

CZU 658.1:631.1

ASSET MANAGEMENT OF AN AGRICULTURAL ORGANIZATION

TRACI Dumitru,

PhD in economics, associate professor,
Shevchenko State University,

E-mail: dtrach.72@mail.ru,

<https://orcid.org/0000-0002-6575-5725>

SUMMARY

In conditions of complete economic independence of enterprises, the quality of management in general and financial management in particular has a decisive influence on effective development. The main goal of financial management is the formation of own capital and its structure and quality are important. Any profitable production activity should provide a balanced material and technical base corresponding to the specialization of the enterprise. Given the current situation in the agro-industrial complex of the region, first of all, the fragmentation of the land by small users, the lack of business management experience in the market economy, improving the quality of financial management is extremely relevant.

The proposed study is considered on the example of one of the leading agricultural enterprises in the region, which was established in 2004 having 20 hectares of land in use, and currently – 8144 hectares of land, so it is a sufficient basis for scientific research.

Key words: financial management, effective development, property structure, return on net asset value, sales volume, profit, financial stability coefficient, liquidity.

MANAGEMENTUL ACTIVELOR UNEI ORGANIZATII AGRICOLE

TRACI Dumitru,

Doctor in economie, conferențiar universitar,
Universitatea de stat T. Sevchenko

E-mail: dtrach.72@mail.ru,

<https://orcid.org/0000-0002-6575-5725>

RESUMAT

În condițiile unei independente economice deplină a întreprinderilor, calitatea managementului în general și a managementului financiar în special are o influență decisivă asupra dezvoltării eficiente. Principalul obiectiv al managementului financiar este formarea capitalului propriu, iar structura și calitatea acestuia sunt de mare importanță. Orice activitate de producție profitabilă trebuie să asigure o bază materială și tehnică echilibrată, corespunzătoare specializării întreprinderii. Având în vedere situația actuală a complexului agroindustrial din regiune, în primul rând fragmentarea terenurilor în mici utilizatori, lipsa de experiență în gestionarea afacerilor în economia de piață, îmbunătățirea calității managementului financiar este extrem de relevantă.

Cercetarea propusă este luată în considerare pe exemplul uneia dintre cele mai importante întreprinderi agricole din regiune, care a fost înființată în anul 2004, având în folosință 20 de hectare de teren, iar în prezent – 8144 de hectare de teren, ceea ce reprezintă o bază suficientă pentru cercetarea științifică.

Cuvinte-cheie: managementul financiar, dezvoltarea eficientă, structura proprietății, rentabilitatea valorii nete, volumul vânzărilor, profitul, raportul de putere financiară, lichiditatea.

Introduction. Property capital is the main value in financial management. Property is a set of economic benefits expressed in monetary form, which a production unit has on the basis of the balance sheet data at the moment (at the end of the management period) [1].

In analytical practice, depending on the sources from which these goods are produced, there are:

- a) the real value of the company's property;
- b) its net value.

The real value of the property includes goods created both from own sources and from borrowed ones. From the point of view of accounting, this cost is reflected in the assets of the balance sheet.

The tendency to change this indicator in dynamics allows us to assess the tendency to increase or decrease

the property in the studied enterprise.

The net value of the property expresses only the economic benefits coming from its own sources (it expresses the state of the enterprise).

The issue of effectiveness of agricultural organizations' own capital management as one of the most important tasks of financial management has been given considerable attention by domestic and foreign scientists [2,3,4,5,6].

Materials and methods

To ensure the financial stability of the enterprise, a scientifically based management system of its activities should be built from a long-term perspective [7,8]. The most important component of this system should be indicators for assessing current activities and

development prospects.

The materials of this study were the statistical data of the enterprise for the period of 2017-2019 [9,10]. The following methods were used: the analysis and comparison method, grouping method, generalization and forecasting method [11,12,13,14].

Results and discussion

Next, we will trace the growth and efficiency of the property of the LLC "Rist" according to the data presented in Table 1.

