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Conceptual approaches to analysis and assessment of efficiency of joint stock company functioning

Summary. Effectiveness of a joint-stock company is realized through the skills and ability to take into account the wishes and needs of stakeholders and the organization in full. This work is based on the alignment of performance criteria with the organization's strategy and capabilities. Management plays a key role in this process. It is they who must understand what the shareholders, customers, employees, lenders, and regulators want from the company, and that each category requires organizations to meet their own needs. At the same time, the performance measurement and management system should be flexible enough to be transparent and able to keep track of processes occurring within the organization and stakeholder engagement. The activity of a joint-stock company includes general elements and special elements that arise from the specifics of the company's operation. The peculiarities of the activity of the company are due also to industry trends, which are partially derived from specific elements of management. In this regard, when identifying problems of functioning of joint-stock companies of the dairy industry, it is necessary to take into account the specific nature of their activity.

Key words: joint stock company, efficiency, corporation, corporate governance, financial and economic condition, dairy processing enterprise

Introduction

Nowadays the doctrine is recognized, according to which all activities of the corporation are based solely on the growth of shareholders' income, which is manifested in the receipt of profits, the growth of the share price and the payment of dividends. In the 21st century, this approach seems too narrow, since there are other stakeholders in the productive work of the corporation, ignoring the needs and opportunities of which is a sign of lack of transparency and lack of professionalism in today's highly developed and highly informative environment of enterprise operation. Other stakeholders include consumers, employees, suppliers, and the state. Thus, it is unacceptable for an organization to focus solely on the needs of only one stakeholder in the long-term survival and success, and the relationship between the corporation, shareholders, consumers, employees, suppliers and the state are mutually binding. All strategies and potential of a joint-stock company

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should be linked and agreed upon if the company wants to take a favorable market position and bring real benefit to all interested parties on a long-term basis¹.

The current stage of dairy production in Ukraine is characterized by ambiguous production rates and a constant search for efficient options for the economy, which requires managers to make the most rational management decisions to create competitive advantages, increase the share of the market for manufactured products². Particular attention in the analysis of dairy enterprises should be given to the study of financial performance of enterprises, which will identify trends in financial indicators, to investigate the work of managers to use the potential of enterprises, meet the needs for economic and business development, interests of corporate governance, improve competitiveness and allow develop mechanisms for managing the efficiency of dairy enterprises in Ukraine³.

Theoretical background

Dairy production has a tendency to displace smaller dairies and absorb them by larger ones. If this trend continues, a dozen milk processing companies may remain in the milk processing market, which will belong to several holdings.

Currently, more than 300 enterprises are engaged in milk processing in Ukraine, but about 80% of these enterprises are incorporated into holdings. Nowadays, the most influential in the Ukrainian dairy market is Terra Food, with a total revenue of 2016 in the amount of UAH 3.435 billion. The company includes 19 enterprises that produce whole milk products, cheese, plant-butter mixes and butter⁴.

Effectiveness of a joint-stock company is realized through the skills and ability to take into account the wishes and needs of stakeholders and the organization in full. This work is based on the alignment of performance criteria with the organization's strategy and capabilities. A key role in this process is played by JSC management⁵.

¹ Г.М.Чорний, М.П. Ястреб, О.В. Кучер: Новітній підхід до змісту управлінської діяльності в агроформуваннях. Аграрний інформаційний науково-виробничий журнал: наука і виробництво 2011, no 1–3, p. 80–84; The 21st Century Annual Report. The Institute of Chartered Accountants in England and Wales, November 2018, <https://www.icaew.com/archive/library/subject-gateways/corporate-reporting/new-reporting-models-for-business-further-reading/21st-century-annual-report> (access: 12.03.2020).

² O. Mandych et al.: Financial Condition of the Development of the Market of Renewable Energy Sources, [in:] Renewable Energy Sources: Engineering, Technology, Innovation, M. Wróbel, M. Jewiarz, A. Szlęk (Eds), Springer Proceedings in Energy, Springer, Cham 2020, p. 939–951, https://link.springer.com/chapter/10.1007/978-3-030-13888-2_90#citeas (access: 12.03.2020).

³ І.М. Сотник, Ю.О. Мазін, О.В. Супрун: Формування стратегії стійкого економічного розвитку молокопереробного підприємства, Вісник Одеського національного університету. Серія Економіка 2017, vol. 21(49), p. 98–104.

