SUBSTANTIATION OF AN ECONOMIC DEVELOPMENT STRATEGY IN THE CASE OF VEGETABLE FARM

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Abstract

The paper considers the economic-financial analysis of a vegetable farm in order to substantiate an economic development strategy. The paper also examines key indicators for the farm, such as: turnover, labor productivity, profit margin, rate of return, financial solvency, or capital. The analysis was performed based on information from Top Firm using Tableau software, capturing trends and dynamics of farm indicators.

Keywords: financial and economic analysis, economic performance, farm, strategy.

 $\begin{tabular}{ll} \textbf{JEL Classification:} according to $$\underline{$https://www.aeaweb.org/jel/guide/}$ \\ \underline{jel.php} \end{tabular}$

REL Classification: according to $\underline{\text{http://www.asociatiaeconomistilor.}}$ $\underline{\text{ro/rel.php}}$

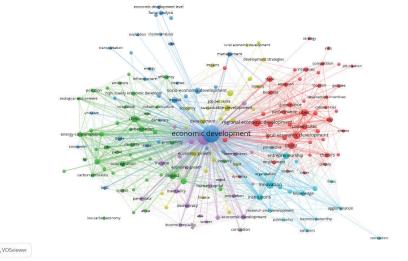
I. Review of literature. Quantitative analysis of scientific documents carried out in VOSviewer

In order to revise the literature, the bibliometric analysis of the concept of "economic development" was used, with the help of the VOSviewer program.

These bibliometric links are based on various journals, papers presented at conferences or articles.

Correlation of the concept of economic development with other structures/keywords

Figure 1.1



Source: author's own conceptualization

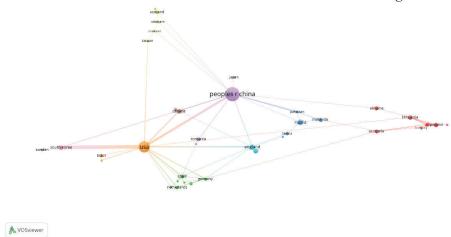
Analyzing the figure we notice that the main key structures/words correlated with the concept of "economic development" are "socio-economic development", "innovation", "local economic development" or "democracy".

Also, the closest connection of this query is the very structure of "economic development" being the basic query.

In addition, we observe the cluster grouping that refers to keywords correlated with the concept of "economic development" but from other areas of application. For example, the green cluster refers to the application of the concept in the field of the environment, noting structures such as "ecological environment", "pollution", "GDP", "carbon emissions" or "energy consumed".

Analysis of collaboration between states

Figure 1.1.2



Source: Author's own conceptualization based on querying data on the Web of Science

Analyzing the figure, it is noted that the state with the most collaborations and achievements on "economic development" is the Republic of China, followed by the United States of America, England, Russia and Poland.

II. Description of the farm

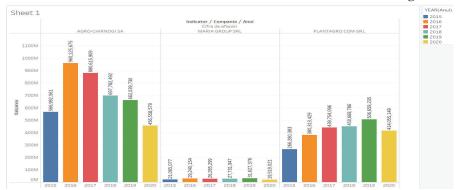
Maria Group is one of the most important farms in the Romanian agriculture and has as field of activity the cultivation of cereals, leguminous plants and plants producing oilseeds. Together with Agro-Chirnogi, she is part of the large Maria Trading group. Maria Group represents a standard for all Romanian farmers, because we are in the period when investors in this branch of the economy are still looking for models to follow, and Maria Group represents one, in that it has a high degree of investment, and also a considerable area for growing. The arable area is situated on the site of a former lake (Greek Lake), the land that emerged from under the waters having the capacity to produce extraordinary harvests, taking the Romanian agriculture and the economy out of the impasse in which it finds itself.

III. O-financial economic analysis of PLANTAGRO COM S.R.L.

Within this chapter, the analysis of the main economic and financial indicators will be carried out, with the purpose of substantiating an economic development strategy.

Turnover analysis

Figure 1.1.

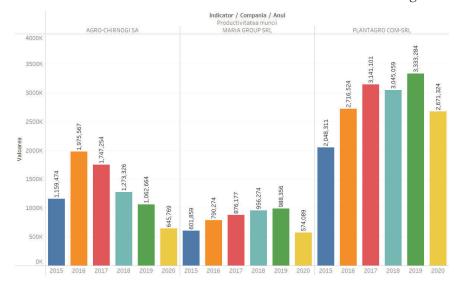


Source: Author's own conceptualization in Tableau based on information from Total.firm

Analyzing the figure we can see that the turnover of the company in the analyzed period is fluctuating. Thus, the company registers the highest turnover in 2019 (about 31,627,375 lei), the lowest turnover being recorded in 2020 (about 19,519,021 lei). This decrease in 2020, according to the conrable balance sheet, is recorded due to the investment in upgrades. We note that during the analyzed period, the turnover decreases by 1546,056 lei.