The information in Table 1 allows us to conclude:

– the total value of assets in 2022 compared to 2020 increased by $4416,8 - 4188,7 = 228,1$ thousand lei; long-term and short-term debts corresponding to $486,1 - 391,1 = 95$ thousand lei, or $95 \times 100\% : 391,1 = 24,3\%$; net asset value increased by $3930,7 - 3797,6 = 133,1$ thousand lei; or $133,1 \times 100\% : 3797,6 = 3,5\%$;

– the net value profitability sharply decreased by 0,068: $0,03 = 22,7$ times and it was affected by the decrease in the net profit in 2022 compared to 2020 by 260,1: $12,4 = 21$ times.

Table 1. The growth and efficiency of the property of the LLC "Rist" in 2020-2022

Indicators	Years		
	2020	2021	2022
1. Total value of assets, thousand lei	4188,7	4517,8	4416,8
2. Total long-term and short-term debt, thousand lei	391,1	4245	486,1
3. Net asset value, thousand lei	3797, 6	4093,3	3930,7
4. Net profit, thousand lei	260,1	277,0	12,4
5. Net value profitability, lei	0,068	0,068	0,003

Source: designed by the author.

The analysis of assets in the balance sheet allows you to argue the decision on the investment content. Next, we

will analyze the real value and property structure of the LLC "Rist" in 2021-2022, Table 2.

Table 2. The diagnostics and evaluation of the company's property structure at real value (according to the balance sheet)

Indicators	2021		2022		Deviation	
	quantity, lei	ratio, %	quantity, lei	ratio, %	lei	%
A	1	2	3	4	5	6
I. Long-term assets	-	-	-	-	-	-
1.1. Intangible assets	-	-	-	-	-	-
1.2. Long-term tangible assets	2428,2	58	2004,6	46,5	-423,6	-11,5
1.3. Long-term financial assets	-	-	-	-	-	-
1.4. Long-term working assets	63,7	1,5	231,4	5,3	+167,7	+3,8
Total for Chapter I	2492	59,5	2236	51,8	-256	-7,7
II Current assets						
2.1. Stocks of goods and materials	1630,4	38,9	1380	31,9	-250,4	-7
2.2. Short-term accounts receivable	26,4	0,6	547,9	12,6	+521,5	+12
2.3. Short-term investments	-	-	-	-	-	-
2.4. Money	22,3	0,7	138,5	3,2	+116,2	+2,5
2.5. Other current assets	17,6	0,5	13,3	0,3	-4,3	-0,2
Total for Chapter II	1696,7	41,5	2079,7	48,2	383	7,2
Total – assets	4188,7	100,00	4315,7	100,00	127	x

Source: designed by the author.

The data in Table 2 allow us to draw the following conclusions. Compared to 2021 the real value of the property of the LLC "Rist" in 2022 increased by 127 thousand lei or by 3,03% ($127000 \times 100 : 4188,7$).

This increase was provided by the increase in current assets in general by 383 thousand lei or by 9,1% ($383 \times 100\% : 4188,7$) and the general decrease of long-term assets by -256 thousand lei or by 6,11%.

The main share is on current assets, which in 2022 amounted to 48,2% of the total assets, having decreased by 7,2 percentage points compared to 2021, and long-term assets decreased by -7.7 percentage points, amounting to 51,8% in 2022.

In countries with modern agriculture effective compliance in the property structure of production units should correspond to a 50-50 balance sheet, i.e. 50% of the company's property should be long-term tangible assets, and 50% – current assets.

One of the main conditions for a good financial situation of any production unit is a situation in which,

according to the balance sheet, the company has funds in the amount of operational needs (usually up to 5 days).

In the context of a relative indicator that may reflect this situation in the company's asset structure, there may be a lack of monetary funds. Having studied the data in Table 3., we note that the LLC "Rist" monetary flow rate increased from 0,7% to 3,2% in 2021-2022. With such an increase, the LLC "Rist" will not be able to repay the operating debt.

Changes occurring in the liabilities of the balance sheet of the LLC "Rist" can be presented in Table 3.

