ON DETERMINING THE FINANCIAL STRUCTURE OF A TRADING COMPANY BASED ON ITS YEARLY FINANCIAL STATEMENTS

Hada Teodor

University "1 Decembrie 1918" Alba Iulia, Faculty of Science

Abstract: The present article addresses the following concepts: financial structure, financing structure, capital structure and the connection between all the three. Methodological aspects are addressed regarding advance expenditure, advance incomes, provisions included in the accounts balance as capital resources, long-term and short-term debts.

Based on a case study, a number of twenty-eight ratios are determined which will support the evaluation of the enterprise structure.

Key words: Structure, ratio, provisions, equities, permanent capitals, assets, liabilities

In Romania, yearly financial statements are regulated by O.M.F.P. 1752/2005 and its subsequent changes approved by Order no. 2374/2007.

The capital structure is defined as "the capital of a trading company which can contain ordinary shares and other types of preferred shares, bonds, capital as long-term loan. Capital structure shows the weight of each capital category in the overall used capital."[69]

Nicolae Hoanță, in the book *Finanțele firmei* (Company Finance), Economică Publishing House, 2003, defines the financial structure of a company as follows: "it refers to the size of short-term and long-term loans, to preferred shares and common stock used for company financing. Thus, capital structure is part of financial structure and thus represents the permanent funding sources of a company."

Other authors use the term of funding structure:[70] "the funding structure encompasses all elements (irrespective of their nature and deadline which determined the company to draw funding); funding structure is only defined based on medium- and long-term funding sources."

We believe these additional descriptors of the funding structure and of the financial structure to be adequate, as short-term debts are also included in the funding of a trading company. The following assets and liabilities balance published by a trading company is used for calculating structure ratios:

TOTAL ASSETS

Permanent assets	7.774.952 lei
Circulating assets	27.336.582 lei
Expenditure in advance	961.545 lei
	36.073.079 lei

TOTAL LIABILITIES

debts < 1 year	17.974.868 lei
debts > 1 year	569.256 lei
provisions	-
Incomes in advance	1.673.140 lei
Owners' equities	15.855.815 lei

---

[69] Gheorghe D. Bistriceanu, 2001, Lexicon de finanțe, bănci, asigurări, vol. III, Economică Publishing House, Bucharest, 2001,p.332.

[70] Mihaela Brândușa Tudose, Gestiunea capitalului întreprinderii, Economică Publishing House, 2006, p.101

36.073.079 lei

Before proceeding to the calculus of the structure ratios, we consider the following:

- Expenditure in advance are considered to be elements of circulating assets;
- Provisions are "a category of intermediate resources between equities and debts; they can be considered when determining the equity size"[71];
- "incomes registered in advance are assimilated to the obligations that the trading society has toward third parties and they refer to future exercises, as they do not affect the incomes of the accounting period."[72] This point of view is considered also when determining net circulating assets, the balance position according to O.M.F.P. 1752/2005.

Based on the data in the accounts balance at 31.12.2007 and based on the profit and loss account, the structure ratios are calculated in the table below:

Financial structure ratios[73]

Name of the financial structure ratio and calculation	Current year	Normal limits
Financial stability ratios		
$R_1 = \dfrac{permanent\ capitals}{Total\ liabilities}$	$\dfrac{16425071}{36073079} = 0{,}455$	-
$R_2 = \dfrac{Debts\ on\ a\ short\ term}{Total\ liabilities}$	$\dfrac{19648008}{36073079} = 0{,}5445$	-
Financial autonomy ratios $R_3 = \dfrac{Owners'\ equities}{Total\ liabilities} \times 100$	$\dfrac{15855815}{36073079} \times 100 = 44\%$	30%-35%
Financial autonomy ratios		-
$R_4 = \dfrac{Debts\ on\ a\ medium\ and\ long\ term}{Total\ liabilities} \times 100$	$\dfrac{569256}{36073079} \times 100 = 1{,}58\%$	-
$R_5 = \dfrac{Owners'\ equities}{Permanent\ capitals} \times 100$	$\dfrac{15855815}{16425071} \times 100 = 96{,}53\%$	-
$R_6 = \dfrac{Debts\ on\ a\ medium\ and\ long\ term}{Permanent\ capitals} \times 100$	$\dfrac{569256}{16425071} \times 100 = 3{,}47\%$	<50%
$R_7\ \dfrac{Debts\ on\ a\ medium\ and\ long\ term}{owners'\ equities}$	$\dfrac{569256}{15855815} = 0{,}0359$	>1 debt capacity is saturated
Debt structure ratios for a company		

