

## Company's Rentability Board through Cash Flows

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**Abstract:** The objective of the current research is to emphasize the financial balance between the sources of financing and the economic means needed for the commercial and investment activities regarding the minimal financial balance, the maximal indebtness and the financing limit. The determination of the financial balance is important, because it reflects the rentability of the company's activity when the net treasury is positive and it helps establishing the indebtness optimum. Within this context, the current article is to introduce the rentability board through flows that correlate on one hand the gross surplus of the exploitation, with is the financing resource of the exploitation activity, and on the other hand, the maximal degree of indebtness by assuring the corresponding financial balance so that it does not afflict the company's ability of paying its debts.

**Key words:** rentability, financing, indebtness, cash flow, financial balance.

**Jel Classification:** M41

### 1. Introduction

In order to develop the link between the yearly financial situations, respectively the balance of accounts and the win and loss account that offer a static analysis, and the flows approach interferes, that offers a dynamic analysis regarding the past and forecast evolution.

In order to study the rentability of one company using the flows, the analysis begins from the functional balance sheet and continues with the board of financing and the board of flows, in order to ensure the proper financial balance, so that the company will be able to cover all its financial debts.

### 2. Resources - Stages

#### 2.1 The financial board - tool of the financial balance

According the functional balance sheet approach, the financing board is adjusted to the forecast management and it emphasizes the change in the working capital as a result of the comparison of two successive financial balance sheets, explaining the patrimony variation. The financing board is situated between the opening balance sheet and the closing balance sheet of the financial exercise.

At the base of the financing board elaboration stands the functional balance of accounts that reproduces the posts in the balance of account with their gross value in order to emphasize the primary decisions regarding the needs and way of financing of the company.

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The functional balance of accounts, comparing to the financial balance of accounts, groups the posts of the balance of accounts to their gross value, depending on the nature of the activities: investments, exploitation, financing and treasury.

The difference between the financial balance of accounts and the functional balance of accounts is that the first one allows an external analysis achieved from the sight of the slowing down -activity and designed for the creditors, while the functional balance of accounts allows an internal analysis achieved by managers from the perspective of the continuous activity of the company.

In order to achieve a estimation of the financial situation and an internal analysis used for the management of CNFR NAVROM, one must analyses the functional balance of accounts between 2005 and 2010, with the sums registered in the rollover of the accounts, as it results from the trial balance.

**Table 1 The functional of accounts**

USAGE	2005	2006	2007	2008	2009	2010
<b>Gross Value</b>						
<i>Investment function</i>	354686422	397907650	526423353	627299667	643689630	655949095
<b>Stable usage</b>	354686422	397907650	526423353	627299667	643689630	655949095
<b>A. Gross noncurrent assets</b>	354686422	397907650	526423353	627299667	643689630	655949095
- intangible assets	16470	28072	50722	82386	163428	139593
- fixed assets	331420233	189734582	488738928	612374786	622639757	632193124
- financial assets	23249719	208144996	37633703	14842495	20886445	23616378
<i>Exploitation function</i>	35047463	58866262	65293595	64252851	62658100	88786796
<b>B1. Circulating exploitation assets</b>	32219812	43967576	54027008	56129224	54841860	69482217
I. Stocks - total	3767083	3699488	15907626	5408741	6191041	7386181
II. commercial claims	28452729	40268088	38119382	50720483	48650819	62096036
<b>B2. Circulating assets excepting exploitation</b>	2609503	2598505	1248212	-	1050000	14660199
<b>C. In advance expenditures</b>	218148	12300181	10018375	8123627	6766240	4644380
<i>Treasury function</i>	12435972	10496580	18403632	8252498	15131048	1478868
<b>Financial circulating assets</b>	12435972	10496580	18403632	8252498	15131048	1478868
<b>TOTAL USAGES</b>	402169857	467270492	610120580	699805016	721478778	746214759
<b>RESOURCES</b>						
<b>Gross Value</b>						
<i>Financing function</i>	387900094	444706331	583254674	675048509	695720242	715202539
<b>Stable resource(I + II)</b>	370844253	389915731	535138069	630681133	657260273	684741977