Table 3. The structure of sources of creation of the company's property in the LLC "Rist" for 2021-2022

Indicators	2021		2022		Deviation	
	quantity, lei	ratio, %	quantity, lei	ratio, %	lei	%
A	1	2	3	4	5	6
III Property capital						
3.1. Authorized and additional capital, total	2309,2	55,1	2430,2	56,3	121	1,2
3.2. Stocks, total	1034,0	24,7	1181,4	27,1	147,4	2,4
3.3. Retained earnings (uncovered loss), total	260,1	6,2	12,4	0,3	-247,7	-5,9
3.4. Secondary capital, total	-	-	-	-	-	-
Total for Chapter III	3603,4	86,0	3638,0	84,3	34,9	1,7
IV. Long-term liabilities						
4.1. Long-term financial liability, total	-	-	130,1	3,0	130,1	3,0
4.2. Calculated long-term liability, total	255,2	6,1	130,1	3,0	-125,1	-3,1
Total for Chapter IV	255,2	6,1	130,1	3,0	-125,1	-3,1
V. Short-term liabilities						
5.1. Short-term financial liability, total	-	-	-	-	-	-
5.2. Short-term commercial liability, total	193,9	4,6	428,7	9,9	234,8	5,3
5.3. Calculated short-term liability, total	193,9	4,6	80,8	1,9	-113,1	-2,7
Total for Chapter V	330,0	7,9	547,6	12,7	217,6	10,8
Total – total liabilities	4188,7	100	4315,7	100	127,0	x

Source: designed by the author.

The data in Table 3 allow us to conclude that the total volume of sources for the creation of the property of the LLC "Rist" in 2022 increased by 127 thousand lei or 3,03% compared to 2021 (127x100: 4188,7).

This deviation was basically provided by the increase in the property capital, which during 2022 increased from 3603,4 thousand lei to 3638 thousand lei or by 34,9 thousand lei, while the total amount of the long-term liability was reduced from 255,2 thousand lei to 130,1 thousand lei or 125,1 thousand lei.

The structure of the property value characterizes the financial position of the LLC "Rist". The basis of the future financial stability is its economic potential, i.e., the size of the company's assets. Unfortunately, the increase in the number of assets does not always guarantee the economic growth. To achieve the increase in the economic performance of the enterprise, it is required to

achieve a high return on the resources of the enterprise.

To get a full assessment of the financial position of the LLC "Rist", it is necessary to compare the change in average assets (capital) with the changes in financial results (sales income, gross profit, profit from financial activities, using the information in the profit and loss statement). To do this, the growth rates of income, profit for the period before taxation and net profit are calculated.

The increase in sales and profit compared to the growth rate of the assets of the LLC "Rist" demonstrates an improvement in the use of production potential.

The increase in profit at a higher rate compared to the growth rate of sales indicates a decrease in the cost of sales, which indicates an increase in the economic efficiency of the enterprise.

Based on the information from the financial

statements for 2021-2022, we will confirm the presence or absence of such a situation in the LLC "Rist".

$$Ra = \frac{4416720 - 4353225}{4353225} \times 100 = 6349500 : 4353225 = 1,46\%$$

$$Rv = \frac{4840308 - 3937847}{3937847} \times 100 = 90246100 : 3937847 = 22,92 \%$$

$$Rp = \frac{12413 - 292357}{292357} \times 100 = -27994400 : 292357 = -95,75 \%$$

Thus, in the LLC "Rist":

$$Rp < Rv < Ra \text{ до } -95,75 < 22,92 < 1,46\%$$

The current situation requires informed decisions, which in the future should help to reduce costs and increase profits at a higher rate compared to the rate of increase in revenue from sales and assets.

Along with the analysis of the structure and effectiveness of property, financial management involves a detailed analysis of the financial stability and solvency of the LLC "Rist".