Labor productivity of the analyzed company

Figure 1.2



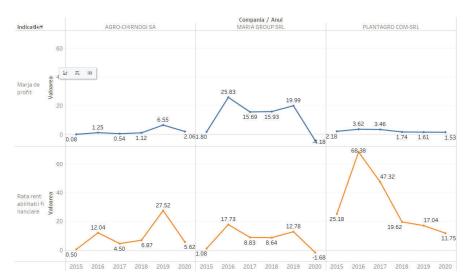
Source: Author's own conceptualization in Tableau based on topfirme information

We note that labour productivity in the period under review is steadily increasing until 2019, following a considerable decrease in the following year. Therefore, we register from the beginning of the analyzed period (2015) a value of labor productivity of 601,859 thousand lei, and a maximum increase of about 988,356 thousand lei (year 2019). After the best year, the company registers a major decrease in labor productivity in 2020 (about 574,089 thousand lei).

In relation to the analyzed indicator (fig. 1.1. turnover), we note that, due to investments, we have the effect of decreasing labor productivity. High-performance equipment and new programs cause a major decrease in labor productivity.

The profit margin and financial profitability of the company

Figure 1.3

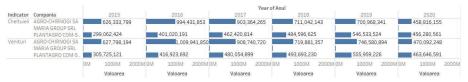


Source: Author's own conceptualization in Tableau based on information from Total Firm

Analyzing the figure we note that the profit margin reaches a maximum threshold of 25.83 and a minimum threshold of -4.18. We note that, although there is a significant threshold, small decreases follow afterwards. We also see that the financial profitability registers approximately the same growth pattern as the profit margin. The company registers a maximum increase in financial profitability of about 35.87 and a maximum value of -3.45. Both the profit margin and the rate of financial profitability are subject to the downward effect in 2020 due to investments and in a dire way, due to the decrease in the turnover.

Analysis of the company's revenues and expenses

Figure 1.4

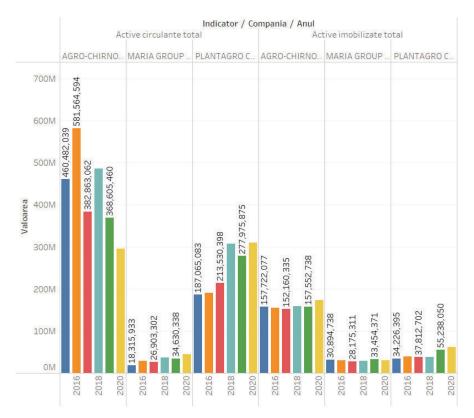


Source: Author's own conceptualization in Tableau based on top firm information

Thus, a minimum value of expenses in 2016 of MDL 21,053.33 thousand and a maximum amount of expenses of about MDL 25,482,401 thousand in 2019 are recorded. In the case of income, there are fluctuations during the period under review. Therefore, in 2020, the lowest revenues were recorded (about 22,858) and the highest value of revenues being recorded in 2019 (about 32,775 thousand lei). This sudden decrease between the two years analyzed, is due to the fact that investments have been made, and its effects are not observed in the same year, but a little later.

Analysis of the current and fixed assets of the company

Figure 1.5



Source: Author's own conceptualization in Tableau based on top firm information

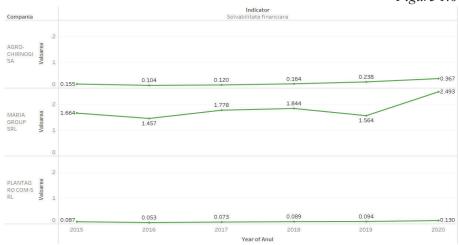
Analyzing the figure and analyzing the situation of current assets, we note that it registers a maximum value of about 44,563,755 thousand lei in

2020, and also registers a minimum value of MDL 18,315,933 thousand. We see a continuous increase in these current assets as a result of investments.

In the case of fixed assets, the company registers a continuous growth. Thus, starting with the first year of the analyzed period (2015) the company registers a value of 30,894,738 thousand lei. Also, the company registers a maximum value of 33,454,371 thousand lei in 2019 and a minimum value of 28,248,493 thousand lei.

Financial solvency of the company



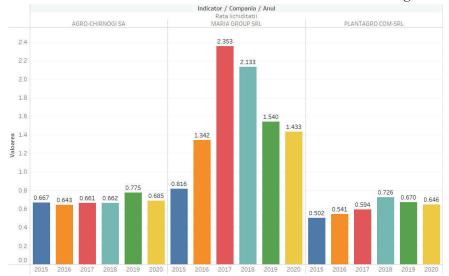


Source: Author's own conceptualization in Tableau based on top firm information

Analyzing the profitability of the company, we note that it reaches a maximum value of 2,439 in 2020 and a minimum value of 1,457 in 2016. This is positive throughout the period under review. Being larger than 1, it shows us that the farm has the ability to carry out its operations, and in addition to this, it shows us that it can pay off its debts both in the medium and long term.

