Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development
Vol. 14, Issue 4, 2014
PRINT ISSN 2284-7995, E-ISSN 2285-3952

ECONOMIC-FINANCIAL DIAGNOSIS BASED ON THE DATA PROVIDED IN THE BALANCE SHEET OF S.C. AUGER PETRUȘ S.R.L. IN THE INTERVAL 2009-2013

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Abstract

The analysis performed and presented in this paper is based on an agricultural business in the Călărași County, namely S.C. Auger Petrus S.R.L. The basic activity of the company is represented by cultivating cereals ecologically, on an area of 700 ha of wheat, maize, sunflower, peas, lucerne, etc. The analysed company expanded its ecologically cultivated area by purchasing new land, as well as by leasing new areas of land. Also, the company has its own silo made up of three units with a capacity of 3,000 metric tons each, a laboratory where to analyse the cereals on entering and leaving the silo, as well as good technical equipment, namely: tractors, combine harvesters, seeders, agricultural combiners, plows, trailers, irrigation pumping station. From the data processed and presented in the company's financial balance, we noticed the evolution of the efficiency level correlated with strategies employed by the company.

Key words**:** *net assets, working capital, the need for working capital, financial structure ratios, capital rotation ratios*

INTRODUCTION

The sustainable development of agriculture, an important objective of national and international agricultural policies, aims at implementing techniques and technologies which, in order to obtain agricultural produce, allow for environment protection without decreasing the producers' economic profitability[2].

The equity analysis in a company studies the insolvability risk, namely the company's incapacity to pay its debts to third parties [7].

Financial analysis is based on the data provided by Balance Sheet and Profit and loss account and the main used method is ratio method. [1,3,4,6].

In this context, we considered it necessary to monitor firstly, for comparison purposes, the assets according to their degree of liquidity and, secondly, the liabilities according to their degree of chargeability.

In this endeavour, this paper aims at presenting the results of the analysis facilitated by the assets and liabilities, so as to emphasise the way in which long-term financial equilibrium can be estimated by means of identifying permanent needs and resources, and the short-term financial equilibrium can be estimated by means of identifying temporary needs and resources [5].

MATERIALS AND METHODS

The basis in elaborating this paper was represented by the analysis of financial-accounting documents (the balance sheet accompanied by the profit and loss account) and the processing of data provided by the company, as well as capturing the economic performances by means of analysing the indicators that were representative for the interval 2009-2013.

The gathered data aimed at analysing the structural evolution of the indicators that highlighted the financial equilibrium at company level: net assets, working capital, the need for working capital, net treasury [7][8].

The "Net Assets" (NA) *are calculated as Assets minus (Debts of less than one year plus Debts of more than one year)*

The „Working Capital" (WC) *namely Equity plus Debts of more than one year minus Fixed assets*

The „Need for Working Capital" (NWC) *namely (Current assets plus Advance payments minus Cash register and bank accounts) minus (Debts of less than one year plus Debts of more than one year plus Advance revenues)*

The „Net Treasury" (NT) *is the difference between WC and NWC*

We also emphasised the structural evolution of the indicators specific to the diagnostic analysis of the company in the ratios system: financial structure ratios; the capital rotation ratios [7][8].

The „Financial Equilibrium Ratios

The „Fixed assets financing ratios" (the working capital ratios) = Permanent Capitals/Fixed assets

The „Liquidity ratios"

The „General liquidity ratio" = Current Assets/Debts of less than one year

The „Low liquidity ratio" = (Accounts receivable +Cash)/Debts of less than one year

The „Immediate liquidity ratio" = Cash/Debts of less than one year

The „Solvency ratio" = (Equity + Total Debts)/Total debts

The „Debt-to-equity ratio"

The „Leverage ratio" (debt coefficient) = Total debts/Equity

The „Financial debts ratio" = Total debts/Permanent capitals

The „Financial independence ratio" =Equity/Permanent capitals

The „Reimbursement capacity ratio" = Debts of more than one year /Self-financing capacity

The „Debt cost" = Financial expenditures/Debts of more than one year

The „Assets and liabilities structure ratios"

*The „Fixed assets ratio" = Fixed assets/Assets*100*

*The „Current assets ratio" = Current assets /Assets*100*

*The „Stocks ratio" = Stocks/Assets*100*

*The „Commercial receivables ratio" = Accounts receivable/assets*100*

*The „Cash ratios" = Cash/Assets*100*

*The „Global financial autonomy ratio" = Equity/Liabilities*100*

*The „Global debt-to-equity ratio" = Total debts /Liabilities*100*

The „Capital rotation ratios"

*The „Capital rotation span through the turnover" = Total debts/TO*360*

The „Global rotation speed" = TO/Total debts

The „Stocks rotation speed" = TO /Stocks

The „Receivables rotation speed" = TO/Receivables

RESULTS AND DISCUSSIONS

The analysis of the company' balance sheet in the interval 2009-2013, as well as the analysis of the assets and liabilities, which are the basis for ensuring financial equilibrium, allowed us to identify the economic-financial status of the analysed company.

