

Improvement of Operational Management of Cash Flows as a Factor of the Growth of Business Activity of Agricultural Enterprises in the Region

Kukushina O.S.

Yaroslav-the-Wise Novgorod State University,
Veliky Novgorod, Russia,
Olga.Kukushina@novsu.ru

Vinogradova N.I.

Yaroslav-the-Wise Novgorod State University,
Veliky Novgorod, Russia,
Nina.Vinogradova@novsu.ru

Abstract—Agricultural production is a risky industry, which is recognized all over the world. In this regard, the state is obliged to form, improve, and implement effective mechanisms to support agricultural producers, primarily financial. Analysis of the situation in the industry of the region indicates a significant reduction in financial support by the end of 2019 by 442 million rubles. This led to a slight decrease in the number of commodity producers, the share of profitable enterprises capable of creating conditions for sustainable economic development of the region. The article is devoted to the study of the process of cash flow management in agricultural enterprises of the Novgorod region as a factor in the growth of their business activity. The study of the regional system of cash flow management in the Novgorod region made it possible to describe its basic principles of operation and form recommendations that can be applied considering possible risks of further development. At present, agricultural producers in the Novgorod Region have not yet developed a fully functioning cash flow management system. An analysis of the existing mechanisms for managing cash flows indicated problems that, ultimately, can lead to cash gaps and insufficient own funds. Thus, in the conditions of not fully formed effective economic mechanisms to support agricultural producers, the unstable situation in international trade, the development of new forms and methods of cash flow management with a focus on the seasonality and cyclical nature of their activities is of particular importance.

Keywords—*sustainable development of the region, cash flow management strategy, payment calendar, business activity*

I. INTRODUCTION

Agriculture is a multipurpose sector that combines a number of life-supporting functions of any state, primarily food security [1].

Despite the small share of the industry in Russia’s GDP (in 2018 – 4%), it has a very significant impact on the nature and pace of social, economic, and demographic processes in the country.

From the point of view of the nature and pace of development of agricultural production, the Novgorod region reflects all-Russian trends. The volume of production in value

terms has increased over the past few years by an average of 41% and amounted to 44.5 thousand rubles per capita (28th place among the regions of the Russian Federation). The largest increase in production is characteristic of potato growing (62.3%) and vegetable growing (86.7%). This is due to a significant increase in demand for these products, due to an increase in meat prices, affordable prices for greenhouse vegetable products [2].

The share of livestock products in the total agricultural production accounts for 69.7%. The share of products of large enterprises in this industry is 75%, households – 19.2%, farms – 5.8%. In the last two categories, in contrast to the first, crop production prevails in the structure of production [2].

Over the past 5 years, the balanced financial result of the industry decreased by 52% and made 345.7 million rubles. The profitability of products of agricultural enterprises in the Novgorod region annually decreases by an average of 2-3 percentage points. At the same time, the amount of losses per enterprise increased significantly, by 2.3 times. Over the past two years, the average difference amounted to 4 million rubles. This indicates problems in the industry and ineffective regional regulation. The result of this situation in the region’s industry was a decrease in the number of agricultural enterprises from 893 to 806 [2].

Agricultural enterprises carry out their activities in an economically unstable and not always informationally defined external environment, while not having objective opportunities to influence or counteract it. At the same time, they form the conditions and factors of the internal environment that are able to neutralize the influence from outside. Initially, the indisputable and objective condition for the activity of agricultural enterprises is the presence of capital and the peculiarities of its structure. However, this is not a guarantee of profit formation. One of these conditions is the organization of an adequate to the factors of the external environment and capable of realizing internal goals (sustainable development), operational management of cash flows [3]. The management and evaluation of its results should consider such very important industry features as the prolonged period of

production, the use of living organisms, land and soil resources as resources, the seasonality of production, a significant proportion of non-working, natural processes, etc.

One of the main problems in the agricultural sector is the problem of organizing a financial service capable of adjusting the work for effective and flexible management of cash flows, which determine the financial condition and business activity of enterprises, the effectiveness of the entire range of management decisions taken.

Agricultural enterprises of the Novgorod region are not satisfactorily stable, since at the end of 2019 financial indicators are below the recommended standard values. Several factors contributed to this. Firstly, in 2019 there was a significant decrease in the quick liquidity ratio, which indicates a deterioration in the solvency of enterprises. Their ability to repay liabilities has declined both in the current period and in the long term.

Secondly, the ratio of borrowed and own funds of agricultural enterprises in the region indicates a decrease in autonomy. Thus, there are 1.656 borrowed funds per unit of own funds. The slight increase in the indicator in 2018 compared to 2017 did not bring it into the range of recommended values. The dynamics of the coefficient of mobility of funds indicates that only 48.9% of the property of agricultural enterprises in the Novgorod region can be used by them to cover obligations.

II. RESULTS

The strategy of agricultural enterprises of the Novgorod region should be aimed at increasing business activity, as a fundamental factor in the growth of the quality of life of the population and sustainable convergent development of the region as a whole. Nevertheless, the performance results indicate a slowdown in the turnover of such the most mobile part of assets as working capital, primarily feed, fuel, planting material, fertilizers, etc. Now they are in the form of inventories and work in progress for a longer time (within 176 days), which is confirmed by a similar dynamics of the turnover ratio of inventories, the period of which in production has increased by 16 days. Objective reasons explaining the situation are unfavorable natural and climatic conditions in summer and winter, destructive for both commercial and forage crops. For several years, African swine fever broke out and as a result, young animals and fattening animals were destroyed.

