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THE ECONOMIC POTENTIAL OF LIVESTOCK FARMS AND MEAT PROCESSING UNITS IN THE NORTH-WEST REGION OF ROMANIA

ABSTRACT

The purpose of this work is to identify and assess the main economic indicators, including the turnover and the market share for the companies whose corporate purpose is livestock farming and meat production processing in the North-West Region of Romania. The data came from the accounting and financial statements of such companies in the period 2009-2013, as well as from the statistical information, NIS and FAOSTAT. The research method is specific to the accounting and financial analysis as well as the SWOT analysis, specific to the financial diagnosis.

The results allow us to present evolutions and competitiveness comparisons across the counties of this region and to become familiar with workforce absorption, as well as the need for the development of new companies or even of an agri-food cluster in this development region.

Key words: market share, turnover, livestock farming, SWOT analysis.

JEL Classification: M2.

1. INTRODUCTION

The paper investigates the livestock farming and meat processing business in the counties from the North-West Region of Romania, through a thorough and sequential analysis of the collateral indicator, i.e. the turnover, as an extension of the Entrepreneurship Sector from the 2007-2013 North-West Regional Development Plan.

The identified active economic activities, in conformity with the classification of national business activities, are: cattle raising, sheep and goat raising, pig raising, poultry raising, other animal raising and activities on mixed farms, as well as commercial companies that process meat, through activities such as: meat production and preservation, poultry meat processing and preservation, production of meat preparations (from poultry meat included).

The research allows us to become familiar with the contribution of the commercial activities of both farms and processing units, active in the dynamic and competitive environment, to the economic potential of the North-West development region, as well as to the market share of the meat processing units.

2. STATE OF KNOWLEDGE

The assessment of a company turnover is often used in the analysis of production and marketing indicators, for the diagnosis of the economic and financial performance of companies (Siminică, 2010), whereas the dissemination of information on the turnover in terms of its components, at the level of a given company, is presented both theoretically and for practical applications (Pavăloaia et al., 2006).

The turnover of production units – farms and factories – includes the sold production, resulting from the production activity (Petrescu, 2008).

The market share as indicator measuring the competitive position of a given company, through the utilization of the turnover (Hristea, 2003), makes it possible for us to rank the economic operators from the sector by the value of sales.

Globalization as an economic process implies the analysis of the turnover indicator, firstly according to the location (county) and then to region, in the context of the investigated theme. The results could influence the decision-makers' activities at county level or even at a macro-economic level.

3. MATERIAL AND METHOD

In our study, the information came from the annual financial statements, namely the profit and loss accounts, for the period 2009-2013, from the data of the companies in the North-West region that had declared, according to the National Classification of Economic Activities (NACE), animal farming and meat production activities (platform <http://www.doingbusiness.ro>).

Grouping and comparison, as quality analysis methods in the financial accountancy analysis methodology (Păvăloaia et. al, 2006), have been materialized into the identification of the active economic units in the counties: Bihor, Bistrița-Năsăud, Cluj, Maramureș, Satu Mare and Sălaj; within these, the analyzed indicator was established for each investigated economic activity.

The Turnover indicator for the activities disseminated across counties and regions is the basis for the determination of rates, shares or specific weight of the researched activities, as methods of the quantitative analysis of the economic phenomenon investigated in the North-West Region of Romania.

The market share, identified according to specific indicators (Hristea, 2013), can be relative market share:

$$C_{rel} = \frac{CA_1}{CA_L} \cdot 100 \qquad C_{rel} = \frac{CA_1}{\sum_{l=1}^3 CA_{Ll}} \cdot 100 \qquad (1)$$

where: CA_L – turnover of the largest competitor on the market (leading competitor)