This study begins with the analysis of the sustainability of funding sources. For these purposes, the financial stability coefficient (RSF) is used, which is also called the sustainability coefficient of funding sources, the fixed capital rate or the capitalization rate:

We calculate the RSF in the LLC "Rist":

$$\text{The year of 2020} = 3603376 + 255216 : 4188678 = 0,921$$

$$\text{The year of 2021} = 3788959 + 169267 : 4517772 = 0,876$$

$$\text{The year of 2022} = 3637949 + 130146 : 4315668 = 0,873$$

These coefficients express the share of funding sources that the company can use to finance its activities in accordance with the business plan. The increase in this coefficient in dynamics reflects the strengthening of the financial stability of the LLC "Rist". In the LLC "Rist", it has decreased slightly.

If, when considering funding sources, short-term debts are excluded from their composition and attention is focused on the structure of permanent capital, then we will get the following coefficients of long-term liabilities, absolutely identical in their economic nature. These coefficients serve as indicators for assessing credit risk.

The most common coefficient used in the practice of advanced economies is the ratio of the long-term debt (RIL) to the fixed capital, which is also called the coefficient of long-term borrowing or the coefficient of dependence on long-term borrowed funding sources.

We calculate this rate for the LLC "Rist":

$$\text{The year of 2020} = 255216 : 3603376 + 255216 = 0,066$$

$$\text{The year of 2021} = 169267 : 3788959 + 169267 = 0,043$$

$$\text{The year of 2022} = 130146 : 3637949 + 130146 = 0,035$$

From the creditor's point of view, the increase in this dynamic rate is a negative trend, reflecting the increase in the potential risk of falling under external influence, which cannot be controlled by the management of the enterprise or its owners. In world practice, credit agreements often contain provisions regulating the

maximum credit risk in the form of restrictions on the share of debt in fixed capital.

Unlike the coefficients of the general structure of financing sources, the level of security (necessary or optimal) of long-term debt rates cannot be determined unambiguously and concretely. Therefore, the assessment of these indicators is made by comparisons in dynamics. In world practice, the level of the considered rate is considered to be about 26-40%. If this recommended level is exceeded, further attraction of long-term borrowed funds will be stopped. Additional financing of the company's activities can be carried out from its own sources (the amount of the authorized capital, etc.) [15].

When analyzing the company's debts, instead of the rate of long-term liabilities to permanent capital, another additional and replaceable rate can be applied – the rate of self-financing of the permanent capital (this is called the degree of financial independence of capitalized sources or the degree of property solvency).

The calculation of the self-financing rate of the LLC "Rist":

$$\text{The year of 2020} = 3603376 : 3603376 + 255216 = 0,933$$

$$\text{The year of 2021} = 3788959 : 3788959 + 169267 = 0,957$$

$$\text{The year of 2022} = 3637949 : 3637949 + 130146 = 0,965$$

The calculation of the ratio of the long-term debt to the fixed capital:

$$\text{The year of 2020} = 1 - (255216 : 2309199) = 0,889$$

$$\text{The year of 2021} = 1 - (16967 : 2309199) = 0,927$$

$$\text{The year of 2022} = 1 - (130146 : 2309199) = 0,944$$

This ratio also reflects the structure of the permanent capital that provides long-term financing of the company's activities. In world practice, the lower limit of this indicator is equal to 60%.

The group of replaceable coefficients also includes the leverage ratio (the ratio of long-term debt to property capital), which is a special case of "financial leverage":

The calculations for the LLC "Rist":

$$\text{The year of 2020} = 255216 : 3603376 = 0,071$$

$$\text{The year of 2021} = 169267 : 3788959 = 0,073$$

$$\text{The year of 2022} = 130146 : 3637949 = 0,058$$

Taking into account the interest of creditors, the above unitary level of this coefficient is estimated negatively. At the same time, it is worth noting that the high degree of the coefficient under consideration (as well as other debt ratios) allows the owners to benefit from the borrowed sources if the return on investment in the company's activities exceeds the interest rate.

In auditing practice, to assess the risk of bankruptcy of a company as a whole, a coefficient is used that is not formally included in the above group of rates, i.e. it is not absolutely identical, but can be characterized as very close (similar) in its economic content [16].