Firstly, we notice that the company's net assets, which express the value of the assets achievable at a given moment, was positive and had an upward trend, represented by a healthy economic management which maximised the company's value and strengthened the equity (Table 1). Except for 2012 when the company's net assets had a lower value – as the company recorded a negative financial result. In this situation, the company was directly exposed to the risk of insolvency.

Table 1. Evolution of the net assets (RON)

	2009	2010	2011	2012	2013
Total assets	3,394,122	3,181,114	3,528,760	3,414,387	4,765,168
Total debts	2,753,939	2,523,325	2,753,084	2,836,214	3,936,200
Net assets (NA)	640,183	657,789	775,676	578,173	828,968

Source: processed from the annual financial statements of S.C. Auger Petruş S.R.L. 2009-2013

On the other hand, the positive working capital recorded in the analysed interval emphasises that the company has enough permanent capitals that ensure the funding for net fixed assets and illustrate the fact that the current assets were higher than the short term debts.

Table 2. Evolution of the working capital (RON)

	2009	2010	2011	2012	2013
Equity	640,183	657,789	775,676	578,173	578,173
Debts of more than one year	1,836,068	1,404,152	978,279	142,862	373,352
Fixed assets	1,807,048	1,818,307	1,340,637	1,136,779	771,360
Financial working capital	669,203	243,634	413,318	-415,744	180,165

Source: processed from the annual financial statements of S.C. Auger Petruş S.R.L. 2009-2013

Thus we may say that the company was in a state of financial balance, due to the highly developed production activity, having enough liquidity to pay off short-term debts. The favourable situation in connection with the suppliers is also represented by the need for working capital whose positive value is due to company's investment policy which used short-term loans to sustain the activity. In 2012, the working capital recorded a negative value because the company's current assets were not enough to pay off short-term debts. For this reason, we may say that the company was in a state of financial imbalance.

The negative need for working capital recorded in 2012 emphasises the fact that the company temporarily cancelled its supplies and stock renewals.

Table 3. Evolution of the need for working capital (RON)

	2009	2010	2011	2012	2013
Current assets	1,587,074	1,362,807	2,188,123	2,277,608	3,993,808
Cash register and bank accounts	63,648	752	63,885	48,203	44,569
Debts that must be paid off in one year	917,871	1,119,173	1,774,805	2,693,352	3,562,848
The need for working capital	605,555	242,882	349,433	-463,947	386,391

Source: processed from the annual financial statements of S.C. Auger Petruş S.R.L. 2009-2013

* advance expenditures, treasury bank loans, advance revenues have zero values

For this reason, we may say that the company was in an unfavourable state which affected the production activity.

The net treasury indicator results from the difference between the working capital and the need for working capital, but it is most convincing in connection to the financial equilibrium result at company level. The fact that the company records a net positive treasury with a downward trend reflects its dependence on external financial resources.

Table 4. Evolution of the net treasury (RON)

	2009	2010	2011	2012	2013
Financial working capital	669,203	243,634	413,318	-415,744	430,960
The need for working capital	605,555	242,882	349,433	-463,947	386,391
Ne treasury	63,648	752	63,885	48,203	44,569

Source: processed from the annual financial statements of S.C. Auger Petruş S.R.L. 2009-2013

In order to assess the financial equilibrium achieved at company level, we analysed the financial structures ratios in the interval 2009-2013.

In the case of the analysis of the assets and liabilities structure ratios (Figure 1), by analysing the liabilities we noticed that the company's financial state deteriorated, as the global debt-to-equity ratio (the ratio of total debts to total liabilities) recorded the highest value in 2012, amounting to 83.1%. Regarding the global financial autonomy ratio, which examines financial autonomy in its overall funding, it increases slightly from 18.9% in 2009 to 22% in 2011, in the context in which the minimum acceptable level is de 30%.

On the other hand, the assets structure reveals an increasing fixed assets ratio until 2010 when it was 57.2%, which was especially due to the high ratio of technical equipment, machinery and installations. The decrease in the fixed assets ratio from 38% in 2011 to 16.2% in 2013 is favourable to the company because it will be able to perform a

technology conversion in order to adjust to the market requirements, by rapidly turning it into liquidity.