⁴ TOP-10 largest producers of dairy products in Ukraine, 2017, Agravery Agrarian News Agency, TOP-10 largest producers of dairy products in Ukraine. 2017. Agravery Agrarian News Agency, <http://agravery.com/uk/posts/show/top-10-najbilsih-virobnikiv-molocnoi-produkcii-v-ukraini> (access: 12.03.2020).

⁵ V. Ivanyshyn, O. Kucher, T. Bilyk: Marketing strategy formation for the development of organic production in the Ukraine. Proceedings of the 2018 International Scientific Conferenc Economic Sciences for Agribusiness and Rural Economy no 1, Warsaw, 7–8 June 2018, p. 34–39.

Scientists have identified four areas of analysis and evaluation of efficiency, exploring the broader scope of functioning of business structures: analysis and assessment of financial status; analysis and evaluation of enterprise competitiveness; analysis and evaluation of the investment attractiveness of the enterprise; analysis and evaluation of the return on equity⁶. A system of indicators, methods of their calculation are developed and substantiated in each direction. Accordingly, analytical calculations are made and conclusions are drawn regarding the level of efficiency of the enterprise functioning according to the set criteria.

Materials and Methods

During the research, the methods of logical generalization and comparison were used to formulate the main provisions of conceptual approaches to assessing the effectiveness of joint-stock companies; systematic analysis and synthesis, in particular, in substantiating the directions of refining the information needed to build a system of performance indicators of a joint-stock company; statistical analysis – in the study of changes in financial and economic indicators of dairy enterprises, determining their rating; logical generalization – when formulating conclusions. The information base of the research is the results of the scientific search of the author in the process of solving the problem, materials of state statistical bodies and publications in periodicals, data of the investigated enterprises.

The study was based on the analysis of 17 enterprises, the activity of which, in our opinion, reflects the general trends of functioning of economic entities of the dairy industry. The study is designed to identify the bottlenecks of corporations, their causes, and ways to eliminate them in order to increase the efficiency of businesses and increase the impact on resources used in the process. In this regard, a detailed analysis of the entire economic activity of the entities was conducted on the basis of the calculation of indicators of the financial and economic status of the companies.

The joint-stock companies were selected according to the following criteria:

- location,
- sales volumes,
- dynamism of development,
- completeness of coverage of information on financial and economic activity,
- possibility of comparison with other enterprises both within the region and in the country as a whole,
- the most similar conditions and environment.

⁶ O.M. Lyutkevych (Ed): Analysis and evaluation of efficiency of functioning of business structures (methodical instructions), Lviv Banking College of the National Bank of Ukraine, Lviv 2018, <http://www.disslib.org/orhanizatsiyno-ekonomichna-polityka-spryjannja-rozvytkovi-pidpryyemnytstva-ta-mekhanizmy.html> (access: 12.03.2020); I.A. Form: I.A. Form: The financial strategy of the enterprise, http://lib100.com/book/management/financial_strategy/ (access: 04.02.2010); Н.В. Сабліна, Т.Б. Кузенко: Формування стратегічних карт у рамках реалізації процесу управління фінансовою безпекою підприємства, Бізнес Інформ 2014, no 4, , p. 327–331; В.О. Захарченко, С.І. Счасна: Систематизація методів оцінки фінансового стану підприємства, Фінанси України 2005, p. 137–144.

This choice of enterprises allowed to get quite complete information on the topic of the research.

Research results and discussion

The authors offer a point evaluation of the level of enterprise efficiency. However, this approach has several disadvantages, and the system itself does not seem to be fully thought out and incomplete. First, there is confusion with the score in the methodology. The criterion by which the financial position of an enterprise, its investment attractiveness, competitiveness and return on equity are defined as high or low is unclear. The question is why the financial position and return on equity are rated higher than the other two aspects. Therefore, this approach to determining the effectiveness of the enterprise is impossible for the practical implementation of calculations and summarizing the conclusions⁷. Therefore, the author proposes his own approach and methodology for calculating the effectiveness of the activity of a joint-stock company that meets the purpose of the work.

The analysis and evaluation of the efficiency of operation is carried out according to the scheme (Fig. 1).

