# ANALYSIS OF THE FINANCIAL EQUILIBRIUM IN ASSESSING THE ECONOMIC VIABILITY OF THE GRAPE PROCESSING ENTERPRISES

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## INTRODUCTION

Financial equilibrium generally implies the idea of harmony between different elements of a system or in financial terms it represents the equality between financial sources and necessary economic means to develop an activity. Financial equilibrium, despite the multitude of its meanings, can be defined as enterprise capacity to ensure payments from its cash receipts without interrupting the debts, in order to avoid the risk of failure.

The maintenance of financial equilibrium represents the essential condition for enterprise survival and the assessment of financial equilibrium has to take into account the real conditions in which the inability to pay occurred.

## 1. MATERIAL AND METHOD

The researches have been made on the basis of a multi-annual data set (2006-2011) from five grape processing factories from Straseni district and namely: "Romnesti" JSC, Winery "Cojusna" JSC, "Alianta - Vin" Ltd., "Vinaria Vinius" Ltd., "Migdal - P" JSC, and the financial and statistical reports served as a source of information.

In order to assess the financial equilibrium of the enterprises from the agroindustrial sector and also of the grape processing enterprises, it is used the patrimonial method and functional method.

## 2. RESULTS AND DISCUTIONS

The rule of financial management requires that long-term assets to be funded at the expense of stable sources, i.e. at the expense of permanent capital. Starting from this premise, the rule of minimum financial equilibrium can be presented in the form of two equalities:

$$Long-term \ assets = Permanent \ capital$$
 (1)

Current assets = Short-term debts 
$$(2)$$

The observance of minimum financial equilibrium is often not enough, because the stocks can

devalorize, and a part of liabilities couldn't be paid (because of debtor's bankruptcy, satisfying debtor's claims, return of delivered goods and others). Therefore, it is necessary to maintain some "safety margin", i.e. the size of current assets should exceed the size of short-term debts. This "safety margin" actually represents the net current assets.

At the first stage of factors analysis it is determined the influence of factors which modified the size of net current assets. Taking into consideration the additional connection between the influence factors and resulting indicator, the most convenient method to analyze the relationship of factors is to use the balance method.

Detailed calculation of the influence factors on the modification of net current assets of the grape processing enterprises is reflected in the following analytical table:

**Table 1.** Calculation of the I<sup>st</sup> degree influence factors on the modification of net current assets, million lei

Factor's name	On average for the period 2006-2008	On average for the period 2009-2011	De- via- tions (+:-)	
A	1	2	3	4
1. Modification of personal capital	717	1527	+810	+810
2. Modification of long-term debts	66	-	-66	-66
3. Modification of long-term assets	321	332	+11	-11
4. Net current assets	462	1195	+733	X

According to the calculations from table 1 we can state an increase of the net current assets size in the grape processing enterprises up to 733 million lei. This modification is due to:

- 1. The increase of personal capital which favoured the growth of resulting indicator by 810 million lei:
- 2. The reduction of long-term debts and increase of long-term assets that contributed to the reduction of net current assets respectively by 66 million lei and 11 million lei.

The study of I<sup>st</sup> degree influence factors is enough to assess the situation regarding the evolution of net current assets. That's why, during the analysis it is also performed the decomposition and detailing of the general factors in their components. For this purpose, on the database of the Balance Sheet, each I<sup>st</sup> degree factor is presented as a totality of II<sup>nd</sup> degree factors. It should be mentioned that this analysis can be accomplished at different detailing levels: at the level of subchapters from the Balance Sheet or at the level of separate positions from the Balance Sheet.

**Table 2.** Calculating the influence of II<sup>nd</sup> degree factors on the modification of net current assets, million lei

Factor's name	On aver- age for the period 2006- 2008	On aver- age for the period 2009- 2011	<i>tions</i> (+:-)	Fac- tor's influ- ence (+;-)
A	1	2	3	4
1. Modification of personal capital	717	1527	+810	+810
including the fol- lowing modifica- tions:				
1.1. statutory capital	5	5	ı	-
1.2. undistributed profit	712	1522	+810	+810
2. Modification of long-term debts	66	-	-66	-66
including the modi- fication:				
2.1. calculated long- term debts	66	-	-66	-66
3. Modification of long-term assets	321	332	+11	-11
including the modi- fication:				
3.1. material long- term assets	321	332	+11	+11
Net current assets	462	1195	+733	X

We'll break down the influence of I<sup>st</sup> degree factors of net current assets in separate components. On the database of the Balance Sheet we'll elaborate an analytical table and we'll interpret the obtained results.

The calculations from table 2 prove the fact that among the II<sup>nd</sup> degree factors influencing the increase of net current assets we can consider the increase of undistributed profit. The influence of this factor equalled the sum of 810 million lei.

The greatest influence on the reduction of net current assets in the grape processing enterprises belongs to the calculated long-term debts. As a consequence, the resulting indicator decreased by 66 million lei.

In order to ensure the financial equilibrium in grape processing enterprises we suggest the following directions:

I. The efficient use of capital – consisting in the calculation of certain indices that determine at which level the personal and borrowed capital use can contribute to achieve a stable economic development of the enterprise (table 3).

**Table 3.** Assessing the reduction of financial risk on the basis of indicators of efficient capital use in the grape processing enterprises.

