

# **STUDY ON THE IMPORTANCE OF CASH FLOW ANALYSIS BASED ON RATES IN THE FINANCIAL DECISION MAKING PROCESS**

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**Abstract:** : Cash flow is the most viable source of information for managers, and its interpretation is one of the most important objectives of the management team to acquire the desired efficiency. This paper highlights the importance of correct interpretation of cash flow and using results cash flow's analysis using financial rates.

**JEL classification:** M21,G31

**Key words:** cash flow, cash flow rates, decision making process, the real financial position, external sources of funding

## **1.INTRODUCTION**

In the present period is particularly important given cash flow analysis, at the expense of accounting profit analysis. This is because the existence of many companies, which although profitable, have a significant shortage of liquidity and to support his work and make the necessary investments to increase efficiency, resort to external sources of funding.

## **2. OBJECTIVES**

In this context, it is necessary to establish the primary objective of managers as maximize enterprise value by maintaining a relatively steady cash flow, not profit maximization. This new orientation is particularly appropriate for investors who are interested in medium and long term results and less short-term performance .

## **3. METHODOLOGY**

To get a better cash flow and its forms of expression, will be presented cash flow situation, how to do it and the main features of the main activities carried out within an enterprise.

Cash flow statement is a basic information source for economic and financial analysis. It is drafted in accordance with IAS 7 and in Romania, as in other developed countries is considered a component of the enterprise's annual financial statements based on OMF 3055/2009 approving the accounting regulations harmonized with European Directives and International Accounting Standards[OMFP3055/2009].

The objective is cash flow situation to provide necessary information for internal users, such as shareholders, managers and employees, as well as for external users such as

suppliers, financial creditors and customers, that information regarding current and future capacity assessment of a firm to generate Cash or cash equivalent[Valceanu,2004].

Cash flow allows dynamics analysis of financial balance by describing mining operations, investment and financing, thus obtaining a true picture of the changing financial position of an enterprise during the period.

It shows the cash flows resulting from the three activities performed at an enterprise (operating, investing, financing) and can be determined by two methods

- direct method, which shows all receipts and payments flows for the three types of activities,

- indirect method, which shows the operational flow starting from the net result of the exercise, which is corrected with changes registered capital, as well as adjustments for non-cash items and other items included in investment and financing activities[Buglea,2005].

Therefore, cash flow from operating activities (CFE) is a role for the future evolution of an enterprise, as expressed that this activity generated sufficient cash to repay loans and financial leasing, maintenance capacity production dividend payments and making new investments without recourse to external sources of funding. For this reason most experts believe that the result generated by operating activities is the main source of financing, cash flow of this activity is focused on financing and not on measuring profit. Positive result of operating activities reflects the Company's operational performance. As the flow is higher the more work is most effective[Buse,2003].

Cash flow from investment activity (IFC) expresses the degree to which these activities were self-financed and the possibility that the amounts allocated to the investments to generate future positive cash flows in the future. It recorded revenues doritorita positive values higher than payments for investment. Such a situation may indicate an intention to restructure the company's activity or who disponibilizeaza assets that the company is the beneficiary of large commercial loans granted to suppliers of property. Negative values can achieve when it is important investments whose value is only partially offset the recovery of property.

Cash flow from financing activities (CFF) shows the cash flows arising from changes in the capital of the enterprise, and its financing structure. It registered positive values when he turned to external sources of funding to supplement the results from operations. Cash flow from financing activities recorded negative values due to payments on debt (repayment of loans, financial lease payment obligations, payment of interest). Or reduction of capital (capital repayment to shareholders). In this case payments will be made most likely in cash flow from operating activities.

Sum of the three components of cash flow situation is equal to net cash flow:

$$CFF + CFI + CFE = \text{Net Cash Flow Net},$$

It can record the following situations:

- Net cash flow  $> 0$ , reflecting a cash excedent their activity which is generated by an additional source of internal growth through self-financing,

- Net cash flow  $= 0$ , in which case ensure a balance between receipts and payments period,

- Net cash flow  $< 0$ , reflecting a temporary shortage of liquidity that may be covered either by existing liquidity at the beginning or from temporary loans.

For a more conclusive on the availability of which now have, it is recommended to consider the cash flow of each activity and then the net cash flow because it can be considered an indicator of performance, but shows dezantajul that includes flows

financing. The cash flow net can register values too high because of loans that now it has entered, but can record and too low on account of reimbursement of loans.

Because accounting regulations require companies to pool cash actual flow sites in one of three categories that make cash flow net to make adjustments that cause unnatural aggregation of cash flows, which can lead to conclusions erroneous. Un such example is interest expenses which are treated separately from dividends paid, interest expenses reduces CFE, CFF and reducing dividends paid.