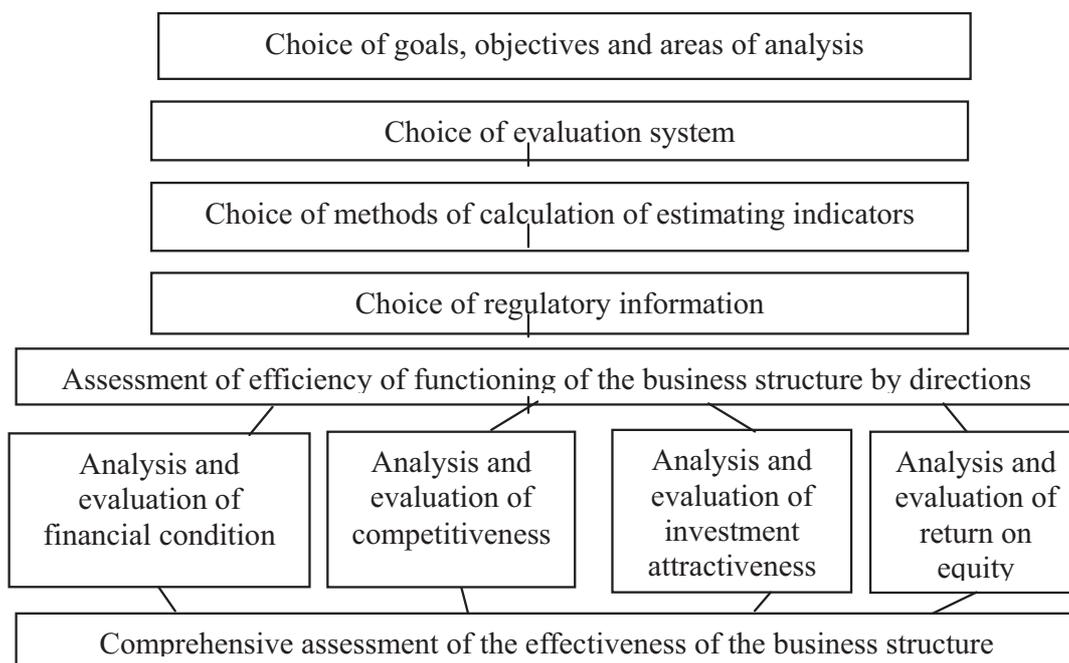


Figure 1. Scheme of analysis and evaluation of efficiency of functioning of business structures.

Source: O.M. Lyutkevych (Ed.): Analysis and evaluation of efficiency..., op. cit., p. 5.

⁷ K.V. Orekhova: The process for forming a financial security strategy of an enterprise, Financial and credit activities: problems of theory and practice 2015, vol. 17(2), p. 158–172.

Estimation of the level of financial and economic state of dairy enterprises was made according to the financial statements of dairy enterprises of Ukraine. According to the analysis (Tab. 1) it can be seen that in the period 2014–2018, the sales volumes of dairy enterprises increased, from UAH 28634.2 million in 2014 to UAH 51561.5 million in 2018, while financial performance indicators (level of profitability of all activity, level of profitability of assets, productive funds, equity, sales) decreased and became worse, coefficients of financial autonomy (independence), financial stability, absolute liquidity (solvency) decreased, the ratio of short-term receivables and payables⁸. The financial sustainability ratio remained almost at the same level.

Dairy-processing enterprises of Ukraine, which made a profit in 2014, occupied a share of 62.9% of all dairy-processing enterprises in Ukraine, in 2018 there were 65.2% of such enterprises. Profit margins for profitable enterprises have been steadily decreasing, from UAH 1161.4 million in 2014 to UAH 1013.1 million in 2018, almost 1.2 times. Other dairies with a share of about 37.1–34.8% are unprofitable, with a tendency to increase the amount of losses received, from UAH 467.6 million in 2014 to 3621.0 million UAH in 2018, which is more than seven times. The absolute liquidity ratio is low, which indicates that debt cannot be repaid on time, the financial stability of enterprises is insufficient, which indicates a high level of financial risks.

Thus, in general, dairy enterprises in Ukraine have a low level of financial security, with a tendency to decrease. One third of all enterprises are unprofitable, with a sharp tendency to increase the amount of losses received from their activities, while other profit-making enterprises have a low tendency to increase it. Analyzing the financial state of dairy enterprises of Ukraine for 2014–2018, we concluded that the financial condition and, accordingly, the level of financial security is far from ideal, from its normal state during the analyzed period the level has decreased to the critical level.

