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# FINANCIAL MANAGEMENT AS THE MAIN MECHANISM TO TAKE INTO ACCOUNT IN THE SUSTAINABLE DEVELOPMENT OF AGRICULTURAL ENTERPRISES

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**Abstract:** One of the key places in business management belongs to financial management. This is especially important in the conditions of full economic independence of economic entities. Qualitative analysis and the adoption of strategic and current decisions based on it will contribute to the positive dynamics of business development, profitability of economic activity, increased liquidity and financial stability.

Of particular importance is the quality management of company's assets, both non-current and current. Their cost, structure and quality determine the volume of production, labor productivity, and prime cost of production. In the article this problem is considered on the example of existing agricultural enterprises.

**Keywords:** profitability, asset turnover, investments, assets of agricultural organizations, profit, financial stability, sustainable development, economic growth, efficiency, economic levers, financial solutions.

**JEL code:** *M1, Q01, Q14, R51, R58.* 

### 1. Introduction

The most important task of the financial management of the organization is the quality management of the enterprise's assets. The size of assets, their structure and role in ensuring the production process determines the complexity of their management tasks. A special policy should be developed to form a mechanism for such management, which will be an integral part of the general profit management policy.

This policy should include:

- determining the need for assets;
- optimization of the asset structure;
- optimization of the use of assets in the production process;
- acceleration of asset turnover;
- minimization of asset losses;
- timely updating of assets;
- real reflection in the accounting of the value of assets in terms of inflation.

#### 2. Materials and methods

In order to ensure the financial stability of a business, a scientific system of management of its activities should be built with the position of the long-term perspective. Such a management system should be based on appropriate algorithms (indicators) for evaluating activities and forecast goals. In practice, various methods of analysis are used, which can be explained by the difference in goals and priorities set by analysts.

## 3. Results

Considering the dynamics of economic profitability (assets) of the agricultural enterprises of the town of Rybnitsa and the Rybnitsa district (Table 1) one should note a positive trend of growth in dynamics for all indicators.

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	Indicators		Years						
		2015	2016	2017	2018	2019			
1	Total return on sales, %	8,6	7,1	27,2	25,4	31,4			
2	Net return on sales, %	-31,7	-4,3	7,2	10,9	20,3			
3	Return on sales, %	9,5	7,6	37,4	54,9	45,8			
4	Average annual value of assets, thousand lei	293154	327893	370384	336363	293286			
5	Economic profitability (assets)	-15,3	-2,0	3,9	5,9	0,14			
6	Average annual cost of capital and reserves, thousand lei	158992	166287	205422	198665	175398			
7	Return on equity, %	-28,3	-3,9	7,0	9,6	24,4			

# Table 1. Indicators for assessing the profitability (margins) of economic activity of the agricultural enterprises in Rybnitsa and the Rybnitsa district

Source: calculated by the author on the database of the agricultural enterprises of the town of Rybnitsa and the Rybnitsa district for 2015-2019.

To assess the effectiveness of activities in terms of sales and resulting income indicators are used that characterize the share of profit in the total amount of income. With the help of the return on sales indicator, the profitability of an agricultural enterprise as a whole and its individual activities are estimated. The high value of profitability of sales indicates that the company has advantages in comparison with competitors, which indicates effective financial management of the enterprise [1].

Profitability of sales is an important indicator of the financial performance of the company and shows the share of the company's profit in sales revenue. Thus, the total return on sales in 2019 compared to 2015 increased by 22.8 p.p. If for every 1 lei of sales, enterprises on average in 2015 received 31.7 bans of net loss, then in 2019 they received 20.3 bans of net profit.

The profitability of agricultural products sold increased by 2019 from 9.5% to 45.8%, i.e. by 36.3 percentage points. This was due to the fact that over the past three years, the volume of sales of vegetables has increased by more than 20%, cattle and poultry by more than 30%, etc. compared to previous years. Exports of food products of agricultural origin and their processing, such as oil seeds and fruits of vegetables, alcoholic and non-alcoholic beverages increased by 15.8%. This all amounted to 134.5 thousand US dollars [2].

