beginning of the period	149	36
Cash at the end of the period	38	190

The analysis of cash flows on types of activities shows that the operating activity recorded a positive cash flow in each of the two years considered, an aspect which is considered favourable, the investment activity recorded a negative cash flow due to realized investments, a deficiency which was not fully covered due to the positive flow derived from operating activity, and the financing activity recorded a positive flow, mainly due to the loans contracted in year N, respectively because of the capital increasing in year N-1.

Based on this information we will consider a series of financial rates that will allow a more accurate assessment of the firm's position.

The calculation of these rates is shown below:

Table 2
- Thousands lei -

Base of calculation	Year N	Year N+1
Cash flow from operating activity	1,938.00	4,651.00
Invested capital	12,784.30	20,086.00
Cumulated liabilities	3,413.00	3,307.60
Current financial liabilities	1,841.00	1,720.20
Paid interests	218.60	338.00
Paid dividends	-	-
Realized investments	6,468.30	5,493.00

1. *Rate of return through cash flows*

$$Rr_N = \frac{1,938}{12,784.3} \times 100 = 15.16\%$$

$$Rr_{N+1} = \frac{4,651}{20,086} \times 100 = 23.16\%$$

2. *Rate of operational cash flow*

$$RCFo_N = \frac{1,938}{3,413} \times 100 = 56.78\%$$

$$RCFo_{N+1} = \frac{4,651}{3,307.6} \times 100 = 140.61\%$$

3. *Rate of covering the current financial liabilities*

$$R_{DFc} N = \frac{1,938}{1,841} \times 100 = 105.25\%$$

$$R_{DFc} N+1 = \frac{4,651}{1,720.2} \times 100 = 270.37\%$$

4. *Rate of covering the interest*

$$R_{Dob} N = \frac{1,938}{218.6} \times 100 = 886.55\%$$

$$R_{Dob} N+1 = \frac{4,651}{338} \times 100 = 1,376.03\%$$

5. *Rate of covering the capital cost*

$$R_K N = \frac{1,938}{218.6 + 0} \times 100 = 886.55\%$$

$$R_K N+1 = \frac{4,651}{338 + 0} \times 100 = 1,376.03\%$$

6. *Rate of investments financing*

$$R_F N = \frac{1,938 - 218.6}{6,468.3} \times 100 = 26.58\%$$

$$R_F N+1 = \frac{4,651 - 338}{5,493} \times 100 = 13,778.52\%$$

Conclusions:

From the analysis of these rates we note the following aspects:

- The return rate of cash flows recorded in the current year (N + 1) a higher level than that of the previous year (N).
- The rate of operational cash flow in the current year has a value of 140,61%, which means that current liabilities can be entirely covered with the cash flow from operating activities.
- The rate of covering the current financial liabilities in both years is more than 100%, which means that current liabilities can be covered at the expense of operating cash flow achieved in one year, resulting a lower financial risk.
- The rate of interest coverage is more than 100% (in year N it is 884% and in year N+1 is 1,376%), which means that the cash flow from operating activity

covers entirely the cost of borrowed capital, leaving to the company an amount available for the distribution of the dividends and the financing of investments.

- The rate of coverage of capital cost has values above 100% in both years (in year N = 884% and in year N+1 = 1,376%), which means that the company does not record financial difficulties.

- The rate of investment financing, less than 100% (in year N = 26.55% and in year N+1 = 78.53%), reflects the fact that the cash surplus after interest payments does not cover all the investments. The company is obliged to resort to bank loans for this purpose. This situation is assessed as normal, taking into account the high level of investments in the two years and the fact that the firm is obliged to resort to bank loans to finance them.

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