

## **STUDY RELATED TO THE ECONOMIC AND FINANCIAL ANALYSIS OF PRODUCTION UNITS (CASE STUDY)**

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*Abstract: The performed study was based on the data and information of the official specialized documents of the company S.C. Multiagra S.R.L. Vlasinesti, located in Vlasinesti, in Botosani district. The company manages a crop-livestock mixed farming system and owns an agricultural area of 1500 hectares. **The profit and loss account** measures the farm performance within the fiscal year and comprises the net turnover, the incomes, the expenses and the profit of the fiscal year. The assessment of the company's performance was performed on the following indicators: the gross commercial margin, the turnover, the yearly production and the added value. **The turnover** comprises the value of the sold production and the subsidies. **The added value** must present a growth index bigger than the production index, with a positive evolution. **The gross profit of the fiscal year** reflects briefly the efficiency of the whole activity performed during the fiscal year, consisting of the profit of the fiscal year and the result of exploitation. **The rates of return** have been improved to the preceding fiscal year, but with values under the minimum recommended level. The best values have been obtained in the gross and net economic return, but they were influenced by the high costs of the financial indebtedness.*

*Keywords :agriculture, strategies, efficiency*

### **INTRODUCTION**

The strategy for improving the agricultural production in a certain area is based on the economic and financial analysis of the agricultural sector. It must take into consideration the adoption of measures to lead firstly to the increase of the agricultural production and secondly to its efficiency by attracting European funds.

### **MATERIALS AND METHODS**

**The researches** were performed in Botoșani district. This district has an agricultural area of 392788 hectares, out of which the arable area represents a proportion of 76,1 %. **The case study** was performed at the company S.C. MULTIAGRA Vlăsinești S.R.L. in Botoșani district, which deals with *the producing, processing and sale of the agricultural production*. **The researches aim** consists to study the main economic and financial indicators of S.C. MULTIAGRA Vlăsinești S.R.L. *and to recommend some strategies for improving the agricultural production by attracting European funds*. Briefly, the authors applied several methods to achieve the researches aim and objectives, such as: the analysis of specific

indicators, the comparison, the structural analysis and the evolution progress, the economic analysis, etc. The researches aimed the 2006-2012 period.

## RESULTS AND DISCUSSIONS

By analysing the evolution of the total incomes and turnover during the whole studied period, the authors observed an obvious economic growth registered in the period after the implementation of the European funds and also the improvement of the exploitation conditions. They observed increasing values of the rates of return during 2009-2012 period as compared to 2007, representing the year of reference, excepting the year 2010, which was characterized by a weak economic and financial performance, due to the negative influence of climatic conditions (*extreme drought and very high temperatures*). The efficiency of the assets and liabilities and the capacity of paying the financial obligations were improved in the studied period. The sudden changes for the better were insignificant in 2009-2012 period, but with a significant increase of indicators in the year 2011 and even more in 2012. **The available cash-flow** reached a positive value in 2011, by decreasing the variation of the financial debts and the increasing of the operating cash-flow which was generated by the net result put down to the increase of the sinking expenses. Moreover, the ascending turnover of 8.221.660 lei in 2012 proves an efficient use of the working capital, which presented also an increase (1.925.299 lei in 2012). The company disposed of a surplus of circulating assets as compared to the current debts, for getting higher incomes by putting up for sale of the products from exploitation. All these elements certify the improving possibilities of the agrivultural production by attracting and using of the European funds.

The assessment of the company's performance was performed on the following indicators: the gross commercial margin, the turnover, the yearly production and the added value. **The turnover** must reach a proportion of 85 % of the incomes by exploitation and 75 % of the total incomes, within a normal situation of the company's activity. The turnover reached a level of 69,41 % of the incomes of exploitation in 2007 and it has been improved to 76,09 % in 2009, but it decreased to 61,55 % in 2012. The incomes of exploitation were influenced by the production in stock, as well as by the incomes from the subsidies for investments (table 1):

*Table 1*

### Evolution of the turnover, the sold production and the incomes of the company S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