<b>I. Own assets</b>							
II. Stable financial liabilities (> 1 year)	17055841	54790600	48116605	44367376	38459969	30460562	
<b>Exploitation function</b>	<i>14269763</i>	<i>22564161</i>	<i>26865906</i>	<i>24756507</i>	<i>25758536</i>	<i>31012220</i>	
1. Exploitation liabilities	12841311	13873810	15147019	17099261	16536484	21787258	
2. Extra exploitation liabilities	-	3965017	2783388	1274483	348305	553646	
3. Current bank credits	955421	4334521	8713434	6262457	8767774	8592138	
<b>In advance revenues</b>	473031	390813	222065	120306	105973	79178	
<b>TOTAL RESOURCES</b>	402169857	467270492	610120580	699805016	721478778	746214759	

In order to draw up the financing board, the relevance of the financial balance indicators is needed. Based on the functional balance of accounts from 2005 to 2010, the investment policy and the financing policy of the CNFR NAVROM is analyzed and the principles of the financial balance are verified in order to see if they had been respected in the past, according to table nr. 2

**Table 2 The financing board**

Usage	Resources	2005	2006	2007	2008	2009	2010
I. Variation of the global net working capital : $\Delta \text{FRNG} = \Delta \text{Stable Resources} - \Delta \text{Stable usages}$							
Noncurrent assets growth	Stable Resources growth	-	+13585	+10033	-9082	+4282	+7223
II. Variation of the total working capital demand : $\Delta \text{NFRT} = \Delta \text{Total Usages} - \Delta \text{total Resources}$							
1. Current assets growth 2. Reduction of liabilities	1. Current assets reduction 2. Liabilities growth	-	+15524	+2126	+1069	-2596	+20875
II.1. Variation of the exploiting working capital demand : $\Delta \text{NFRE} = \Delta \text{Exploitation Usages} - \Delta \text{Exploitation Resources}$							
1. Exploitation assets growth 2. Exploitation liabilities reduction	1. Current assets reduction 2. Exploitation liabilities growth	-	+22880	+6673	-1643	-2068	+7295
II.2. Variation of the working capital demand excepting the exploitation : $\Delta \text{NFRAE} = \Delta \text{Usages excepting the expl.} - \Delta \text{Resources excepting the expl}$							
1. Assets growth 2. extra expl. liabilities reduction	1. Other assets reduction 2. Extra expl. liabilities growth	-	-7355	-4548	+2712	-529	+13580
III. Variation of the net treasury $\Delta \text{TN}$ :							
a) $\Delta \text{TN} = \Delta \text{FRNG} - \Delta \text{NFRT}$		- 80174	-1939	+7907	-10151	+6878	-13652
b) $\Delta \text{TN} = \Delta \text{TN}_1 - \Delta \text{TN}_0$		- 80174	-1939	+7907	-10151	+6878	-13652

As a result of the financing board analysis, one can notice the following:

1. *The global net working capital* (FRNG) has had a general positive variation, excepting 2008, when it experienced a negative variation and the stable resources were greater than the stable usages, which reflects the absorption of some permanent needs contrary to the financing principle. As a whole, there has been a safety margin on the company financing and its solvency.
2. *The exploiting working capital* (NFRE) demand has had a generally positive variation due to the increase in the exploitation assets that covered the slower increase of the exploitation liabilities, but in 2008 and 2009 the variation got negative as a result of the faster increase of the exploitation liabilities compared to the exploitation assets.

3. *The activity apart from the exploitation* (NFRAE) has had a fluctuating variation. During the first years, the variation had been negative as a result of the faster increase in the liabilities apart the exploitation compared to the increase in the assets apart from the exploitation. In 2010, the variation became positive as a result of the increase in the assets apart from the exploitation through the short term financial investments the company made that year.
4. *The net treasury* (TN) presents a fluctuating variation that can be interpreted as a company dependence on external resource. The net treasury is positive in 2007 and 2009, which reflects the fact that the working capital is bigger than the working capital demand, insuring the possibility of placing resources in efficient activities. The negative treasury points that the working capital demand cannot be totally financed from the working capital, and the company is forced to use external resources.