We calculate this rate, the ratio of the long-term debt to the authorized capital, for the LLC "Rist":

$$\text{The year of 2020} = 255216 : 2309199 = 0,111$$

$$\text{The year of 2021} = 169267 : 3788959 = 0,073$$

$$\text{The year of 2022} = 130146 : 3637949 = 0,092$$

In advanced economies, to determine this ratio, the

authorized capital is often estimated at the market prices of shares in circulation.

If the numerator and denominator are reversed in the formulas for calculating debt ratios, then we will get a long-term debt coverage ratio with the authorized capital, own or permanent. This set of indicators also

characterizes the ability of the enterprise to attract new long-term loans, if necessary, while reflecting a certain level of guarantees for creditors regarding the possibility of repayment of borrowed funds. All the results calculated above are presented in table 4.

Table 4. The analysis of the sustainability of funding sources and the degree of the long-term liabilities in the LLC "Rist"

Indicators	Years		
	2020	2021	2022
1. Financial stability indicator	0,921	0,976	0,873
2. The rate of the long-term liabilities to the permanent capital	0,066	0,043	0,035
3. The ratio of self-financing of the permanent capital	0,933	0,957	0,965
4. Leverage ratio	0,071	0,073	0,058
5. The ratio of the long-term liabilities the authorized capital	0,889	0,927	0,944
6. The ratio of the long-term liability coverage to the authorized capital	0,111	0,073	0,092

Source: designed by the author.

Based on the data in Table 4 we can conclude that the funding sources of the LLC "Rist" are characterized by a fairly high degree of stability in 2017-2019 (92,1%; 87,6%; 87,3%). The stability of this ratio in dynamics is assessed positively, despite the decline in the financial stability in 2021-2022.

The rate of self-financing of the permanent capital increased from 93,3% in 2020 to 96,5% in 2022, which demonstrates self-financing of the permanent capital from own sources. The long-term debts are poorly covered by the authorized capital.

From the creditor's point of view, the most important aspect of assessing the reliability of the client is, first of all, the ability of the enterprise to pay interest and repay the principal amount of the debt in accordance with the schedule established in the loan agreement. In this context, the following coefficients having practical importance are calculated and interpreted.

Interest coverage rate with profit:

The calculations for the LLC "Rist":

The year of 2020 = $260149 + 25659 : 25659 = 11,14$ times

The year of 2021 = $292357 + 38625 : 38625 = 8,57$ times

The year of 2022 = $12413 + 19217 : 19217 = 1,65$ times

Interest rate coverage by monetary flow:

The calculations for the LLC "Rist":

The year of 2020 = $- 119 : 013 + 25659 : 25659 = - 3,64$ times

The year of 2021 = $427360 + 38625 : 38625 = 12,06$ times

The year of 2022 = $338648 + 19217 : 19217 = 18,26$ times

The results of the calculations characterize the level of protection of creditors from the possibility of non-payment of interest on loans provided. From a practical

point of view, these rates reflect how many times the profit (monetary funds) received by the enterprise during the management period exceeds the amount of funds needed to pay interest accrued for payment during the period.

Based on the results of the calculations, it can be concluded that the interest coverage rate with profit is reduced from 11,14 times in 2020 to 1,65 times in 2022 due to the rising costs and the decrease in profit before paying taxes.

The interest rate coverage rate with monetary flow decreased sharply due to the increase in the flow from operating activities and the decrease in the interest on payments.

Next, let us study the liquidity and solvency indicators of the LLC "Rist".

If an enterprise requests some loans from the bank, it is necessary to assess the solvency of this enterprise. The indicators characterizing the company's strategy from the point of view of its solvency are liquidity indicators (L).

Absolute L (liquidity of the first degree) shows how much of the short-term liability the company can repay from its money account.

The calculations for the LLC "Rist":

The year of 2020 = $22312 : 136188 = 0,164$

The year of 2021 = $76059 : 359693 = 0,212$

The year of 2022 = $138532 : 547573 = 0,303$

Starting from 2018, this indicator is in the optimal recommended amount (0,2-0,25).

The intermediate L (level II) shows how much of the short-term liability can be repaid at the expense of monetary funds, securities, receivables.