Indicators	U.M.	Studied period		
		2007	2009	2012
<b>Turnover</b>	ths. lei	<b>1675,0</b>	<b>2453,8</b>	<b>3051,0</b>
Incomes from the subsidies of exploitation	ths. lei	500,3	1035,3	1171,4
<b>Sold production</b>	ths. lei	<b>1174,7</b>	<b>1866,0</b>	<b>1879,6</b>
<b>Growth index of the turnover</b>	%/2007	<b>100,0</b>	<b>146,5</b>	<b>182,1</b>
<b>Growth index of the sold production</b>	%/2007	<b>100,0</b>	<b>158,8</b>	<b>160,0</b>
Incomes from exploitation	ths. lei	2413,1	3224,6	4957,3
Proportion of the turnover in the incomes of exploitation	%	<b>69,4</b>	<b>76,1</b>	<b>61,54</b>
Total incomes	ths. lei	2413,4	3224,6	4965,1

Proportion of the turnover in the total incomes	%	<b>69,4</b>	<b>76,1</b>	<b>61,45</b>
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Source : Processed data by the official specialized documents of S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

The proportion of the turnover within the total incomes was similar to the turnover calculated by reporting to the incomes of exploitation, due to the unsubstantially of the financial incomes within the total incomes. The 2007-2012 period is situated in the context of big changes in the national economy and apparition of a global economic crisis, as well as of the economic recession.

The authors observed an ascent of the registered expenses, both the expenses of exploitation and the financial expenses due to an ascending evolution of the company's activity, the doubling of incomes and of the exploitation for increasing of fixed capital with the effort of implementing the developing and investments projects by accesing European funds, as well as credits (table 2):

Table 2

**Evolution of expenses and incomes from exploitation in the 2007-2012 period**

Indicators	Studied period				
	2007	2009	2010	2011	2012
Expenses of exploitation – ths. lei	2.238,7	2.597,1	3.415,5	4.385,2	4.462,6
Incomes from exploitation – ths. lei	2.413,1	3.224,6	3.959,1	5.009,6	4.957,3
<b>Expenses of exploitation at 1000 lei incomes from exploitation - lei</b>	<b>927,7</b>	<b>805,4</b>	<b>862,7</b>	<b>875,4</b>	<b>900,2</b>

Source: Processed data by the official specialized documents of S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

The financial effort deposed to realize the investments, was visible in the evolution of financial expenses which represented about 95-100 % expenses for paying interests and increased in the total expenses from a proportion of 4,8 % in 2007 to 13,1 % in 2010, but diminished to 9,9 % in 2012. **The production of the fiscal year** presented an ascending tendency, having a maximum value in 2011 (table 3).

**The added value** must present an growth index higher than the growth index of the production of the fiscal year and a positive evolution (table 4).

Table 3

**Evolution of the production of the fiscal year at S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district, in 2007-2012 period**

Indicators	Studied period				
	2007	2009	2010	2011	2012
Sold production – thousands lei	1.174,7	1.418,3	1.866,0	2.874,7	1.879,6
Production in stock – thousands lei	525,4	666,8	1.019,7	863,1	1.070,0
<b>Production of the fiscal year-ths. lei</b>	<b>1.700,1</b>	<b>2.085,1</b>	<b>2.885,7</b>	<b>3.737,8</b>	<b>2.949,6</b>
Growth index of the sold prod..- %	<b>100,0</b>	<b>120,7</b>	<b>131,6</b>	<b>154,1</b>	<b>100,7</b>
Growth index of the prod. in stock - %	<b>100,0</b>	<b>126,9</b>	<b>152,9</b>	<b>84,64</b>	<b>104,9</b>
Growth index of the prod.of the fiscal year %	<b>100,0</b>	<b>122,6</b>	<b>138,4</b>	<b>129,53</b>	<b>102,2</b>

Source: Processed data by the official specialized documents of S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