## 2.2 Cash flow board

In order to evaluate the strength of an entity, more definite the solvency and liquidity, the users of the financial situations ask for information regarding the cash resources, the capacity of the company to generate cash resources and the using of the cash resources by the company.

The goal of IAS 7 is to provide references regarding the way cash flow info should be presented. The situation of the cash flows also is relevant for the identification of:

- the cash flow sold changes for a while;
- the moment of emergence and certitude of cash flows;
- the ability of the company to generate cash resources;
- the forecast of the future cash flows ( useful for the evaluation models) (Hennie van Greuning, 2011)

The flow board has the central role in the treasury, considered a genuine financial and economical board.

A dynamic approach is exclusively based on the cash flows that allow the anticipation of the short term risks by emphasizing the strengths and the existing or possible imbalances.

One of the key point that describes this board is its division in three flow categories regarding the exploitation activity, the investment activity and the financing activity, the net sum creating the liquidities flows in a certain time period, the financial exercise.

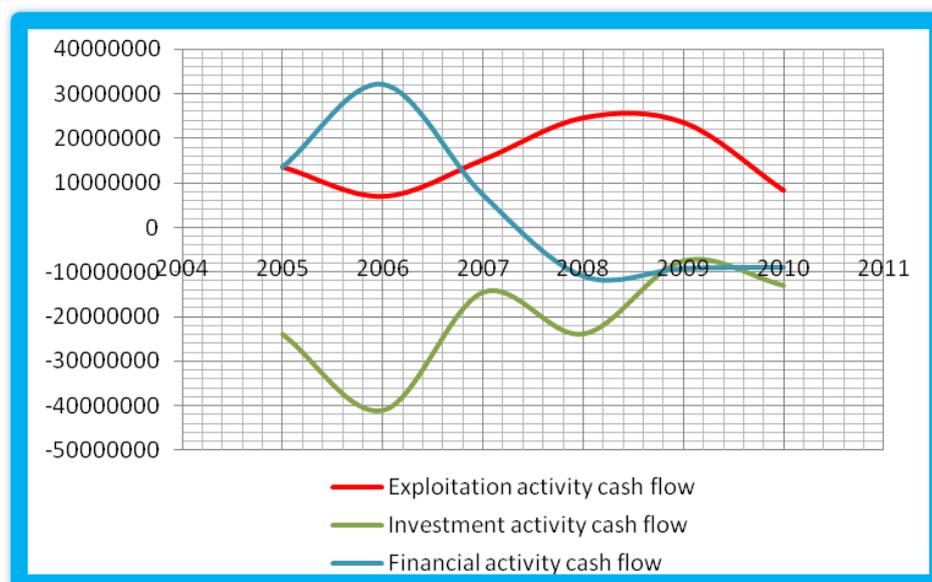
This presentation gives the advantage of a better measurement of the performance and it fosters the data interpretation, though in some cases, the distribution of the flows in categories is a more controversial one.(Patrick Pellicer, 2001)

S.C. CNFR NAVROM presents in table 3 the cash flow situations between 2005 and 2010. This interpretation uses the direct method regarding the main classes of

receipts and payments, because this method provides extra info that is useful in forecasting the future cash flows.

**Table 3 Cash flows board**

Cash flow indicators	2005	2006	2007	2008	2009	2010
Exploitation activity cash flow	+13625019	+7028812	+15252237	+24710526	+23646251	+8376855
Investment activity cash flow	-23974647	-40993301	-14606340	-23922552	-7561809	-13077059
Financial activity cash flow	+13524614	+32025097	+7261155	-10939108	-9205892	-8951977
<b>Total cash flows</b>	<b>+3174986</b>	<b>-1939392</b>	<b>+7907052</b>	<b>-10151134</b>	<b>+6878551</b>	<b>-13652181</b>
Beginning exercise cash	9260986	12435972	10496580	18403632	8252498	15131048
Final period cash	12435972	10496580	18403632	8252498	15131048	1478868



**Figure 1 The evolution of cash flows**

By analyzing the cash flows, one may notice:

1. *The exploitation activity cash flow* between 2005 and 2010 has been positive. This situation is the result of the increase in the turnover during these years, of the net profit and the positive variation of the working capital demand.
2. *The investment cash flow* presents negative variations between 2005 and 2010 as a result of the retrofit of the own ship fleet, in order to adapt the transport

capacities and ensuring the technical performance depending on the goods traffic and the technical requirements of the EU.