At the same time considering the dynamics of economic profitability (assets), one should note the relatively low level of this indicator, which indicates a low efficiency of asset use. This is due to the high depreciation of fixed assets. In general, the assets gave the agricultural economic entities of the city of Rybnitsa and the Rybnitsa district 0.14 bans for each leu of assets.

The level of return on the equity for the analyzed period has increased significantly compared to the previous years. In 2019 the financial profitability reached 24.4%. This increase was due to the increase in net profit and the decrease in the average annual amount of the capital and reserves from year to year.

It should be noted that "the value of profitability of sales has serious industry specifics. This is mainly determined by different turnover rates of funds" [3]. Business activity indicators can be presented in a dynamic series in order to identify the most significant factors affecting the financial condition of an agricultural enterprise, as well as to determine the effectiveness of operational financial management. The financial condition of agricultural enterprises, as an important characteristics of business activity and reliability, is the guarantor of the effective realization of the economic interests of the enterprise and partners and determines its competitiveness.

A stable financial position is the result of skillful, calculated management of the entire set of production and economic factors (resources) that determine the result of the company's activities. One can determine how effectively material and financial resources are used by using indicators of turnover of non-current and working capital [4]. It should be noted that the efforts of financial managers should be aimed at accelerating the turnover of assets, since each additional turnover brings additional income to the enterprise. At the same time with the decrease in turnover, there is a threat

of a shortage of liquid assets for operating activities and finding sources of their financing. The lower the turnover rate of current assets, the greater the need for additional financing.

The efficiency of the use of all available resources by an agricultural enterprise, regardless of their sources of attraction, is characterized by the indicator of turnover (return) of assets. If the return on all assets is lower than the industry average, then the enterprise does not develop agricultural activities in sufficient volume with a given amount of investment in existing assets. In such cases the managers of the enterprise should either develop ways to increase the volume of sales of agricultural products or alienate unnecessary assets.

The dynamics of indicators for assessing the efficiency of the use (return) of material resources of the agricultural enterprises of the town of Rybnitsa and the Rybnitsa district over the past 5 years is presented in Table 2.

	Indicators	Years				
		2015	2016	2017	2018	2019
1	Return of all assets, lei	0,48	0,46	0,53	0,54	0,72
2	Return of fixed assets for agricultural purposes, lei	1,065	1,063	0,924	1,128	1,189
3	Turnover ratio of working capital, number of turnovers	0,834	0,811	1,104	1,217	1,688
4	Turnover of working capital in days (365/ Turnover ratio of working capital)	438	450	331	300	216
5	Turnover ratio of accounts receivable (Sales revenue / Average balance of accounts receivable), number of turnovers	1,54	1,48	1,96	3,18	10,0

# Table 2. Dynamics of indicators for assessing the efficiency (return) of the use of resources of the agricultural enterprises in Rybnitsa and Rybnitsa district for 2015-2019

Source: calculated by the author on the basis of the data.

In the dynamics of 2015-2019 the return on all assets is growing slightly, which means that if in 2015 0.482 lei of sales revenue was received for 1 leu of average annual assets, then already in 2019 enterprises on average received 0.72 lei, i.e., 0.24 lei more. This is evaluated positively, but the levels of return on all assets themselves are very low. The growth of this indicator indicates that sales revenues have increased, but the level of return, the greater the dependence of the enterprise in financing its production process.

The efficiency of the use of agricultural fixed assets is at a low level and there are insignificant fluctuations in the dynamics of this indicator due to the influence of market prices. However, during this period, the depreciation of fixed assets reaches up to 45%, the equipment is not restored at the proper level with the latest high-impact machines and equipment, and the proportion of buildings reaches 40%. We believe that to increase the efficiency of the use of fixed assets it is necessary to improve their structure so that the share of active assets reaches 50-60%, which will also affect the growth of labor productivity.