In our opinion, the most optimal coefficients, such as profitability of operating activity of the enterprise (P6.1), profitability of all activity of the enterprise (P6.2), profitability of assets (P6.3), are used to assess the financial condition of dairy-processed enterprises of joint-stock ownership, profitability of production funds (P6.4), return on equity (P6.5), return on sales of net profit (P6.6), coefficient of financial autonomy (independence) (K7.1), coefficient of financial stability and (K7.2), financial durability ratio (K7.3), absolute liquidity ratio (solvency ratio) (K7.4)⁹.

Lets calculate the integrated assessment of the financial condition of dairy enterprises of joint-stock ownership for 2014–2018 on the basis of the financial indicators of the enterprises under study. The well-established correlation between financial performance of an enterprise reflects how attractive an enterprise is in terms of investment.

⁸ Васіна Н.В. Моделювання фінансового стану сільськогосподарських організацій при оцінці їх кредитоспроможності, НОУ ВПО ОмГАН, Омськ 2012, р. 49.

⁹ М. Melnyk, S. Zabolotnyy: Essence of the financial state of the enterprise. Proceedings of Actual problems of agrarian economy: theory, practice, strategy 2017, p. 262–265, http://188.190.33.55:7980/jspui/bitstream/123456789/748/1/%D0%97%D0%B1%D1%96%D1%80%D0%BD%D0%B8%D0%BA%20%D1%82%D0%B5%D0%B7_new-46.pdf (access: 12.03.2020).

Table 1. Indicators of financial and economic state of dairy enterprises of Ukraine

| Indicators | Years | | | | | Deviation 2018/2014 |
|--|----------|----------|----------|----------|----------|------------------------|
| | 2014 | 2015 | 2016 | 2017 | 2018 | |
| Enterprises that received losses [%] | 37,1 | 40,7 | 37,6 | 35,4 | 34,8 | -2,3 |
| Financial result obtained [m] | -467,6 | -1825,3 | -2644,0 | -3403,0 | -3621,0 | -3153,4 |
| Companies that have received profit [%] | 62,9 | 59,3 | 62,4 | 64,6 | 65,2 | 2,3 |
| Obtained financial result [m, UAH] | 1161,4 | 659,8 | 738,7 | 865,8 | 1013,1 | -148,3 |
| Financial result (balance) [m] | 693,8 | -1165,5 | -1905,3 | -2537,2 | -2607,9 | -3301,7 |
| Sales volume [mln, UAH] | 28 634,2 | 30 117,4 | 34 766,9 | 39 972,1 | 51 561,5 | 22 927,3 |
| Index of level of turnover [%] | 1,00 | 1,05 | 1,21 | 1,4 | 1,8 | 0,8 |
| The level of profitability (loss) of operating activities of enterprises [%] | 4,8 | 2,7 | 1,5 | 1,3 | 2,5 | -2,3 |
| The level of profitability (loss) of all activity of enterprises [%] | 1,9 | -3,1 | -4,1 | -4,8 | -2,1 | -4,0 |
| The level of return on assets [%] | 3,2 | -2,7 | -4,9 | -5,4 | -3,6 | -6,8 |
| The level of profitability of production funds [%] | 2,1 | -3,3 | -5,3 | -5,7 | -5,1 | -7,2 |
| The level of return on equity [%] | 12,7 | -19,6 | -40,0 | -48,1 | -41,4 | -54,1 |
| The level of profitability of sales on net profit [%] | 2,4 | -3,9 | -5,5 | -6,2 | -5,4 | -7,8 |
| Coefficient of financial autonomy (independence) | 0,20 | 0,16 | 0,11 | 0,10 | 0,11 | -0,09 |
| Coefficient of financial stability | 0,22 | 0,18 | 0,13 | 0,11 | 0,12 | -0,1 |
| Financial sustainability ratio | 0,33 | 0,31 | 0,32 | 0,31 | 0,32 | -0,01 |
| Absolute liquidity ratio (solvency ratio) | 0,03 | 0,02 | 0,02 | 0,02 | 0,03 | 0 |
| Ratio of short-term receivables and payables | 0,92 | 1,09 | 1,00 | 1,00 | 1,04 | 0,12 |

Source: own calculations according to the data: K.V. Orekhova: The process for forming a financial security strategy of an enterprise, Financial and credit activities: problems of theory and practice 2015, vol. 17(2), p. 158–172; V.I. Yarochkin: Security system of the company, Os-89, Moscow 2003, p. 7–22; S. Zabolotnyy, M. Melnyk: The Financial Efficiency of Biogas Stations in Poland, [in:] Renewable Energy Sources: Engineering, Technology, Innovation, K. Mudryk, S. Werle (eds), Springer Proceedings in Energy, Cham, Springer 2018, p. 83–93, https://link.springer.com/chapter/10.1007/978-3-319-72371-6_9 (access: 12.03.2020).