3. *The financing activity cash flow* has been positive between 2005 and 2007 as a result of charging of the treasury accounts with credits, with funds attracted from the shareholders by increasing the capital. Starting with 2008, the flow became negative as a result of the emerging economic crisis, and gathering funds became a problem.

### 2.3 The financing board vs. the flows board

The financial analysis based on the functional balance (the financing board) or on the flows method (flows board) starts from a single point, the gross excess of the exploitation (EBE).

The gross excess of the exploitation is an interim management balance which is important and represents the starting point of the flows functional analysis.

By adopting the two methods, the functional analysis and the flows analysis, the final result would be the same but the construction approach is different.

*The financing board* clarifies in a partial manner the financial balance because it divides the functional balance of accounts from the functional analysis and the result account. There should be a common link between the three documents so that they can be united in a single table. These unclear have led to the development of a method advanced by Geoffroy de Murard called the flow analysis based on the *multiannual financial flows boards* (TPFF), that can be used as means of strategic analysis for the development of a strategic diagnostic. (S. Petrescu, 2010)

The basic idea of de Murad's belief is the integrated operational approach of the connection between the board of the financial flow, the result and balance of accounts account and focusing not on self-financing but on the gross excess of the exploitation. the multiannual financial flows boards does not mention the ability of self-financing and does not consider the need of explaining the working capital variation, as the treasury excess is seen as a secondary calculus, the main role being given to the exploitation excess.(N. Chebac, 2009)

Geoffroy de Murard, the author of the multiannual financial flows boards divides the financial flows in four balances in an original manner:

- *the exploitation or economic balance* (E balance) or the remaining spare after the internal financing of the activities that are exploitation-specific;
- *the banking balance* (B balance) or the remaining net spare after deducting the amortization, the variation of the total liability and the financial expenditures;
- *the financial balance* (F balance) that applies on the financial operations regarding the ineptness wherefrom the profit tax and dividends are deducted;
- *the management balance* (G balance) reflects the company's ability to allocate dividends and it represents the sum of the economic balance and the financial balance.

### 2.4 The board of rentability through flows

Starting from the functional balance of accounts and going on with the financing board and then with the flows board, one may analyse the board of rentability through flows beginning with the gross exploitation excess, which is the financing resource used for the company's exploitation activity up to the maximal debt, which is ensuring a corresponding financial balance so that the company is would be able to cover all its financial liabilities.

**Table 4 The board of rentability through flows**

Indicators	2005	2006	2007	2008	2009	2010
Gross exploitation excess (EBE)	19111183	26592687	40363011	57806624	49594066	53854274
Added value (VA)	22824618	31396257	45913767	67242719	70764395	79223979
Rate of industrial margin (Rmi) (EBE/VA) %	83,73	84,70	87,91	85,97	70,08	67,98
$\Delta$ NFRE	-	22879516	6673165	-1643015	-2067641	7294518
Treasury exploitation excess ETE (EBE - $\Delta$ NFRE)	-	3713171	33689846	59449639	51661707	46559756
Gross assets Ib	354686422	397907650	526423353	627299667	643689630	655949095
NFRE	19123618	42003134	48676299	47033284	44965643	52260161
Invested capital Ci(Ib + NFRE)	373810040	439910784	575099652	674332951	688655273	708209256
Rate of economic rentability Cr(ETE/Ci)%	-	0,84	5,86	8,82	7,50	6,57
Rate of gross economic rentability Reb (EBE/Ci) %	5,11	6,05	7,02	8,57	7,20	7,60
Economic or exploitation balance (SE)	-	-46074379	-47328579	14809682	33715239	30510529
Banking balance (SB)	-	40187639	-15959498	-26917586	-22932934	-20807703
Financial balance (SF)	-	40022231	-16875020	-28286789	-24187589	-22063135
Management balance SG(SE+SF)	-	-6052148	-64203599	-13477107	9527650	8447394
Total liabilities (D)	31325604	77354761	74982511	69123883	64218505	61472782
Own Assets Cpr(Ci - D)	342484436	362556023	500117141	605209068	624436768	646736474
Rate of assets growth (c)	-	11,32	14,09	6,62	2,61	2,27
SG /Own assets%	-	(1,67)	(12,84)	(2,23)	1,53	1,31
Rate of financial rentability Rf (c + SG/Cpr) %	-	9,65	1,25	4,39	4,13	3,57
Financial lever (D/Cpr)	-	0,21	0,15	0,11	0,10	0,10
Gross financial rentability (c+(SE+SB)/Cpr)%	-	9,70	1,44	4,62	4,34	3,77
Profit tax	302697	165408	915522	1369203	1254655	1255432
Imposit percentage i (Imp/EBE)	-	0,0062	0,0227	0,0237	0,0253	0,0233
Net financial rentability Rfn(Rfbr(1-i))	-	9,64	1,41	4,51	4,23	3,68
Financial lever effect ELF (Rfb-Re)	-	8,85	(4,42)	(4,20)	(3,17)	(2,80)
Financial	1711610	3366073	9021109	10119851	8821664	9113492