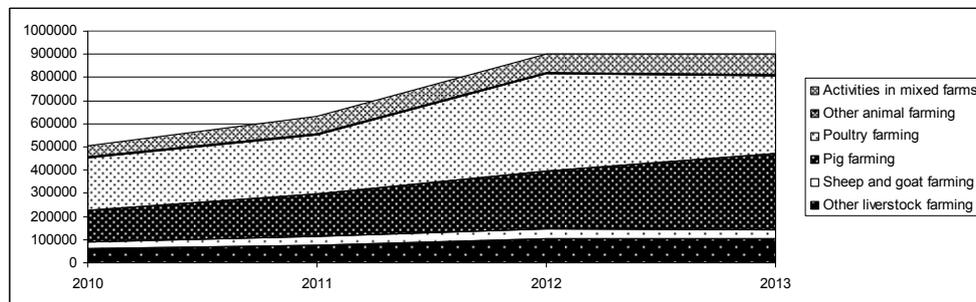
$\sum_{i=1}^3 CA_{Li}$ – sales value (turnover) of the first three business competitors on the market
Specific (served) market share

$$C_s = \frac{CA_1}{\sum_{j=1}^m CA_j} \cdot 100 \quad (2)$$

where: $\sum_{j=1}^m CA_j$ – turnover of the “served” segment.

4. RESULTS AND DISCUSSIONS

A. Assessing the turnover dynamics in the livestock and poultry farming activities, as well as in meat production and processing in the North-West region of Romania. The global assessment of livestock and poultry farming by means of the achieved turnover, as reported by the economic operators involved in this activity in the North-West region, also includes the turnover dynamics diagnosis (Figure 1).



Source: author’s processing of data based on the companies profit and loss accounts (livestock and poultry farms) in the North-West counties of Romania.

Figure 1. The turnover (TO) dynamics by livestock and poultry farming activities in the North-West region of Romania.

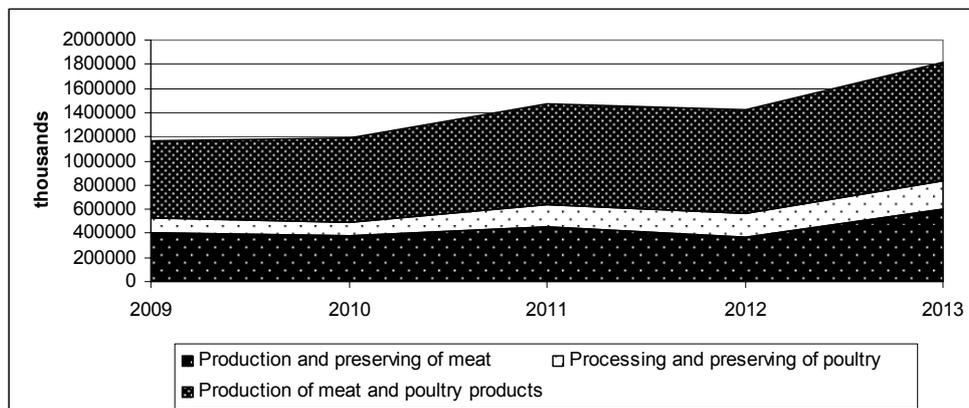
The turnover resulting from sheep and goat farming was up by 53.50% in 2012 as compared to 2009, and down by 4.8% in 2013 as compared to the previous year. Pig farming turnover increased by 31.60% as compared to the previous year, and by 140.87% compared to the year 2009. The turnover of poultry farming increased by 65.31% in 2012 as compared to the previous year, while in 2013 the revenues decreased by 20.27% as compared to 2012. Other livestock farming

activities had an ascending trend until 2012, up by 72.55% as compared to 2010 and by 38.57% as compared to 2011; in 2013 they decreased by 1.98% as compared to the previous year. The activities developed on mixed farms had an ascending trend throughout the investigated period; therefore, by the year 2013, the growth represented 124.28% as compared to 2009.

In the North-West region of Romania, the share in total turnover resulting from livestock and poultry farming is given by poultry farming for the entire investigated period. As for 2009, the turnover resulted from poultry farming represented 49.64%, to reach 44.52% in 2010, 40.31% in 2011, 46.49% in 2012, while in the year 2013 it reached 37.23% of the overall turnover of the livestock and poultry farming sector in the North West region. Pig farming is second to poultry farming, whose turnover had a slightly oscillating trend, so that in 2012 its share decreased by 5.47% as compared to the previous year. In the year 2013, pig farming turnover was up by 32.16% as compared to 2012.