Thus, to reduce the impact of adjustments to be made on cash flow real need to be calculated financial rates starting from existing information cash flows. In this way, the findings from analysis of cash flow are the closest to real financial position of the company.

#### 4. FINANCIAL RATES USED IN ANALYSING CASH FLOW

It can calculate a variety of rates on account of cash flow, but, according to specialists, rates most significance are those that are based on cash flow from operating activities [Siminica, 2008].

These rates allow accurate assessment of position and financial performance the enterprise, but also the associated financial risk.

The rate of operating cash flow =  $\text{Operating CF} / \text{Current liabilities} * 100$

Rate measures the liquidity of enterprise evaluating how current liabilities are covered by operating cash flow. The level of this rate depends on the sector now operates analyzed.

The rate of recovery of current financial debt =  $(\text{CF from operations, dividends paid}) / 100 * \text{Rates current financial liabilities}$

Rates reflect the company's ability to pay timely interest bearing liabilities. A high rate means that a good financial situation of the company.

Interest coverage ratio =  $\text{Operating CF} / \text{Interest rate paid} * 100$

Rate reflects company's ability to obtain flows from operations which would allow interest coverage. Supraunitary level of this rate means that now has reached one of the objectives set.

The cost of capital coverage ratio =  $\text{Operating CF} / (\text{Interest} + \text{Dividends paid}) * 100$

Rate requires supraunitary value record, otherwise being forced to turn to other sources of capital remuneration [Batrancea, 2008].

The rate of investment financing =  $(\text{CF from operations} - \text{Interest paid}) / \text{Investment} * 100$

Rate is also called productivity rate because, in case of lower investments to maintain the current productivity, it must register supraunitary value. If the company has made major investments, to expand the productive potential, available resources will not suffice and certainly will call on external resources, for which the rate can record and subunit levels, but maintained at a reasonable level to avoid creating a dependency from banks [Petrescu, 2004].

The rate of net profit =  $\text{Net profit} / \text{Operating CF} * 100$

Rate highlights the contribution rate of net profit to generate cash flow from operating activities.

Rates based on cash flow provides useful information for analyzing liquidity and solvency of the enterprise. Disregarding these rates can get wrong information on the financial position and enterprise performance[Brealey,2001].

## 5. CASH FLOW ANALYSIS BASED ON DIRECT METHOD AT SC STAR GROUP SA

To underline the importance of cash flow analysis within a study management decisions on a company *SC STAR GROUP SA* that accounting profit earned in the period 2006-2008, but resorted to foreign loans even to sustain the production activity not only for investment activity. The main economic-financial indicators of company *SC STAR GROUP SA* in analysis are presented in Table no. 1.

**Table no. 1: Leading indicators of company SC STAR GROUP SA (2006-2008)**

				Absolute change		Index	
The main economic-financial indicators	Year 2006	Year 2007	Year 2008	2007/2006	2008/2007	2007/2006	2008/2007
Fixed assets – Total	13,343,757	15,992,324	28,194,777	2,648,567	12,202,453	119.85%	176.30%
Current Assets – Total	9,360,611	16,336,913	23,220,729	6,976,302	6,883,816	174.53%	142.14%
Debts to be paid over a period of one year – Total	10,089,886	17,715,411	20,415,331	7,625,525	2,699,920	175.58%	115.24%
Current financial liabilities	578,669	7,274,840	5,594,214	6,696,171	-1,680,626	1257.17%	76.90%
Debts to be paid over a period longer than one year – Total	6,924,849	7,505,482	16,006,088	580,633	8,500,606	108.38%	213.26%
Revenue in advance	259,750	225,582	191,414	-34,168	-34,168	86.85%	84.85%
Subscribed capital paid	100,000	100,000	100,000	0	0	100.00%	100.00%
Total equity	5,689,633	7,108,344	14,994,087	1,418,711	7,885,743	124.94%	210.94%
Receivables – Total	5,162,707	7,670,643	9,657,427	2,507,936	1,986,784	148.58%	125.90%
Stocks – Total	3,487,091	8,008,709	11,446,540	4,521,618	3,437,831	229.67%	142.93%
Net turnover	44,698,595	81,485,851	110,041,539	36,787,256	28,555,688	182.30%	135.04%
Operating income – Total	45,653,200	83,992,395	113,507,438	38,339,195	29,515,043	183.98%	135.14%