Expenditures Chfin							
Real interest rate d (Chfin/D)		5,46	4,35	12,03	14,64	13,74	14,83
Indebtness optimum Sd		-	(0,14)	(2,11)	(3,50)	(2,96)	(1,81)
		$1 - \frac{i}{(Re)(1-i)}$					
%							
Maximum total liabilities D (Ci*Sd)		-	615875	12134603	23601653	20384196	12818588

The results of the analysis of the flows rentability offer the following conclusions:

*The rate of industrial margin (Rmi)*, calculated as a ratio between the gross exploitation excess and the added value has had a positive evolution which has influenced the evolution of the gross economic rentability rate, by improving the company's exploitation activity, which reflect the degree of technical abilities of the productive fixed assets.

Between 2005 and 2007, *the economic rentability (Re)* had been less than the assets growth rate, which means that the company had not been able to self-finance the economic balance investments, being forced to use credits. Between 2008 and 2010, the economic rentability experienced a relative increase comparing to the assets growth rate, which shows that the company has had a positive balance after using the investment credits.

*The financial rentability (Rf)*, depending on the investment growth level and the liabilities level had a positive though decreasing evolution as a result of passing over the assets investment growth rate (c) until 2008, followed by a decrease in the assets growth rate. This evolution is confirmed by the management balance, with a negative balance ( $SG < 0$ ) until 2008, which made the exploitation and financial activity levels inadequate for financing the company growth, which forced the company to search for other financing resources by using credits and stock issues. From 2009, the balance became slightly positive ( $SG > 0$ ) and permitted a slight company autonomy.

*The financial gross rentability (Rfb)* is still positive and decreasing comparing to the economic rentability ( $Re > Rfb$ ). This is the effect of the interest rate growth (d) over the economic rentability rate (Re) by negative results ( $Re - d < 0$ ). These negative results created a negative lever effect that leads ( $ELF < 0$ ) to the decrease in the financial rentability. It will further go until reaching the indebtness optimum (Sd), which allows the balance between the financial and economic rentability, in order to establish the maximal limit of the indebtness level of the company.

*The indebtness (Sd) optimum* has had a negative evolution as a result of the increase in the interest rate compared to the increase in the economic rentability. This indebtness optimum has also influenced in a direct manner the size of the banking balance (SB), which had a negative evolution from 2005 to 2010.

In order to maintain a positive banking balance, liabilities must increase as well as the added value, leading to the ability to cover the fiscal liabilities, and ensuring a

adequate financial balance covers the other financial liabilities (credit refunds, paying dividends).

Considering the increase in the invested capitals on term of decreasing indebtedness optimum, *the total of maximal liabilities* should come down by 80 percent compared to the total liabilities.

### 3. Conclusions

Coming to a conclusion, the result of combining the financing board and the flow board is the flow rentability board, which represents an optimal financial method for any company, because it can self determine in a direct manner its rentability and the risk it involves.

### 4. References

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