Liquidity rate

Figure 1.7



Source: Author's own conceptualization in Tableau based on top firm information

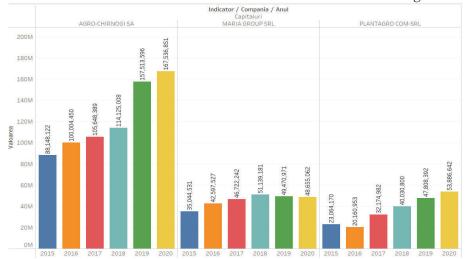
The liquidity rate registers a major and sudden increase from 2015 to 2017(when the company also records the maximum amount of liquidity, about 2,353). After the major and maximum increase (2017, about 2,353) there is an accelerated decrease in the liquidity rate (a decrease of about 0.92).

We can note that liquidity generally has positive values, which is beneficial for the company, reflecting that the farm has the ability to pay off all its debts in the short term.

We also note that between the annual ends of the analyzed period there is a difference of about 0.617.

Capital analysis

Figure 1.8



Source: Author's own conceptualization in Tableau based on Top Firm information

Analyzing the figure we can see the continuous increase of the farm capital from the reference year 2015 (about 35,044,531) until 2018 (about 51,139,181), followed by a slight decrease of up to 48,655,062 in 2020.

The farm registers, overall, an increase in the reference year 2020 (48,655,062) compared to the reference year 2015 (35,044,531), generating an increase in the range of 13,610,531.

IV. Substantiation of an economic growth strategy

It is already unanimously accepted that the degree of digitization can contribute to the increase of the productivity of the fathers registered within the agricultural holding, following the increase of the figure of the balance, the increase of the profit, thus the increase of the efficiency of the its economic.

However, the size of the farm has a decisive impact on the degree of technology implemented and used in the production farm level. It has been established that, obviously, with the increase in the size of the exploitation, with the increase and the need to implement the digitalization of the country within the framework of the economic activity carried out and ugly.

We could even argue that from an economic point of view, the decision to resort to the implementation and use of robotization, of innovative technology within the entire production process is more than justified, given the large volume of work, but also i of the high level of economic efficiency in the register.

By digitizing agriculture at farm level, it is possible to increase the competitiveness of its products, that national and international level (the farm already having exports to different countries in Europe, Asia and Africa), which would lead to an increase in exports, having beneficial implications at macroeconomic level.

Digitalization's essential, not only for strengthening the agricultural sector, but also for achieving the objectives related to the environment, climate, sustainability of the food chain, taking in to account the three aspects: economic, ecological and social. Once the farm is noted and labelled for its sustainability, and for supporting various environmentally friendly practices, customers and suppliers will be more convinced and determined to purchase and the services and products of the farm, or by adopting new medium- and long-term partnerships from another angle. In addition to the latter, consumers will experience more qualitative and sustainable products.

Therefore, the farm adapting to these targets will have more benefits both professionally and economically.

More than that, it would therefore be ideal to develop a European digital single market with regulations on ethics and competition in order to eliminate possible bottlenecks. In agriculture, the implementation of digitalization in the production process involves not only the use of state-of-the-art equipment or high-performance data systems, but also a change of mentality. The fact is that digitalization has become in contemporary society a goal that promises many opportunities and benefits. The farm under review could work towards optimizing processes, increasing productivity and reducing costs. The increased interest in integrating digitalization within the farm is also explained by the fact that there is a certain sector of young people who have taken over or implemented such agricultural organizations, and digital natives prefer and claim a different type of experience.

Also, the current context (the Covid 19 pandemic) only highlights the need for digitalization, because the digital economy has been joined by a distance economy ('the low touch economy').

The general conclusion on the transformations generated by the digitalization of the farm will have an impact on all categories of activities. In the accounting department, for example, digitalization will facilitate a paradigm shift, because it will allow the professional's focus to shift even further from data management to analysis and consulting — accounting works with a large volume of data, and they must be harnessed, because they can help companies discover opportunities, avoid risks and, above all, make data driven *decision making*, leading to improved economic situations.

Conclusions

The analysis concluded that the indicators analysed could be improved by acting on the farm by different factors. Therefore, a first factor that can act in order to increase productivity and turnover is digitalization. By digitizing agriculture at farm level, the competitiveness of its products can be increased, both at national and international level (the farm already having exports to different countries in Europe, Asia and Africa), a factor that would determine an increase in exports, having beneficial implications at macroeconomic level.

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