The turnover ratio of working capital shows an upward trend from 0.834 to 1.688. Thus, if in 2015 enterprises received 0.83 lei for every 1 leu of the value of working capital, then in 2019 - 1.68 lei. However, the analysis shows that this increase occurred both due to the increase in sales income from 141462 thousand lei to 210661 thousand lei for this period, and due to the decrease in the average annual value of current assets from 169541 thousand lei in 2015 to 124,903 thousand lei in 2019, which affected the increase in the turnover ratio of accounts receivable arrears.

We consider it necessary to note the following: enterprises in the process of production activities should strive to increase not only the volume of sales, but also maximize profits by reducing the cost of sales. The dynamics of business activity indicators of the agricultural enterprises in Rybnitsa and the Rybnitsa district for 2015-2019 is shown in Table 3.

		Ryblittsa and the Ryblittsa district for 2015-2017					
	Indicators	Years					
		2015	2016	2017	2018	2019	
1	Asset turnover in days	760	793	689	676	507	
2	Turnover of working capital in days	438	450	331	300	216	
3	Inventory turnover in days	261	252	268	312	240	
4	Turnover of accounts receivable in days	237	247	186	115	37	
5	Turnover of accounts payable in days	861	899	763	687	874	
6	Duration of the operating cycle, days	498	499	454	427	277	
7	Duration of the financial cycle, days	-363	-400	-309	-260	-597	

Table 3. Dynamics of indicators of business activity of the agricultural enterprises ofRybnitsa and the Rybnitsa district for 2015-2019

Source: calculated by the author on the basis of the database of the enterprises of the Rybnitsa district.

Analyzing the turnover of assets of agricultural enterprises of the town of Rybnitsa and the Rybnitsa district, we can note a significant acceleration in turnover compared to the previous years. The asset turnover cycle decreased by 253 days compared to 2015, which is assessed positively. The current assets in 2019 made 1.69 turnover, which corresponds to 216 days. Thus, the period of circulation of working capital decreased by half during the analyzed period. A significant acceleration in the turnover of current assets of enterprises occurred as a result of the increase in the turnover of accounts receivable from 1.54 turnover in 2015 to 10 turnover in 2019, which averaged 37 days for repayment of accounts receivable from the moment of its occurrence. At the same time, there is a slowdown in inventory turnover from 2015 to 2018, and then an acceleration in turnover in 2019 by 0.35 turnover compared to the previous year. The slowdown in the inventory turnover occurred as a result of the outstripping growth in the cost of sales. The inventory turnover can be accelerated by improving the inventory management policy, optimizing them and reducing the cost of sales.

The acceleration of the circulation of working capital, both in general and their individual elements, has a positive effect on the efficiency of agricultural enterprises as a whole and indicates the increase in the efficiency of the use of working capital, which is a criterion for effective financial management. All this was reflected in the reduction of the duration of the operating cycle of enterprises. At the same time, the turnover rate of accounts payable is high, so the monetary (financial) cycle is a significant negative value. This means that these enterprises have overdue debts to suppliers, which may negatively affect the future relationship of the agricultural enterprises with suppliers of seeds, fertilizers, fuel, etc., and this, in turn, affects the financial results. Some suppliers prefer to cooperate only with those companies that have a positive financial cycle.

The development of a financial strategy and fundraising, knowledge of alternative ways to raise funds are pressing issues that determine the success and viability of enterprises. Many enterprises "burn out" due to the fact that they cannot find the funds required to carry out their economic activities. At the same time, banks have credit lines worth tens of millions of dollars at their disposal, however, many enterprises, primarily small or new, cannot receive the required financing from credit resources.

The problem of obtaining funds for small enterprises that are just starting a business is significantly different from what large enterprises face at the stage of their development. To raise funds it is necessary to perform mandatory steps, including:

1. One should know himself and his own business well.

2. One study all alternative financial opportunities, the requirements of each of them and analyze which of them is the best in one's situation.