[71] Mihaela – Brândușa Tudose, Gestiunea capitalului întreprinderii, Economică Publishing House, 2006, p.217

[72] I. Bătrâncea, coord., Analiza financiară pe bază de bilanț, Cluj University Press, Cluj-Napoca, 2001, p.53

[73] Maihaela-Brândușa Tudose, 2006, Gestiunea capitalurilor întreprinderii, Economică Publishing House, Bucharest, pp.216-226

B_1. Permanent capitals composition ratios $R_8 = \dfrac{\text{Owners' } equities}{\text{debts on a medium and long term}}$	$\dfrac{15855815}{569256} = 27,85$	Values close to 1
$R_9 = \dfrac{\text{Permanent } capitals}{\text{debts on a medium and long term}}$	$\dfrac{16425071}{569256} = 28,85$	>2
$R_{10} = \dfrac{\text{Own } funds}{\text{total financial debts}}$	$\dfrac{15855815}{569256} = 27,85$	The higher R_{10} and R_{11} are, the better the company is structured financially
B_2 Financial security ratios		
$R_{11} = \dfrac{\text{Permanent } capital}{\text{Total liabilities}}$	$\dfrac{16425071}{36073079} = 0,455$	
$R_{12} = \dfrac{\text{Permanent } capitals}{\text{debts on a medium and short term}}$	$\dfrac{16425071}{17974868 + 1673140} = 0,0836$	-
$R_{13} = \dfrac{\text{Permanent } capital}{\text{immobilised } assets}$	$\dfrac{16425071}{7774952} = 2,112$	>1
$R_{14} = \dfrac{debts \text{ on a medium and long term}}{\text{owners' equities}} =$	$\dfrac{569256}{15855815} = 0,0359$	≤ 1
$R_{15} = \dfrac{debts \text{ on a medium and long term}}{\text{permanent capital}}$	$\dfrac{569256}{16425071} = 0,0347$	$\leq 1/2$
B_4 Medium and long term financial balance ratios		
$R_{16} = \dfrac{\text{stable } resources}{\text{invested capital}} = \dfrac{\text{Owners' } equities + \text{DTL} + \text{DTM}}{\text{Ai}}$	$\dfrac{16425071}{7774952} = 2,1126$	$\overset{tends}{\rightarrow} 1$
B_5 Medium and long term debt reimbursement capacity ratios		
$R_{17} = \dfrac{debts \text{ on a medium and long term}}{\text{internal financing capacity}}$	$\dfrac{569256}{495805 + 686575} = 0,4814$	-
$R_{18} = \dfrac{annuities \text{ for medium and long term debt reimbursem ent}}{\text{internal financing capacity}} \times 100$	$\dfrac{-}{1184380} \times 100 = -$	<50%
$R_{19} = \dfrac{\text{financial exp } enditure}{\text{turnover}} \times 100$	$\dfrac{2514334}{61136536} \times 100 = 4,1$	-
Or $\dfrac{\text{financial exp } enditure}{\text{gross profit}} \times 100$	$\dfrac{2514334}{495805} \times 100 = 507,12\%$	-