Operating expenses – Total	43,792,643	79,832,989	106,201,122	36,040,346	26,368,133	182.30%	133.03%
Operating Results	1,860,557	4,159,406	7,306,316	2,298,849	3,146,910	223.56%	175.66%
Financial income	409,581	13,120	66,190	-396,461	53,070	3.20%	504.50%
Financial expenses	739,961	1,528,670	3,543,503	788,709	2,014,833	206.59%	231.80%
Financial result	-330,380	-1,515,550	-3,477,313	-1,185,170	-1,961,763	458.73%	229.44%
Current Output	1,530,177	2,643,856	3,829,003	1,113,679	1,185,147	172.78%	144.83%
Extraordinary income	0	0	0	0	0	-	-
Extraordinary expenses	0	0	0	0	0	-	-
Extraordinary result	0	0	0	0	0	-	-
Total revenue	46,062,781	84,005,515	113,573,628	37,942,734	29,568,113	182.37%	135.20%
Total expenditure	44,532,604	81,361,659	109,744,625	36,829,055	28,382,966	182.70%	134.88%
Gross result	1,530,177	2,643,856	3,829,003	1,113,679	1,185,147	172.78%	144.83%
Net income	1,274,837	2,215,604	3,285,381	940,767	1,069,777	173.80%	148.28%
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Net income	1,274,837	2,215,604	3,285,381	940,767	1,069,777	173.80%	148.28%

A brief analysis of key indicators of company SC STAR GROUP SA, shown in Table no.1 according to balance sheets and profit and loss for the period 2006-2008, shows the image of efficient economic activities, registering increases from one year to another, except, Revenue in advance in both years and have recorded declining values, but significant financial mari. Financial income fell substantially in 2007, and in 2008 registered a significant growth.

Financial liabilities have also registered substantial growth in 2007 on account increasing amounts owed lending institution. In 2008, their value decreased, which says that the company's financial situation improved in 2008, compared to previous years.

Operating results, profits and net income increased during the period.

In conclusion, the key financial indicators show that the company has brought up results, the firm contracted a loan from banks, which can not be justified solely on the work investionala.

Therefore, to fully justify the decision to contract managers across the loan that is necessary to consider the intocmii and cash flow for this period[Helfert,2001].

Operating results, profits and net income increased during the period. Cash flow required the use of three successive surveys for 2006-2008, the second profit and loss accounts for 2007 and 2008 and has three scales to 31 December for 2006-2008. Cash flow has been calculated using both methods but the most detailed analysis will be presented cash flow obtained by direct method.

**Table no.2: Cash Flow for Company SC STAR GROUP SA (2007.2008) (MDL)**

<b>Direct method</b>	Nr. UNIT	Year 2007	Year 2008
<b>Cash flows from operating activities</b>		<b>306,001</b>	<b>7,923,307</b>
(+) Cash receipts from the sale of goods or service	1	79,058,068	108,242,870
(+) Cash proceeds from redevenfe, fees, commissions and other income	2		
(-) Cash payments to suppliers of goods and services	3	73,439,145	93,063,217
(-) Cash payments to and on behalf of employees	4	4,593,697	5,977,203
(+/-) Payments in cash payments or tax refunds, unless they can be specifically identified with financing and investment activities	5	719,225	1,316,862
<b>Cash flows from investing activities</b>		<b>-3,640,499</b>	<b>12,824,529</b>
(-) In cash payments for acquisition of land and fixed assets, intangible assets and other long-term assets	6	6,241,003	21,136,447
(+) Cash proceeds from sale of land and buildings, plant and equipment, intangible assets and other long-term assets	7	2,619,123	8,413,867
(-) In cash payments for acquisition of equity instruments and debt of other companies	8	18,619	101,949
(+) Cash proceeds from sale of equity instruments and debt of other companies	9	0	0
(-) Cash advances and loans made by other parties	10	0	0
(+) Cash receipts from repayment of advances and loans made by other parties	11	0	0
<b>Cash flows from financing activities</b>		<b>7,941,983</b>	<b>10,838,704</b>
(+) Cash proceeds from issue of shares and other equity instruments	12	0	0
(-) Cash payments to shareholders to purchase or redeem shares of Company	13	0	0

(+) Cash proceeds from issuance of bonds, loans and mortgages and other loans	14	149,644,374	196,349,912
(-) Cash repayments of amounts borrowed	15	139,884,870	183,727,869
(-) Cash payments to reduce tenant's obligations related to an operation of financial leasing	16	1,817,521	1,783,339
Total cash flows	17	<b>4,607,485</b>	<b>5,937,482</b>
Cash at beginning of period	18	<b>710,813</b>	<b>5,318,298</b>
Cash at end of period	19	<b>5,318,298</b>	<b>11,255,780</b>

Operating results, profits and net income increased during the period. Cash flow from operating activities recorded positive values in both financial years under review, it recorded a lower value in 2007, respectively 306,001 lei, but the situation improves significantly in 2008, when it reaches a value of 7,923,307 lei. This growth may provide a favorable forecast for the next evolution of the company. In 2007, the situation was due to increased amount of spending, very close to the value of collections. In 2008, the situation is different, cash flow generated revenues are sufficient to cover expenses and recording and a surplus which can be interpreted as a result of enterprise resource management efficiency.