3. One should be prepared to consider the possibility of financing from several sources.

If the owner has started the process of creating a business, he should arm himself with courage and patience, as it can stretch for several months. In addition, it will require a full return from the owner. In general, a business can be financed both by a credit (loan) and by capital gains (investment in capital). In order to have the necessary financial base for development, one should use both types of financing. However, the relationship between liabilities and investments in capital, as well as the time required to obtain these resources, may differ.

It is extremely important to know the criteria that use different sources of financing and which are available at the moment, in order to receive funds at the right time and at an affordable price. In the vast majority of transactions, the owners of capital expect to receive income from investments made in a particular business. To assess potential opportunities, fund providers usually use certain methods of risk/profit analysis or optimal cost analysis. This means that they expect higher returns when the risk is increased, or expect at least the same returns that alternative investment options offer.

The task of an entrepreneur is to obtain the cheapest financing. The art of financial success consists in convincing capital providers that the project for which funds are being requested has little risk. To achieve this, an entrepreneur need:

- offer personal guarantees or enterprise guarantees when requesting a loan;

- promise a refund in a short time, during which investors will be able to verify the solidity of the business, and not in a long time, during which the financial condition of the enterprise may be ambiguous;

- offer investors certain types of business control stipulated by the loan agreement or participation in the management of the enterprise (for example, a position in the administrative council);

- demonstrate the desire and ability to manage through sociability, high moral qualities, effective management of the current activities of the enterprise and clear prospects for its development.

If there is a choice, then it would be quite reasonable for an entrepreneur to opt for such an informal investor who could be a good expert and whose interests would coincide with the interests of the enterprise.

Another major category of capital investments is loans. As in the case of capital investments, when raising a loan, it is important not to wait for the moment when the need to meet with the lender will result because of the extreme need for funds. Then, when a financial crisis is inevitable and the financial statements of the firm clearly indicate this, creditors have quite convincing motives to question the entrepreneur's ability to manage and plan.

Investment in fixed assets is the main component of financial management. To identify how the amount of investments affects the main economic indicators of the agricultural enterprises in the Pridnestrovian region, the corresponding grouping was performed, Table 4.

			1 ha. acrea	ge for 2018
Indicators	Groups of farms as	Total, on average		
	I – up to 2500	II – 2501-3000	More than 3000	_
1. Number of households	186	135	151	472
% of the total	39,4	28,6	32,4	100
Acreage, ha	74400	50203	53200	177803
% of the total	41,8	28,2	29,0	100
2. Investments per 1 ha of	1383,6	2489,3	3601,3	2550,4
acreage, lei				
% to group 3	38,4	41,4	100	70,8
3. Profit received per 1 ha of	954,3	1084,4	1450,1	1115,2
acreage, lei				
% to group 3	65,8	74,7	100	76,9
4. Profitability of products	18,9	26,3	43,2	35,1
sold, %				
Difference in p.p. % to group 3	- 24,3 p.p.	-16,9 p.p.	Х	-8,1

 Table 4. Grouping of agricultural enterprises by the amount of investments in fixed assets per

 1 ha, acreage for 2018

Source: calculated by the author on the database of the enterprises of the Pridnestrovian region

The results obtained show a certain dependence of the level of economic efficiency indicators and the amount of investment in fixed assets per 1 hectare of acreage:

1. Investments per 1 hectare of acreage in the first group of farms are less in comparison with the second group by 74.7% - 65.8% = 8.9%, and in the second group, compared with the third, this amount is less by 100 - 74.7% = 25.3%.

2. As investments grow from 1383.6 lei in the first group to 3601.3 lei, we observe an increase in the amount of profit from 954.3 lei in the first group to 1450.1 lei in the third group. Accordingly, the profitability of products sold by groups is growing from 18.9% to 43.2%.