The turnover evolution by types of livestock and poultry farming activities is also an effect of the increasing number of specialized businesses. At the end of 2013, 8 sheep and goat farms, 47 pig farms, 45 poultry farms, 15 other cattle farms, 15 other livestock farms and 61 mixed farms were operating in the North-West region. Most livestock farms operate in the county Bihor, as many as 93, followed by Cluj county with 72 farms and Satu Mare with 64 entities, Sălaj with 40 farms, Maramureş with 36 units and Bistriţa Năsăud with 17 farms.

Analysis of turnover dynamics and structure in the meat processing businesses in the North-West region of Romania. The main customers of animal farms in the Romania's North-West region are the meat processing units in this area, and their contribution had a slightly fluctuating trend (Figure 2).



Source: author's processing of data based on the profit and loss accounts of companies whose activity object is meat processing and production of meat products in the North-West region of Romania.

Figure 2. The turnover dynamics by activities of meat production, preservation, processing and production of meat preparations in the North-West region of Romania.

The turnover generated by meat production and preservation was down by 6.23% in 2010 as compared to the previous year; in 2012 it was down by 17.88% compared to 2011. The turnover increased by 63.28% in 2013 as compared to the previous year. The maximum contribution to the annual turnover was brought by Maramureş County, with an average share of 40.82% in total turnover. The dynamics of the number of functional companies performing the above-mentioned activity fluctuates from 38 companies in 2009 and 2012 to 41 companies in 2011 and 2013.

The turnover generated by poultry meat production and preservation was lower by 5.87% in 2010 as compared to 2009, while for the remaining investigated period the trend was on the rise; therefore, in 2013 a growth by 18.75% was noticed compared to the previous year and by 26.48% as compared to 2011. The county Satu-Mare has a main contribution to the annual turnover, by an average share of 82.07%.

In numerical terms, the evolution of these units was slightly on the rise, from three in 2009 and 2010 to four for the period 2011-2013.

The turnover resulting from the production of meat products (from poultry meat included) had an upward trend throughout the entire investigated period; thus, in the year 2011 it increased by 20.22% compared to the previous year and by 30.30% as compared to 2009. In the year 2013 an increase by 13.96% was noticed as compared to 2012 and by 17.55% as compared to 2011. The county Satu-Mare had again the greatest contribution to this turnover, by an average share 75.48%.

There were 14 companies operating in this sector in the period 2009-2010, and by the year 2011, the number of companies grew to 16. In the year 2012 the number of operating companies was the lowest, i.e. 10, while in 2013 their number increased again, to reach 15.

B. The dynamic analysis of the livestock production in the North-West region of Romania. Among the livestock and poultry farm products, this research study focused on the live weight of livestock and poultry to be slaughtered for human consumption.

The animals slaughtered for human consumption, supplied by specialized farms in the North-West region, are largely the source of raw meat for the meat and meat processing industry in this area, yet insufficient; therefore the factories use both imported raw meat and meat from other regions in the country.

The contribution of the North-West region in terms of live weight livestock and poultry meat slaughtered for human consumption ranged from 11.01% to 13.06% of total animals slaughtered for human consumption in the national economy in the period 2009-2013.

The contribution of the North-West region to Romania's national economy in terms of animals to be slaughtered for human consumption was brought by the cattle sector by 17.46% in 2009 and by 14.76% in 2010. The essential contribution of the region brought by the sheep and goat subsector was by 18.05% in 2011, 16.16% in 2012 and 13.13% in 2013.

Table 1

Structure and dynamics of livestock and poultry products to be slaughtered for human consumption in the North-West region of Romania

Animals to be slaughtered for human consumption in the North-West region of Romania	2009 (tons)	2010 (tons)	2011 (tons)	2012 (tons)	2013 (tons)
Live weight of animals slaughtered for human consumption – cattle	188,571	154,938	170,561	146,792	146,909
Live weight of animals slaughtered for human consumption – pigs	80,762	61,268	69,362	64,908	65,014
Live weight of animals slaughtered for human consumption – sheep and goats	12,994	14,145	19,863	17,355	13,614
Live weight of animals slaughtered for human consumption – poultry	48,560	49,082	51,394	35,823	42,940
North-West region – total	188,571	154,938	170,561	146,792	146,909
National level – total	1,443,548	1,305,260	1,357,053	1,332,186	1,299,525