The results of correlation relationships between financial indicators in the Cheddock table, summarized in the correlation matrix, are moderate (Tab. 2).

Correlations between financial indicators are strong in PJSC “Derazhnyansky Dairy Plant” (75%), PJSC “Lvivmyasolmolproekt” (78%), significant in PJSC “Rakhiv Dairy Plant” (52%), PJSC “Ternopil Dairy Plant” (61%), PJSC “Lviv municipal Dairy Factory” (50%), PJSC “Chortkiv Cheese Factory” (61%), and other milk processing enterprises of the sample, moderate or weak correlation between financial indicators is traced.

Table 2. Correlatory links between financial performance of dairy-processed enterprises of joint-stock ownership for 2014–2018 *

| | P _{6.1} | P _{6.2} | P _{6.3} | P _{6.4} | P _{6.5} | P _{6.6} | K _{7.1} | K _{7.2} | K _{7.3} | K _{7.4} |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| P _{6.1} | 1 | | | | | | | | | |
| P _{6.2} | -0,05014 | 1 | | | | | | | | |
| P _{6.3} | 0,12487 | 0,95257 | 1 | | | | | | | |
| P _{6.4} | 0,15647 | 0,94439 | 0,99706 | 1 | | | | | | |
| P _{6.5} | 0,18110 | 0,93433 | 0,98244 | 0,99355 | 1 | | | | | |
| P _{6.6} | 0,18313 | 0,95438 | 0,99185 | 0,99651 | 0,99463 | 1 | | | | |
| K _{7.1} | 0,13473 | 0,71661 | 0,57596 | 0,60461 | 0,66342 | 0,66309 | 1 | | | |
| K _{7.2} | 0,25048 | 0,89672 | 0,82515 | 0,83312 | 0,85102 | 0,87581 | 0,89814 | 1 | | |
| K _{7.3} | -0,28984 | -0,40455 | -0,65366 | -0,65295 | -0,61707 | -0,59814 | 0,15309 | -0,17456 | 1 | |
| K _{7.4} | -0,00076 | 0,87042 | 0,76167 | 0,78360 | 0,82739 | 0,82101 | 0,94995 | 0,91886 | -0,08013 | 1 |

* level of significance – 48%.

Source: own research.

The financial indicators selected for analysis characterize the quantitative assessment of the financial activity of enterprises. Integral evaluation of the attractiveness of enterprises is carried out according to the formed financial indicators, on the basis of which the normalized financial indicators and the integral indicators of investment attractiveness are calculated¹⁰.

The method of K.V. Izmailova was used as the basis for calculations of the normalized financial indicator and formation of the rating of enterprises by investment attractiveness¹¹ and formula(1) was used.

$$R_j = \sqrt{\sum_{i=1}^n \left(1 - \frac{K_{ij}^{\phi}}{K_{ij}^{\max}}\right)}$$

where:

R_j – the enterprise rating by the integral indicator,

K_{ij}^{ϕ} – the actual level i indicator of the j enterprise,

K_{ij}^{\max} – reference value i indicator of the j enterprise,

j – serial number of the company,

i – financial indicator serial number,

n – number of financial indicators.

Organize by integral indicators R_j in the order of their calculated values increase (Tab. 3).

The leaders in the rating were such enterprises as PJSC “Zarichnensky Dairy Plant”, PJSC “Prykarpatmoloko”, PJSC “Ternopil Milk Factory”, PJSC “Derazhnyansky Dairy Plant”,

¹⁰ K.V. Измайлова: Фінансовий аналіз: Навчальний посібник, МАУП, Київ 2001, р. 152, http://maup.com.ua/assets/files/lib/book/ou_38.pdf (access: 12.03.2020).

¹¹ Ibidem.