Or $\dfrac{\text{financial exp}\,enditure}{\text{net profit}} \times 100$	$\dfrac{2514334}{101149} \times 100 = 2485{,}77$	-
C Ratios of short term assets and liabilities		
Current liquidity $R_{20} = \dfrac{\text{Circulating }\,assets}{\text{short term debts}}$	$\dfrac{27336582 + 96.545}{17974868 + 1673140} = \dfrac{28298127}{19648008} = 1{,}44$	>1
Quick liquidity $R_{21} = \dfrac{\text{Circulating }\,assets\text{ - stocks}}{\text{short term debts}}$	$\dfrac{28298127 - 7744059}{19648008} = 1{,}0461$	>0,5
$R_{22} = \dfrac{available\,assets}{\text{short term}\,debts}$	$\dfrac{552363}{19648008} = 0{,}02811$	0,35-0,65
D. Activity turnover ratios		
Ratio of economic capital profitability: $R_{23} = \dfrac{\text{gross }\,profit}{\text{economic capital}}$ [74]	$\dfrac{495805}{360736079} = 0{,}014$	>25%
Ratio of permanent capital profitability: $R_{24} = \dfrac{\text{gross }\,profit}{\text{permanent capital}}$	$\dfrac{495805}{16425071} = 0{,}0302$	-
Ratio of owners' equities profitability: (ratio of financial profitability)		
$R_{25} = \dfrac{\text{net }\,profit}{\text{owners' equities}}$	$\dfrac{101149}{15855815} = 0{,}0064$	-
Ratio of social capital profitability: $R_{26} = \dfrac{\text{net }\,profit}{social\,capital}$	$\dfrac{101149}{4945203} = 0{,}0205$	-
Ratio of share profitability: $R_{27} = \dfrac{\text{distributed }\,dividends}{\text{social capital}}$	$\dfrac{-}{4945203} = 0$	-
Ratio of gross operation immobilised assets $R_{28} = \dfrac{\text{depreciation fund}}{\text{gross operation immobilised assets}}$	$\dfrac{10681446}{18451235} = 0{,}5789$	-

The data presented above lead to the conclusion that the company under analysis does not fall within the normal limits for the ratios: R22, R23.

---

[74] Total assets were used.

The calculus of structure ratios produce information which can lead to decisions concerning the level of the company's structure and in the case in which the ratios do not fall within the normal limits, the deviations show if the companies can continue or if they have to adapt their structure to normal limits.
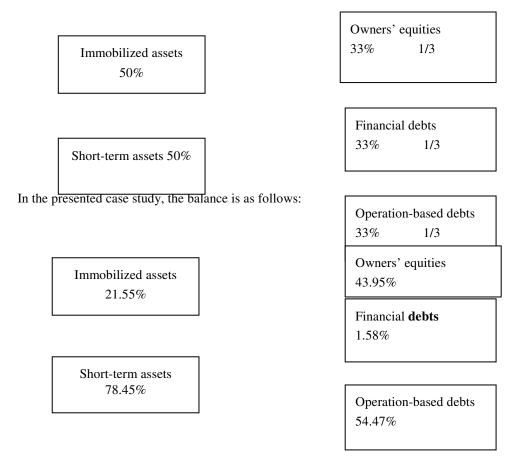
Jean-Piere Labille, in his book Analyse financière, Dunod Publishing, Paris, 2007, p.130 also calculates the ratio: $\dfrac{\text{Immobilised } assets}{\text{Total balance}}$; thus, a "value of 50% would be ideal and it would bring harmony because ½ of the capital i mobilised in stable elements (machines, equipments, patents) and the other ½ in elements that are easily immobilised in case of need (stocks, debts, clients)".

In the example shown, this ratio has the value $\dfrac{7774952}{36073079} \times 100 = 21{,}55\% < 50\%$

According to the same author, the ideal balance will look like:

Immobilized assets 50%		Owners' equities 33% 1/3
Short-term assets 50%		Financial debts 33% 1/3

In the presented case study, the balance is as follows:

		Operation-based debts 33% 1/3
Immobilized assets 21.55%		Owners' equities 43.95%
		Financial **debts** 1.58%
Short-term assets 78.45%		
		Operation-based debts 54.47%

The structure in the presented balance is not the same with that of the ideal balance.

Bibliography

1. Teodor Hada, 2004, Finanțarea agenților economici din România, Risoprint Publishing House, Cluj-Napoca
2. Nicolae Hoanță, 2003, Finanțele firmei, Editura Economică, Bucharest
3. Jean-Pierre Labille, 2007, Analyse financière, Paris, 3e èdition
4. Maihaela-Brândușa Tudose, 2006, Gestiunea capitalurilor întreprinderii, Editura Economică, Bucharest