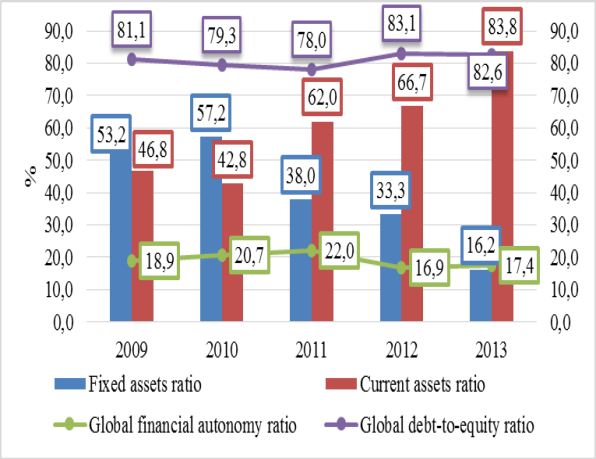

Fig. 1. Evolution of assets and liabilities structure ratios in the interval 2009-2013

The current assets ratio increased from 42.8 in 2010 to 83.8% in 2013. As shown in Figure 2, this is especially due to the increase in accounts receivable.

Regarding the stocks ratio, we notice a decrease from 29.9% in 2009 to 19.4% in 2013, indicating a favourable situation for the company because the decrease in stocks influenced the increase in turnover. The increasing commercial receivables ratio (from 15% in 2009 to 63.5% in 2013) emphasises the issues encountered by the company in reimbursing the clients.

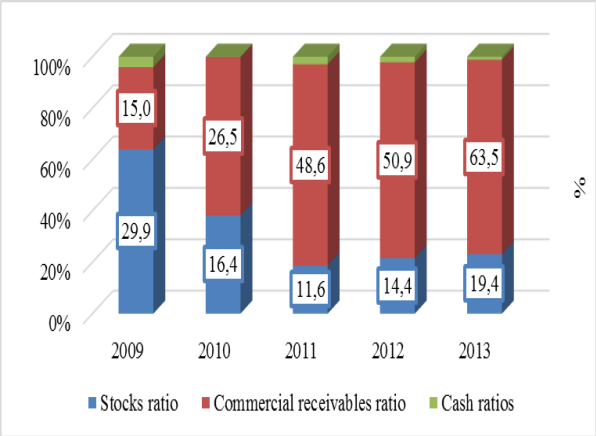

Fig. 2. Evolution of stocks rates, accounts receivable and cash in the interval 2009-2013

The fixed assets financing ratio (Figure 3), used in emphasising the company's financial equilibrium, decreasing in 2012 reflects a worsening financing situation, even if we notice an increase in the value of long-term debts in 2009, 2011 and 2013.

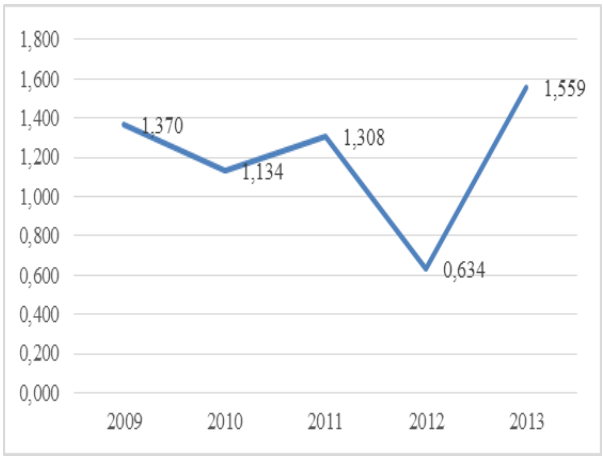

Fig. 3. Evolution of the fixed assets financing ratio (working capital ratio)

This fact is confirmed by the general liquidity ratio (Figure 4) which, through its value greater than 1, proves that the company will be able to pay off its chargeable debts. The decrease in this indicator in 2012 proves that the company underwent a shortage of treasury in the context of debts not being reimbursed.

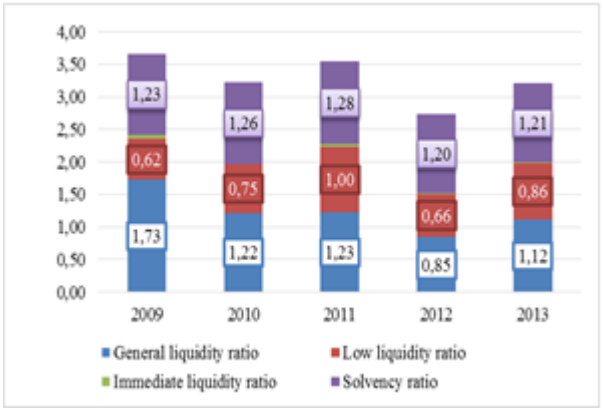

Fig. 4. Evolution of liquidity ratios

The evolution of this indicator, accompanied by an increase in the low liquidity ratio in the interval 2009-2011, proves that the company does not use stocks to pay off chargeable debts and thus the insolvency risk is low. Nevertheless, the financial risk the company was exposed to was very high considering that the immediate liquidity rate was lower than 0.3%, which highlights the company's low capacity to reimburse debts using the existing

cash. But the company offsets this last indicator with an increasing value of the stocks and accounts receivable which allows for achieving an approximately constant solvency ratio (about 1.3) during the analysed interval.