Table 3. Rating of dairy enterprises of joint-stock ownership by financial ratios in 2014–2018

| Enterprises | <i>R</i> | Ranked place |
|--|----------|--------------|
| PJSC “Zarichnensky Dairy Plant” | 1.254633 | 1 |
| PJSC “Prykarpatomoloko” | 1.386019 | 2 |
| PJSC “Ternopil Milk Factory” | 1.489384 | 3 |
| PJSC “Derazhnyansky Dairy Plant” | 1.496749 | 4 |
| PJSC “Lviv municipal Dairy Plant” | 1.552209 | 5 |
| PJSC “Lvivmyasolmolproekt” | 1.647365 | 6 |
| PJSC “Khmelnysky maslosyrbaza” | 1.685280 | 7 |
| PJSC “Dubnomoloko” | 1.717724 | 8 |
| PJSC “Gorodenkivsky cheese factory” | 1.847885 | 9 |
| PJSC “Volodymyr-Volynsky Dairy Combine” | 1.895938 | 10 |
| PJSC “Rava-Rusky Creamery” | 1.963217 | 11 |
| PJSC “Rakhiv Butter Factory” | 2.006843 | 12 |
| PJSC “Chortkiv Cheese Factory” | 2.418489 | 13 |
| PJSC “Brodyvskiy factory of skimmed milk powder” | 2.631962 | 14 |
| PJSC “Ostrog Milk Factory” | 2.933036 | 15 |
| PJSC “Volodymyretska Dairy Factory” | 3.017832 | 16 |
| PJSC “Drohobych dairy plant” | 3.651377 | 17 |

Source: own calculations.

PJSC “Lviv municipal Dairy Plant”, the last places were in PJSC “Drohobych Dairy Plant”, PJSC “Volodymyretska Dairy Factory”, PJSC “Ostrog milk factory”.

This rating procedure is standard and does not take into account the criterion of profitability of dairy enterprises of joint-stock ownership and other financial opportunities for increasing business activity.

Taking into account the level of profitability of dairies, the calculation of the rating on the integral indicators of investment attractiveness can be considered a procedure for normalization of financial indicators by the formula:

$$N_{ij} = \frac{t_{ij} - t_{i \cdot \cdot \min}}{t_{i \cdot \cdot \max} - t_{i \cdot \cdot \min}}$$

where:

i – indicator,

j – totality,

N_{ij} – normalized indicator,

t_{ij} – actual financial indicator,

t_{i max} – the maximal value of a financial indicator from the sample,

t_{i min} – the minimal value of a financial indicator from the sample¹².

¹² Y.S. Tsal-Tsalko: Statistical analysis of financial statements: theory, practice and interpretation, ZhSTU, Zhytomyr 2004, p. 506

The calculated integral indicators are ranked in order from greater to lesser value, because the indicators of profitability level are more important, the better the financial condition of the enterprise (Tab. 4).

Table 4. Rating of dairy-processed enterprises of joint-stock ownership by the level of profitability 2014–2018

| Enterprises | <i>R</i> | Ranked place |
|--|----------|--------------|
| PJSC “Zarichnensky Dairy Plant” | 5.43556 | 1 |
| PJSC “Ternopil Milk Factory” | 5.31947 | 2 |
| PJSC “Gorodenkivsky cheese factory” | 5.30585 | 3 |
| PJSC “Derazhnyansky Dairy Plant” | 5.24211 | 4 |
| PJSC “Rakhiv Butter Factory” | 5.10440 | 5 |
| PJSC “Chortkiv Cheese Factory” | 5.08992 | 6 |
| PJSC “Dubnomoloko” | 5.04411 | 7 |
| PJSC “Prykarpattmoloko” | 4.99864 | 8 |
| PJSC “Lvivmyasolmolproekt” | 4.96652 | 9 |
| PJSC “Khmelnitsky maslosyrbaza” | 4.93741 | 10 |
| PJSC “Rava-Rusky Creamery” | 4.68932 | 11 |
| PJSC “Brodyvskiy factory of skimmed milk powder” | 4.64104 | 12 |
| PJSC “Lviv municipal Dairy Plant” | 4.63503 | 13 |
| PJSC “Drohobych dairy plant” | 4.57741 | 14 |
| PJSC “Volodymyretska Dairy Factory” | 4.04728 | 15 |
| PJSC “Volodymyr-Volynsky Dairy Combine” | 3.09705 | 16 |
| PJSC “Ostrog Milk Factory” | 2.34624 | 17 |

Source: own calculations.