The calculations for the LLC "Rist":

The year of 2020 = $22312 + 0 + 26372 : 330086 = 0,15$

The year of 2021 = $76059 + 0 + 276399 : 359693 = 0,98$

The year of 2022 = $138532 + 0 + 259482 : 547573 =$

0,73

The calculations show that the LLC "Rist" was able to pay more than 70% of the debt on time.

The current liquidity indicates whether the company has enough funds to fulfill its obligations during the reporting period. This allows us to draw general conclusions about the solvency of the company.

The calculations for the LLC "Rist":

The year of 2020 = $1696721 : 330086 = 5,1$

The year of 2021 = $1921715 : 424546 = 4,5$

The year of 2022 = $2079694 : 547573 = 3,8$

The calculations show that the LLC "Rist" had funds to repay the debt in the analyzed period.

Solvency is the ability of an enterprise to pay its long-term and short-term debts. Solvency ratio = The actual value of total assets / liabilities.

The calculations for the LLC "Rist":

The year of 2020 = $4188678 - 585302 : 585302 = 6,2$

The year of 2021 = $4517722 - 728813 : 728813 = 5,2$

The year of 2022 = $4315668 - 547573 : 547573 = 6,9$

As can be seen from the above calculations, the LLC "Rist" managed to pay its debts.

In our opinion, a special attention should be paid to the analysis of the asset management indicators. The calculations of these indicators for the LLC "Rist" are presented below:

The fixed rate:

The year of 2020 = $2491957 : 4188678 = 0,59$

The year of 2021 = $2596057 : 4517772 = 0,57$

The year of 2022 = $2235974 : 4315668 = 0,52$

The rate of fixed assets exceeds 50% and complies

with the current regulations.

The current assets rate:

The year of 2020 = $1 - 0,59 = 0,41$

The year of 2021 = $1 - 0,57 = 0,43$

The year of 2022 = $1 - 0,52 = 0,48$

The assets rate for production:

The year of 2020 = $9721981 + 46966 : 4188678 = 2,33$

The year of 2021 = $10053966 + 92873 : 4517772 = 2,25$

The year of 2022 = $2004592 + 363387 : 4315668 = 0,55$

This indicator reflects the share of the company's assets that can be used directly for the production of agricultural products. If this indicator is $<0,5$, it is considered as a dangerous financial situation. The calculations show that the patrimonial position in the LLC "Rist" is satisfactory.

For a deeper characterization of the productivity of the enterprise, the indicator of the technical composition of fixed assets (capital) is studied:

The norm of the technical composition of assets (capital) = fixed assets on the balance sheet / current assets.

The year of 2020 = $9721981 : 1921715 = 5,10$

The year of 2021 = $10053966 : 1696721 = 5,90$

The year of 2022 = $2004592 : 2079694 = 0,96$

The settlement rate is reduced due to the increase in prices for stored goods and materials.

For the greatest clarity all the obtained calculation results for the LLC "Rist" are presented in Table 5.

Table 5. The coverage indicators of interest, liquidity, solvency and asset management of the LLC "Rist"

Indicators	Years		
	2020	2021	2022
Covering interest rates with profit and monetary flows			
1. Interest coverage with profit	11,14	8,57	1,65
2. Covering interest rates with monetary flow	-3,64	12,06	18,26
Liquidity and solvency			
3. I degree absolute liquidity	0,164	0,212	0,303
4. II degree absolute liquidity	0,15	0,98	0,73
5. III degree absolute liquidity	5,1	4,5	3,8
6. Financial solvency coefficient	6,2	5,2	6,9
Asset management			
7. Fixed rate	0,59	0,57	0,52
8. Current assets ratio	0,41	0,43	0,48
9. The property ratio of the production purpose	2,33	2,25	0,55
10. The ratio of the technical composition of assets	5,10	5,90	0,96

Source: designed by the author.