Source: author's processing of statistical data: insse.ro

C. Analysis of the market share of meat processing and meat preparations in the North-West region of Romania

1. The market share of meat processing and meat preserving companies in the North-West region of Romania

Table 2

Ranking of meat processing and preserving companies

Company	Turnover (thousand RON) – 2013
a) Salamandra Plus SRL – Maramureş	95,903
b) Combis SA – Bistriţa-Năsăud	66,059
c) Amareto Impex SRL	60,997
Total served segment	602,682

Source: author's processing of data.

For the company b) the relative market share as compared to the investigated market leader was 68.88% in 2013, while the market share as compared to the three leaders was 29.63%. The high values indicate that company b) is a major competitor on this market in the North-West region of Romania. The specific market share of 10.96% indicates the weight of the served segment.

For the company c) the relative market share as compared to the investigated market leader was 63.60% in 2013, while the market share as compared to the three leaders was 27.35%.

This company is a competitor that draws our attention, with a specific market share of 10.12%, i.e. its weight in the total served segment. The third place for this company is very vulnerable, which implies much attention to be paid to the sales and quality management.

2. The market share of poultry processing and preserving companies in the North-West region of Romania

Table 3
Ranking of poultry meat processing and preserving companies

Company	Turnover (thousand lei) – 2013
a) Oncos Prod SRL – Cluj	63,910
b) Nicomi SRL – Satu Mare	17,441
c) Ave Impex SRL – Satu Mare	151,979
Total attended segment	233,332

Source: author's processing of data.

For the company a) the relative market share as compared to the market leader was 42.05% in 2013, and the relative share as compared to the three leaders was 27.39%. The high rates values reveal that the company is a major competitor on the market. The specific market share was 27.39%, namely its weight in the segment served by this market.

For the company b) the relative market share was 11.48% as compared to the market leader, and 7.47% as compared to the three leaders, the low values indicating that this company is not a worthy competitor for company a). The specific market share was 7.47%, similar to the relative market share compared to the three leaders. Therefore, the market assessed in terms of market share operates only by the three companies.

3. The market share of companies producing meat and poultry products in the North-West region of Romania

Table 4
Ranking of companies producing meat and poultry products

Company	Turnover (thousand lei) – 2013
a) Ferma Zootehnică SRL – Maramures	114,102
b) CIA Aboliv SRL – Cluj	49,156
c) Unicarm SRL – Satu Mare	734,164
Total attended segment	981,614

Source: author's processing of data.

For the company a) the relative market share as compared to the investigated market leader was 15.54%, the relative market share as compared to the three leaders was 12.71%. The shares are relatively low, which implies that the company is not a strong competitor; in terms of specific market share, the share was 11.62%, as contribution to the total turnover of the investigated activity in the North-West region.

For the company b) the relative market share as compared to the market leader was 6.69%; compared to the three leaders, it represented 5.48%. The low shares reveal that the company is a weak competitor on this market. The company weight in the served segment was 5%.

4. The market share of meat, meat processing and meat preparations industry in the North-West region of Romania (overall market share for the three economic activities)

Table 5
Ranking of meat industry-type companies

Company	Turnover (thousand lei) – 2013
a) Ferma Zootehnică SRL – Maramures	114,102
b) Ave Impex SRL – Satu Mare	151,976
c) Unicarm SRL – Satu Mare	734,164
Total attended segment	1,817,628

Source: author's processing.

For the company a) the relative market share as compared to the market leader was 15.54%; as compared to the three leaders it represented 11.40%. The third position for this company is not a comfortable one and the increase of its sales is required. In terms of its weight in total served segment, this company contributed by 6.28% in 2013; therefore great effort is required for it to maintain its position, given that several companies operate in the market.

For the company b) the relative market share was 20.70% as compared to the market leader, and 15.19% as compared to the three leaders; it is an important competitor on this market; however, it should make some effort to maintain its position. Its specific market share is 8.36%.