Indicator	On average for the period 2006-2008	-	Absolute devia- tion (+;-)	Growt h rate, %
A	1	2	3	4
1. Number of rotations of current assets		1,973	+0,209	111,85
2. Coefficient of financial stability		0,956	+0,224	130,60
3. The share of current assets in total assets, %		79,15	+9,14	113,06
4. Coefficient of total liquidity	2,61	18,80	+16,19	7,2 times
5. The share of short-term debts in total debts, %		100,00	+18,61	122,87

According to the calculations from table 3 we can state the following:

1. The capital of grape processing enterprises, both personal and borrowed, is used efficiently,

even more it was found out the dynamic increase of its efficiency;

- 2. On the one hand, the increase of total liquidity coefficient gives investors confidence and enhances enterprise credibility for external creditors and on the other hand, the very high level of this indicator can contribute to reduce the efficiency of money resources use;
- 3. The increase of financial stability coefficient by 30,6% proves that grape processing enterprises can finance their activity without attracting foreign resources, fact that contributes to strengthen the financial independence;
- 4. A contradictory tendency records the share of current assets in total assets; its increase by 13,06 % represents a disadvantage for the increase long-term assets share, which means a poor investment policy for the enterprise.
- II. The maintenance of financial equilibrium is due to the accelerated rotation speed of the components of net current assets. In such conditions, in order to maintain and increase the revenue from sales it is necessary a smaller amount of investment in net current assets.

All these suggest that the rate of sales growth, normally, has to exceed the rate of net current assets growth. As a result, there is a release of means used to form the net current assets. Otherwise, we'll meet the phenomenon of means immobilization ("freezing") in form of stocks of goods and materials, as well as receivables.

In this context, it is up-to-date to study in detail the evolution of means invested in net current assets under the influence of modifying the speed rotation of their components. As operational tools used to achieve the established purpose, the economic theory and practice recommends the rotation coefficients of current assets and short-term debts components.

The sum of release (+) or immobilization (-) of the means invested in the net current assets is determined depending on the influence of the following factors:

- 1. The rotation speed of stocks of goods and materials, which is calculated as the multiplication between the rotation speed of stocks (on average for the period 2006-2008 and respectively for the period 2009-2011) and average daily sales;
- 2. The rotation period of short-term receivables is calculated similarly to the first factor;
- 3. Rotation period of the short-term debts which is calculated similarly to the first factor.

Further, we'll study the evolution of investments in the net current assets of grape processing enterprises under the influence of rotation speed modification of the current assets and short-term debts. On the database of the Balance Sheet and also the Profit and Loss Report we'll elaborate the analytical table and we'll interpret the obtained results.

**Table 4.** Calculation of the average value modification of the net current assets under the influence of rotation of their elements, thousand lei

The elements of the net current assets formation	of the net assets Calculation method	
A	1	2
1. Stocks of goods and materials		+44080
2. Short-term receivables	(26-31)*5510	-27550
3. Short-term debts	(32-148)*5510* ,,- 1"	+639160

According to the calculations from table 4 we can mention that because of the slow rotation speed of the stocks of goods and materials, grape processing enterprises had to invest 44080 thousand lei to replace the stocks of goods and materials.

Adequate assessment of the significance of net current assets for the financial equilibrium requires to take into account the average period of short-term liabilities collection and the average period of short-term debts payment, which in practice are not equal than in exceptional cases. In this case we have two approaches:

- 1. If short-term receivables turn faster than liabilities, it means that the enterprise can ensure its financial equilibrium.
- 2. If short-term receivables turn slower than liabilities, the maintenance of financial equilibrium requires positive and high value net current assets.

In order to analyze the financial equilibrium of grape processing enterprises we'll use two indicators and namely:

- 1. The average period of short-term receivables collection which on average for the period 2006-2008 was of 26 days and respectively for the period 2009-2011 it was of 31 days;
- 2. The average period of short-term debts payment on average for the period 2006-2008 was of 32 days and respectively on average for the period 2009-2011 148 days;

Thus, we can conclude that on average for the period 2006-2008, the average period of short-term receivables collection is 6 days longer than the av-

erage period of short-term debts payment (26 days - 32 days), fact which enables the enterprises to ensure their financial equilibrium. A reverse situation was recorder on average for the period 2009-2011, when the average period of short-term receivables collection was 117 days shorter than the average period of short-term debts payment (31 days - 148 days). In such a case, being unable to maintain its financial equilibrium, there is a need to appreciate the liquidity and solvency in order to determine whether the enterprise will be able to honour its commitments at the expense of other current assets without incurring any financial risk.

## 3. CONCLUSIONS

- 1. The results of our researches prove that grape processing enterprises have sufficient productive potential and liquid assets in order to develop production activities and ensure their financial equilibrium. At the same time, we can mention that there is a weak point in the management of assets structure. Although it has sufficient liquid assets, the reduction of immobilizations is considered to be a negative trend to the detriment of the active assets, fact that proves the reduction of its investment capacity. In this direction we recommend that in future the enterprise mobilizes its resources for the renewal of its fixed means.
- 2. The excess of money resources, stocks of goods and materials in the grape processing enterprises can contribute to the recoverability of current assets, as a result of the production process efficiency reduction, fact which was proved by the obtained average for the period 2009-2011 when assets efficiency reduced by 40,16 p.p. In this direction we recommend that grape processing enterprise improve the structure of assets by increasing the share of those active assets existing in the economic cycle and not those stocked in deposits, accounts and strongboxes, i. e. only those assets that generate profit.

## References:

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