Conclusion General conclusions based on the results of Table 5:

– according to the value of indicator 1.2, the LLC "Rist" can cover interest on profit and monetary flow, except for 2020;

– according to indicator 3, the enterprise was able to repay the short-term liabilities from the money account according to the current rate only in 2020;

– according to indicator 4, the enterprise was able to pay the short-term liabilities to the creditors at the expense of monetary funds and securities at the level of 128

15% in 2020, 98% in 2021 and 73% in 2022;

– III degree liquidity according to the current standards should be in the range of 1-2.5. In this enterprise, the indicator varied from 561; 465; 368;

– the solvency coefficient is higher than 1 and corresponds to the current standards;

– coefficients 7,8,9,10 in size correspond to the current standards.

Thus, the property situation in the LLC "Rist" is considered positive.

Bibliographic references:

1. Ковалёв В.В. Введение в финансовый менеджмент. – Москва: Финансы и статистика, 1999, с.239. ISBN 978-5-392-21433-4.
2. Sheremet A.D., Bakanov M. I. Theory of economic analysis: Textbook.: Infra-M. 2002. – pp. 333. ISBN 5-279-02042-7.
3. Kovalev V.V., Volkova O.N. Analysis of the economic activity of the enterprise. – M.: PBOYUL Grizhenko E. M., 2000. – pp. 424. ISBN 5-94032-005-8.
4. Markin Y. P. Economic analysis: a textbook for university students. 2nd ed. –M.: Omega-L Publishing House. 2010. – pp. 450. ISBN 978-5-370-01299-0.
5. Blank I.A. Fundamentals of financial management. – M.: Perspective. 2001. – pp 358. ISBN 978-5-370-00922-8
6. Timofti. E. 2010. Statistica: Teorie si Aplicatii. Chisinau. State Agricultural University of Moldova. pp. 283. ISBN 978-9975-64-198-2.
7. Șchiopu. I. Obiectivele financiare ale întreprinderii și corelarea lor cu managementul financiar. În: Revista Științifico-Didactică „Economica”. An. XXV. nr.2 (104). Iunie 2018. Editura ASEM. Chișinău. 2018. pp.95-104. ISSN 1810-9136.
8. Perciun. R., M.R., Țîrlea. Alternative de finanțare a microîntreprinderilor. În: Creșterea economică în condițiile globalizării. Ed.A 13-a/Vol.2. 2018. p.15-27. ISBN 978-9975-3202-9-01.
9. Website of Ministry of Economic Development [http: //mer.gospmr.org /](http://mer.gospmr.org/) (visited 12.01.2024).
10. www.statistica.md (visited 22.01.2024).
11. Trach D., Management of the organization's finances in conditions of uncertainty. Scientific Papers. Series “Management, Economic Engineering in Agriculture and Rural Development”, Vol.19 issue 1, 2019, Bucharest, Romania. – P.587-593. PRINT ISSN 2284-7995, E-ISSN 2285-3952.
12. Trach D., A. Litvin, A. Rakul, The impact of financial management performance on the sustainable development of agricultural enterprises in the Republic of Moldova. International Conference “Agriculture for Life, Life for Agriculture”, June 6-8, 2019, Bucharest, Romania. Scientific Papers. Series “Management, Economic Engineering in Agriculture and Rural Development”, Vol. 19 issue 2, Bucharest, Romania. – pp. 449-457. PRINT ISSN 2284-7995, E-ISSN 2285-3952.
13. Trach D. Scientific foundations of management, Rybnitsa: OJSC “Rybnitsa Printing House”, 2019. – 300 p. ISBN 978-9975-3218-4-6.
14. Trach D., Activities of farms on the left bank of the Republic of Moldova. Monthly theoretical and scientific-practical magazine “Agribusiness: Economics and Management”. August 2019 – Moscow, 2019. – pp. 92-96. ISSN 0235-2443.
15. Trach D., Managing the financial development of an organization based on a new income structure for operating personnel. Financial management. – M.: Finpress LLC, 2019. - No. 5 – P. 25-33/ ISSN 1607-968X.
16. Akulay. E. Improving the policy of supporting small and medium-sized enterprises in the Republic of Moldova / E. Akulay; scientific ed. A. Stratan; National Institute of Economics research – Chisinau: NIEI. 2015. – pp. 178. ISBN 978-9975-4422-3-7.