The calculations of estimation of investment attractiveness of dairy-processed enterprises of joint-stock ownership on the basis of normalization on the level of profitability showed a slightly different rating, where PJSC “Zarichnensky Dairy”, PJSC “Ternopilsky Dairy”, PJSC “Gorodozhnensky Dairy”, PJSC “Rakhiv Butter Factory”, the last places were in PJSC “Ostrog Milk Factory”, PJSC “Vladimir-Volynsky Combine of Dairy Products”, PJSC “Volodymyretska Milk Factory”.

The calculated rating of dairies by financial ratios and profitability reflects the level of development of the enterprise in comparison with the level of development of other enterprises of the dairy industry¹³. The multivariate cluster analysis allows dividing the studied sample of joint-stock dairy enterprises from 17 enterprises into clusters according to the same level of profitability, capital size and financial ratios. The analysis made it possible to group the investigated dairy enterprises into three clusters according to the same, characteristic only for this cluster, level of profitability (Tab. 5).

¹³ М.І. Мельник: Моделювання та оцінка фінансового стану сільськогосподарських агроформувань України та Польщі, Економічний вісник Запорізької державної інженерної академії 2017, vol. 5(11) [http://www.irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?I21DBN=LINK&P21DBN=UJRN&Z21ID=&S21REF=10&S21CNR=20&S21STN=1&S21FMT=ASP_meta&C21COM=S&2_S21P03=FILA=&2_S21STR=evzdia_2017_5\(1\)_36](http://www.irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?I21DBN=LINK&P21DBN=UJRN&Z21ID=&S21REF=10&S21CNR=20&S21STN=1&S21FMT=ASP_meta&C21COM=S&2_S21P03=FILA=&2_S21STR=evzdia_2017_5(1)_36) (access: 12.03.2020).

According to the conducted grouping, 23.5% of dairy-processed enterprises that were included in cluster 1 had “Stable Financial Condition” and had a sufficient level of profit, a sufficient level of financial indicators during 2014–2018.

Enterprises in cluster 2 had “Unstable Financial Condition”, which accounted for 23.5% of the sample, were characterized by unstable profitable activity, with medium levels of financial autonomy, financial stability and sustainability, underutilized equity and assets, and received a constant amount of net income.

Table 5. Distribution of dairy-processed enterprises of joint-stock ownership by financial stability, 2014–2018

| Cluster characteristic | Position | Dairy-processed enterprises | Amount |
|---|------------|---|--------|
| <p>Cluster 1</p> <p>$P_{6.1} > 0$; $P_{6.2} > 0$; $K_{7.1} \geq 0.5$; $K_{7.2} \geq 1.0$; $K_{7.3} \geq 0.7$</p> <p>For-profit enterprises, with sufficient levels of financial autonomy, financial stability and sustainability, effectively use equity and assets, and receive sufficient net income.</p> | “Stable” | <p>PJSC “Zarichnensky Dairy Plant”</p> <p>PJSC “Ternopil Milk Factory”</p> <p>PJSC “Derazhnyansky Dairy Plant”</p> <p>PJSC „Chortkiv Cheese Factory”</p> | 4 |
| <p>Cluster 2</p> <p>$P_{6.1} > 0$; $P_{6.2} \leq 0$; $0.5 < K_{7.1} \leq 0.1$; $1.0 < K_{7.2} \leq 0.1$; $0.7 < K_{7.3} \leq 0.1$</p> <p>Profitable businesses have an average level of financial performance and use their assets poorly.</p> | “Unstable” | <p>PJSC “Gorodenkivsky cheese factory”</p> <p>PJSC “Dubnomoloko”</p> <p>PJSC “Khmelnysky maslosyrbaza”</p> <p>PJSC “Rakhiv Butter Factory”</p> | 4 |
| <p>Cluster 3</p> <p>$P_{6.1} < 0$; $P_{6.2} < 0$; $K_{7.1} < 0.1$; $K_{7.2} < 0.1$; $K_{7.3} < 0.1$</p> <p>Businesses are unprofitable, with insufficient levels of financial autonomy, financial stability and sustainability, underutilize their own capital and assets, and have little net income.</p> | “Crisis” | <p>PJSC “Prykarpatomoloko”</p> <p>PJSC “Lvivmyasolmolproekt”</p> <p>PJSC “Rava-Rusky Creamery”</p> <p>PJSC “Brodyvskiy factory of skimmed milk powder”</p> <p>PJSC “Lviv municipal Dairy Plant”</p> <p>PJSC “Volodymyretsky Dairy Factory”</p> <p>PJSC “Volodymyr-Volynsky Dairy Combine”</p> <p>PJSC “Ostrog Milk Factory”</p> <p>PJSC “Drohobych dairy plant”</p> | 9 |

Source: own research.