Table 4

**Evolution of the added value and of the gross profit from exploitation in 2007-2012**

Indicators	2007	Studied period			
		2009	2010	2011	2012
Production of the fiscal year – ths. lei	1700	2085	2886	3738	2950
<b>Added value – thousands lei</b>	<b>177</b>	<b>415</b>	<b>647</b>	<b>1234</b>	<b>155</b>
<b>Growth index of thousands added value - %</b>	<b>1947</b>	<b>234</b>	<b>156</b>	<b>191</b>	<b>13</b>
<b>Gross surplus from exploitation - ths. lei</b>	<b>422</b>	<b>1059</b>	<b>1110</b>	<b>1213</b>	<b>697</b>

Source : Processed data by the official specialized documents of S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

The added value registered an oscillating tendency from a year to another in 2007-2012 period, being directly influenced by the value of the production of the fiscal year and by the different volume of expenses for obtaining this production.

The indicator increased with 234 % in the year 2009 as compared to 2007, which represents the year of reference, and later in 2010 (156 %) and in 2011 (191 %). The added value was still positive in 2012, but lower than in the previous years, because of a smaller production and a bigger volume of intermediary consumptions. The value of the indicator “the added value per employee” decreased in 2012, reaching the value of 4.072 lei, which was smaller than the value of 5.536 lei reached in 2007, both being very small as compared to those from the years 2010 (23.963 lei) and 2011 (34.273 lei). Some **indicators of profitableness** are mentioned in the table 5:

Table 5

**Evolution of the rates of return at S.C. MULTIAGRA S.R.L.Vlăsinești in 2007-2012**

Indicators	2007	2009	2010	2011	2012
Rate of the economic profitableness	.67	4,59	,00	,25	,33
Rate of the economic gross profitableness	5,17	3,15	8,86	2,79	2,86
Rate of the economic net profitableness	,97	4,23	,08	,21	,44
Rate of the financial profitableness	,03	9,31	,97	,10	,32

Source: Processed data by the official specialized documents of S.C. MULTIAGRA S.R.L. Vlăsinești in Botoșani district

- a) **the rate of the economic profitableness**, which represents the gross pay of the invested capitals and the result must be at the minimum level of efficiency, respectively, the average rate of the interest (5-6 %);
- b) **the rate of the economic gross profitableness**, which presents how much of the gross surplus from exploitation corresponds to one unit of the invested capital; the recommended optimal value must be of 25 %;
- c) **the rate of the economic net profitableness**, which expresses how much of the gross profit from exploitation corresponds to one unit of invested capital, within the activity of exploitation; the results must be at least at the level of the average rate of the interest;
- d) **the rate of the financial profitableness**, which measures the company's capacity to obtain profit based on own capitals.

The rates of profitableness at the end of the year 2011 were improved as compared to the previous year, but they were under the minimum level recommended. The rates of profitableness decreased in 2012. The best values were obtained on the net and gross profitableness, due to the exploitation activity which created an added value, but the net profit decreased due to the financial deficit caused by the high costs of the financial indebtedness.

## CONCLUSIONS

1. The authors calculated the indicators of cash, solvability, bookkeeping and profitableness, which represent the main categories of indicators to put a comprehensive diagnosis of the studied company's activity, based on *the accounting balance and the profit and loss account*. The overall analysis of the company's capacity to face the total debts, represented by the solvability indicator, presented an ascending tendency, approaching by the value of the optimal recommended coefficient: 2.
2. The solvability of a company depends both on the available assets and the volume of debts, which are evaluated by the indicators of indebtedness. The accounting indicators and the profitableness indicators revealed that a small capacity of funding resources was mobilized or of creating bigger resources out of the new created value (profit) in the preadhesion period to the European Union. But the situation change in good during the 2009-2012 period.
3. The indicators of profitableness were situated under the optimal level and they presented a decreasing tendency, with a negative direct effect, both in the process of ensuring the own funding sources and in attracting foreign funding sources.
4. The rotation speed of the circulating assets was very small in 2007: a complete rotation was done at 329 days, representing a little bit more than a rotation in a fiscal year; this fact reveals a low efficiency of the circulating assets used in getting incomes;
5. The current analysis should be completed with informations concerning the new Common Agricultural Policy and its effects on P.N.D.R. and on the rural development policies.

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