Cash flow investment activity recorded negative values in both financial years, respectively - 3,640,499 lei in 2007 and - 12,824,529 lei in 2008. These negative values means that the investment activities carried out were not entirely self-financing, being necessary to resort to other sources. Analyzing the two values obtained, it can be said that in 2008 the amount recorded significant growth is due to the acquisition of assets. Although in 2008 there has been an increase in revenue from sale of assets, compared to 2007, this increase is not significant enough to fund asset growth recorded in 2008.

Cash flow from financing activities recorded positive values in both years analyzed, and 7,941,983 lei in 2007 and 10,838,704 lei in 2008. These figures mean that in both periods analyzed was used external sources of funding, in 2008 the value of external sources was superior in 2007.

Cash flow positive net profit for both periods, recording values of 4,607,485 lei 2007 5,937,482 lei respectively. These values reflect a surplus of cash generated by their activity, which constitutes an additional source of self-financing.

Accumulating the results for each type of activity to those obtained for the net cash flow, it can be said that in the first year of operating activity has generated a flow that could cover the investments made by enterprise and necessary external sources of cash covered almost entirely the needs of this activity, and in the second year, cash flow generated by operating activities partially covered investment needs, is still needed external sources of funding.

This conclusion flows values obtained by analyzing components of cash flow configurations can be supported with financial rates[Reider,2003].



**Table no.3: Financial ratios based on cash flow for company SC STAR GROUP SA (2007-2008)**

<b>BASIS OF CALCULATION</b>	Year 2007	Year 2008
Cash flow from operating activities	306,001	7,923,307
Current liabilities	17,715,411	20,415,331
Current financial liabilities	7,274,840	5,594,214
Interest paid	1,177,973	1,928,384
Dividends paid	0	0
Investment	6,248,531	17,486,303
Net profit	2,215,604	3,285,381
<b>CASH FLOW RATES</b>	Year 2007(%)	Year 2008(%)
The rate of operating cash flow	1.73	38.81
The rate of recovery of current financial debt	4.21	141.63
Interest coverage ratio	25.98	410.88
The cost of capital coverage ratio	25.98	410.88
The rate of investment financing	-13.95	34.28
The rate of net profit	724.05	41.46

The operating cash flow ratio recorded a lower value in the first year, 1.73% respectively, indicating a low liquidity, debt not covered by current cash flow from operations, but in a proportion very small, insignificant. In 2008, the value of this rate increased, reaching a value of 38.81%. This value supports the previous statement according to which the cash flow generated by operating activities partially cover, at a rate of 38.81%, financial debt.

Coverage rate of current financial debt ratio shows a similar situation operating cash flow in 2007, registering a value of 4.21%, which means that current financial liabilities can be covered at the expense of operating cash flow, so there are increased financial risk snul 2007. But the situation improved in 2008, the value recorded being 100% and 141.63%, which means that in 2008 current financial liabilities can be covered entirely on account of operating cash flow, which and significantly reduces the financial risk existing in 2007.

Coverage rate of interest and capital cost recovery rate inregsitreaza same values in the analyzed period because now not distributed dividends. In 2007, the rates recorded a value of 25.98%, which means that flow from operations partially covered the interest costs this year, but in 2008, the rates recorded a value of 410.88%, which means not only flow from operations that cover the full cost of borrowed capital, but remain available for business investment and a significant margin.

Rate of investment financing registered a negative figure in 2007, the - 13.95%, which means that flow from operations does not participate in financing investments, but does not cover any interest cost of borrowings required to finance investments. In 2008, flow from operations 34.28% participate in financing investments, but may not fully financed.

The rate of net profit recorded a net profit amounting to 724.05% in 2007 and a value of 41.46% in 2008. The value of this rate shows the proportion of net profit to the

generation of flows from operating. Thus in 2007 net profit fully contribute to the generation flows from operations and net income attributed to extra cash part to cover working capital deficit. In 2008, the situation has improved only contributes net profit of 41.46% in generating flows from operations. This rate shows, a significant cash deficit, respectively, justify contracting a mortgage.

## 5. CONCLUSIONS

Applied study presented fully supports the assertion that the results of situation analysis and cash flow rates based on the contents of it are essential in decision-making process undertaken at the enterprise. Management team decisions influence the future evolution of the company and it is important that these decisions should be based on a detailed knowledge as to its real financial position.

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