Enterprises that were in the Crisis Financial Condition cluster 3, accounting for 53.0%, were unprofitable, sometimes with insufficient levels of financial autonomy, financial stability and sustainability, insufficient use of equity and assets, with little net of income.

The evaluation of the financial security management mechanism by financial stability, carried out by means of cluster analysis, has shown the enterprises by clusters according to the same level of profitability and financial ratios. As a result, only 23.5% of the surveyed enterprises were profitable and had sufficient financial sustainability.

Recently, the performance of the company is evaluated in terms of organizational efficiency, which is characteristic of post-industrial society research. Organizational efficiency takes into account and evaluates the impact of the management system, organizational culture, decision-making methods and other parameters on the efficiency of the enterprise¹⁴.

Summarizing the above, the concept of performance management should be based on the following principles: abandoning production and market-oriented management. This does not mean a complete rejection of a systematic search for factors and sources of savings for all types of resources. Primary in relation to managerial functions are the development strategy, which is determined by the external environment¹⁵; a joint-stock company is regarded as an open system whose elements are related to the external environment. This is the key to the success of the company. Each company is a complex socio-economic system whose activities cannot be secured solely by internal resources. It is always dependent on external resources¹⁶. It is possible to manage only dependence on external factors by rational organization of all available resources. Thus, great importance is attached to the flexibility of the company to quickly adapt to the changing environment; the organization of the corporation's activities is a reaction to the different environmental influences by nature. Improving company performance over time is nothing but performance management; recognition of a person as the main resource on which the success of the development of a joint-stock company depends.

Conclusion

Summarizing the above, we can draw the following conclusions:

1. Efficiency of a joint-stock company is the ratio of the income received and the costs of logistical, financial, labor and information resources. Only a comprehensive approach to the work of the corporation can ensure the efficiency of the company as a whole.
2. Top management should be proactive, able to creatively analyze, combine theoretical and practical skills.

¹⁴ A. Chyurkova, O. Homenko: Financial safety of enterprises of agroindustrial complex as a basis for innovative development, [in:] National Economic Reform: experience of Poland and prospects for Ukraine vol. 2 Poland, Baltija Publishing, Riga 2017, p. 117–132; L.M. Prokopchuk, A.D. Chyurkova, O.F. Nogachevsky: Formation and Development of Corporate Governance in Joint Stock Companies: Theory, Methodology and Practice, PE Zvoleyko D.G., Kamianets-Podilskyi 2015, p. 173.

¹⁵ О Кучер О.В., Покотильська Н.В.: Маркетинговий менеджмент у системі управління аграрними підприємствами, Подільський вісник: сільське господарство, техніка, економіка 2016, p. 128–134, <http://188.190.33.55:7980/jspui/bitstream/123456789/336/1/PB-25-15.pdf> (access: 12.03.2020).

¹⁶ О. Kucher: Problems of management and marketing in the enterprises activity of agriculture, Scientific Achievements in Agricultural Engineering Agronomy and Veterinary Medicine 2017, vol. 1, no 1, p. 31–41.

3. A great role should be given to the personnel, their ability to analyze their work in terms of achieving the goals of the corporation, to anticipate the prospect of development of the company and their own professional ambitions.
4. Timely fulfillment of mutual obligations to debtors and creditors should be observed, which is conditioned by the integrity, culture and image of the company in the market.
5. Selection of a single team of executives, managers should be based on the following criteria: deep knowledge, honesty, use of physical and mental abilities for the benefit of the enterprise, dedication of the company.
6. Ensuring stable work of the team is possible only in case of improvement of the social status of employees, their confidence in the future, which implies the demanding management not only to their subordinates but also to themselves.
7. Continued use of scientific and technological progress, development and implementation of high-performance projects is necessary.
8. The criterion for evaluating the effectiveness of the relationship between a joint-stock company and the state is the timeliness and completeness of payment of mandatory payments, the provision of complete information about their own activities.

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