The debt-to equity ratio of the analysed company could be highlighted using the analysis of the debt-to-ratios presented in Figure 5.

Thus, the financial leverage recorded values greater than one and decreasing from 4.302 in 2009 to 3.549 in 2011, which indicates the company's independence from its debtors.

On the other hand, the financial debts ratio, increasing in the analysed interval, caused difficulty to the company when accessing new bank loans, as this indicator exceeds the normal value of 0.5%, and the reimbursement capacity ratio reached 79.8 in 2010, the company having a normal financial independence ratio (under 0.5).

Regarding the debt-to-equity cost, it ranged between 0.2-0.6, having a higher value than the profitability ratio, which triggers a positive leverage effect on its return on equity.

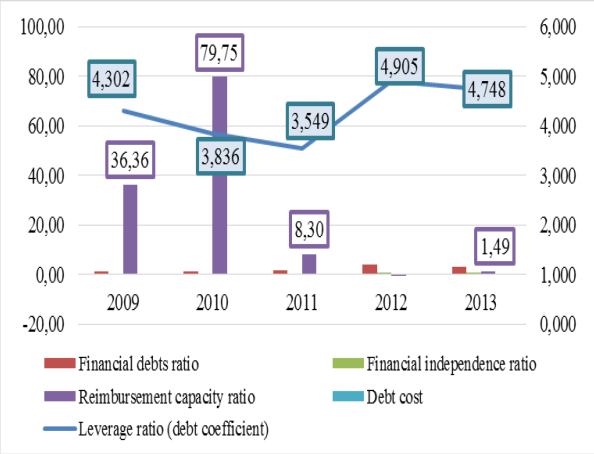

Fig. 5. Evolution of debt-to-equity ratios

Another perspective on the situation presented by the balance sheet indicators dynamics is provided by the analysis of rotation ratios which measure the equity items renewal rate, expressed by the number of rotations (Figure 6). Thus, the global rotation speed was of 0.6 rotations/year in 2010, as the company could not cover its production activity with proceeds from its clients, but incurred short-term debts.

Regarding the stocks rotation speed, in 2009 it was of 1.8 rotations/year; the number of rotations increased, reaching 5.8 rotations/year in 2011; because the company had more and more liquidity invested in stocks.

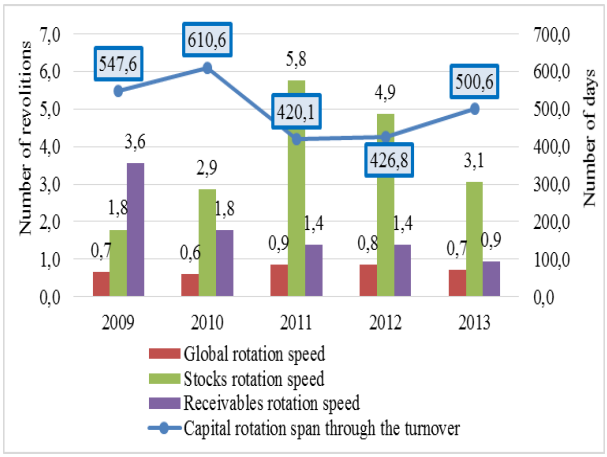

Fig. 6. Evolution of the stocks rotation speed, accounts receivable and capitals

The accounts receivables rotation speed reached only 0.9 rotations/year in 2013, from 3.6 rotations/year in 2009, so it allowed the company to have a negative balance as it could not recover its accounts receivable in an interval as short as possible.

CONCLUSIONS

The analysis performed on the company S.C. Auger Petrus S.R.L., in the Călărași County, an agricultural business with vegetal profile, having 750 hectares, in the interval 2009-2013, aimed at capturing the financial equilibrium at company level, as well as the structural change of the indicators specific to the diagnostic analysis in the ratios system. The main conclusions drawn from this analysis are:

-the positive working capital emphasises that the company had enough permanent capitals to ensure the financing of net fixed assets;

-the positive net treasury values during the entire analysed interval indicates a good economic profitability, which allowed the company to remain on the market;

-the financial leverage values greater than one and decreasing indicate the company's independence from its debtors;
-the company underwent an insolvency risk in 2012 due to drought conditions - this affected the supplies and stock renewals which were temporarily cancelled and led to difficulties in reimbursing short-term debts.
-the company has an approximately constant solvency ratio, even in the context of increasing stocks and accounts receivable.

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