As the market leader on the meat and meat products market in the North-West region of Romania in 2013, the company has the same leading position for the declared economic activity, i.e. the production of meat and poultry products; at the same time, company b) is the industry leader in the business of meat poultry processing and preserving. The meat processing and preserving business, with more modest turnovers, does not rank among the main competitors on the meat and meat products market of the North-West region of Romania.

5. CONCLUSIONS

The economic potential of livestock and poultry farms and of companies processing the animals slaughtered for human consumption in the North-West region of Romania implies:

- Not only the investigation of economic and financial, value and quantitative indicators, determined from financial reports, but also the follow-up of investments made and their recovery, aspects underlying entrepreneurship development, by setting up new livestock and poultry farming businesses, as well as farm products processing activities (animals for slaughtering).

- The North-West development region of Romania, due to its natural resources, number of farms, of processing plants, stands as evidence to the meat market

competition in this area; however, the differences among turnover rates of competitors are decisive for the need to develop new businesses in this field, otherwise the present leaders will declare monopoly on this market and region.

– The actions of farmers' associations and of processing companies in this area are not enough, in the sense of selling the products resulted from the farms, and also of their price, in the context in which the quality of supplied products requires corresponding selling prices.

The SWOT analysis of the economic potential of animal farms and meat processing companies in the North-West development region of Romania allows us to identify a few strengths and weaknesses:

Strengths:

– By the activity of animal farms, with their animals to be slaughtered for human consumption and of meat processing companies, the natural resources (pastures, meadows, arable land etc.) are capitalized, jobs are created, even if they are not sufficient for the population's needs in this region.

– In the North-West development region, the increasing turnover corresponding to the processing of meat production each year stands as evidence for the entrepreneurs' tenacity in increasing sales and supplementing them by selling complementary products.

Weaknesses:

– The periods of business interruption on some animal farms in the investigated period slacken the economic potential of the North-West region; therefore, the farmer entrepreneurs should become members of organizations or associations, which can offer them the necessary motivation and economic solutions from the managerial standpoint so that the economic activity continuity principle should be applied.

– The low labour input used by farms and present in their annual financial statements might be the result of the use of hired daily workers, of taxation concerning paid work, as well as of the lack of qualified manpower on the investigated specialized farms.

– The existence and operation of economic activities in livestock farming, by forms of business organization without legal status, whose turnover is declared – sporadically – to the tax administration offices, so that their contribution cannot be measured in the context of the overall economic potential of the region under investigation.

– Monitoring the livestock farming businesses in each county is performed only in terms of animal numbers and land areas in order to get the subsidies, therefore the monitoring of the economic barometer of such economic units is required, namely: owned investments; investment needs; number of existing animals; increase of animal numbers; contracts with partners-customers for the sale of farm products; marketplace; achieved turnover; business plan of farms, correlated with the county development needs, with the development region needs, respectively.

– Concluding contracts on 2 to 5 years for supplying raw meat between processors and farmers of the region would ensure an economic and financial equilibrium for the farms, namely the reliability of sales of obtained production and selling prices. The contracted selling prices can be the basis of a stock market of animals to be slaughtered for human consumption.

– The processors in the region under investigation justify the purchase of raw meat from other areas, from imports inclusively, by lower prices and better quality, and thus they manufacture products based on raw meat coming from various sources.

REFERENCES

1. Hristea A.M., (2013), *Analiza economică și financiară a activității întreprinderii, de la intuiție la știință*, Editura Economica, București.
2. Niculescu M., (2003), *Diagnostic economic*, Editura Economica, București.
3. Păvăloaia W. et al., (2006), *Analiza financiară – studii de caz*, Editura Tehnopress, Iași.
4. Petrescu S., (2004), *Diagnostic economic-financiar. Metodologie, studii de caz*, Editura Sedcom Libris, Iași.
5. Petrescu S., (2008), *Analiză și diagnostic financiar-contabil. Ghid teoretico-aplicativ*, Editura CECCAR, București.
6. Siminica M., (2010), *Diagnosticul financiar al firmei*, Editura Universitaria, Craiova.