Further, the author calculated the additional profit of enterprises from group I and II if they reached the level of group III and received a profit per hectare of acreage in the amount of 1,450 lei/ha:

1. Calculation of the lost profit per 1 hectare of acreage:

Group I: 1450.1 lei – 954.3 lei = 495.8 lei/ha;

Group II: 1450.1 lei – 1084.4 lei = 365.7 lei/ha.

2. Calculation of additional profit per 1 hectare of acreage in group I and II of enterprises, if they had reached the level of group III:

Group I: 74400 ha x 495.8 lei/ha =36887 thousand lei;

Group II: 50203 ha x 365.7 lei/ha = 18359.2 thousand lei.

Total of groups I and II: 36887 thousand lei + 18359.2 thousand lei = 55246.2 thousand lei

The results obtained demonstrate that if these 321 enterprises of group I and II had reached the profit level of the third group, they would have received an additional profit of 55246.2 thousand lei more in 2018. But for this, enterprises need additional investments.

Calculation of additional investments for the enterprise from group I:

3601.3 lei/ha – 1383.6 lei/ha = 2217 lei/ha.

Calculation of additional investments for an enterprise from group II:

3601.3 lei/ha – 2489.3 lei/ha = 1112 lei/ha.

This could be achieved if the enterprises of the Pridnestrovian region had more opportunities to attract investment. These investments can be attracted from various international projects and funds.

Consequently, the main factor in the growth of the efficiency of the agricultural enterprises in Pridnestrovie is the investment in fixed assets, primarily for the introduction of new equipment and technology.

In this context, attention should be paid to the structure of organizational and legal forms of the agricultural organizations in the region.

**Conclusion.** The balance sheets analysis of the agricultural organizations during the period of five years indicates the presence of significant problems in the quality of assets and their structure.

Thus, 588 agricultural organizations operate on the left bank region, of which 562 organizations have 100-500 hectares of land in use on lease terms [5].

In practice, small-scale production takes place, which makes it difficult to attract investors. Their technical equipment is extremely low. Their purchase of expensive agricultural machinery is unrealistic and economically impractical. Therefore, there is an inefficient use of land, crop losses during harvesting and storage, there is practically no processing of agricultural raw materials and production of food products on the ground.

Based on this, one can conclude that the fragmentation of land by small users does not allow organizing agricultural production on a scientific basis due to their financial insignificance.

There is also a tendency to slow down the turnover of working capital as a result of the growth of stocks, which may lead to their unsecurity by the total amount of formation sources, and, accordingly, to a financial crisis.

The current situation indicates the weakness of financial management and the effectiveness of managerial work in general at the regional level, agricultural organizations, and, accordingly, the efficiency of enterprises and the profitability of assets in particular [6].

#### **References:**

- 1. Trach D., Nauchnye osnovy menedzhmenta, Rybnitsa: OAO "Rybnitskaia tipografiia", 2019. 300 p.
- 2. http://mer.gospmr.org/gosudarstvennaya-sluzhba-statistiki.html
- 3. Grigorjeva T.I. Finansovyi analiz dlia menedzherov: otsenka, prognoz. 3-e izdanie. Moskva: IUrait, 2019. 486 p.
- 4. Upravlenie delovoi aktivnost'iu selskokhoziaistvennoi organizatsii. Monografiia / D. M. Trach; Rybnitsa: Teslain. 2023.– 169 p.
- 5. Trach D., Sotsial'no-ekonomicheskoye razvitiye severnogo regiona Pridnestrov'ya i puti yego uluchsheniya. Pod obshchey redaktsiyey Tracha D. M. Rybnitsa:B.i., 2022(Teslayn). 291 p.
- Trach D.M., Melnichuk L.D. Upravlencheskii personal effektivnost' i otsenka. Nauchnyi zhurnal "Vestnik universiteta". No 11, 2019. Moskva: Izdatel'stvo GOUVPO "Gosudarstvennyi universitet upravleniia", 2019. P. 42-48. ISSN 1816-4277.