As a result of the combined influence of factors, the duration of the operating cycle increased slightly (by 18.9%). Current assets of enterprises are consumed in full within 163 days. The period during which business entities receive payment for products sold has increased by 10 days (23.4%), and the rate of payment of debt by them by 35 days (53.8%). The positive is the excess of the turnover rate of accounts payable over accounts receivable by 2 times. This means that enterprises have a source of additional financing in a larger volume than they expect to receive from counterparties. The effective use of funds is evidenced by the reduction in the duration of their turnover (by 1.9%) and the financial cycle (by 12.9%), which lasted 62 days in 2019.

The changes that have taken place cannot be considered significant and negatively affecting the activities of

agricultural production in the region, since all the values of the indicators are at an acceptable level for this industry (the time frame for obtaining a return from each resource used does not exceed a year).

At the same time, it is necessary to analyze and assess the ratio of the volume of inventories and proceeds. It is necessary to take measures to improve the sales conditions, improve the quality of products as a factor of its competitiveness, monitor compliance with the standardized level of working capital, avoiding the emergence of surpluses that divert additional resources from circulation, and shortcomings that lead to interruptions in work and make it difficult to survive in conditions of objectively seasonal activities.

Important markers of the efficiency of cash flow management are the profitability indicators of various aspects of the activities of agricultural enterprises [4].

The decrease in the level of main and private indicators of profitability allows us to judge that during the analyzed period, the activities of agricultural enterprises were not positively effective. A decrease in the turnover of assets involved in operating activities in 2019 led to losses for each of their units.

Thus, the solution of issues of effective management of available resources, the search and implementation of unused reserves for their increase, improvement and preservation remain important in the process of carrying out the activities of agricultural enterprises, primarily operating.

In modern economic conditions, the development of methods of analysis, planning, accounting and cash flow management becomes relevant. An effective system of analysis and control is one of the most important factors that determine the prospects for the development of an enterprise, its current and future liquidity, financial stability, investment attractiveness, creditworthiness, and, ultimately, ensuring a solid business reputation [5]. However, the organizational structure of agricultural enterprises has its own characteristics due to the specificity of production processes. In this connection, the funds should be distributed rhythmically in the process of activity at all stages of the circulation "M-G-M" and minimum but sufficient volume should be kept on the account of the enterprise [6].

A biased assessment of the situation and inappropriate management decisions can lead to cash gaps and a shortage of funds [7].

An analysis of the volumes, dynamics and nature of cash flows indicates that an efficiently working cash flow management system has not been formed in the region. In many agricultural enterprises, management decisions in the field of cash flows, as a rule, are made based on the experience, intuition and preferences of managers and employees of the financial service, not supported by real calculations, analysis, and interpretation of planning results.

One of the main problems of the cash flow management system is the absence of any (short-term / long-term) strategy for cash flow management [8]. In addition, there is no planning (neither classical nor flexible) of cash flows. Along with planning, a systematic analysis of cash flows is not carried out, and the processes of planning and analysis of cash

flows in many enterprises are far from the ideas and principles of digitalization.

The current financial situation in agricultural enterprises of the Novgorod region indicates the need to create certain business processes that will allow structuring data on the availability and flow of funds, establish priority areas for spending and sources of income that provide the greatest benefits. As a result, accounting, complicated by agro-industrial specifics, will be freed from the need to control the flows of financial resources, and all issues related to their formation, spending and planning will be transferred under the direction of the financial director [9].

The retrospective and prospective analysis of cash flows contributes to obtaining reliable data on the activities of business entities and the development of scientifically based decisions that improve their financial condition [10].

The cyclical nature of the activities of agricultural enterprises and the unpredictability of the production process makes it necessary to change the cash management system in such a way that, if they are scarce, they are spent in the most significant areas, without creating cash gaps, additional losses and debts that negatively affect the solvency of economic entities in the region [11]. For this, the priority of payments should be established, considering the degree of negative financial consequences:

- first of all, payments, the term of which is specified in the contract and the delay on which can cause serious consequences for the enterprise, for example, penalties or deterioration of business reputation (payment of taxes and repayment of loans);
- 2nd stage, payments for which a delay in payment for a period of up to 3 days is permissible without serious consequences (payment of wages, payment to the main suppliers) [6];
- 3rd stage, payments, the payment terms of which can be postponed for more than 3 days [9].

Therefore, despite the enormous importance of budget planning, enterprises need to form a payment calendar and change its structure, considering the specifics of management in such a way that:

- 1) it can reflect the cash balances at the beginning and end of the period, with details by their location (in cash, in bank accounts), which serve as the basis for making rational management decisions on the use of financial resources from specific sources for the most appropriate purposes;
- 2) the items of cash inflow and outflow corresponded to the data of the cash flow budget in order to avoid difficulties in monitoring the implementation of the established limits;
- 3) the level of detail of the plan allowed the financial service to respond in a timely manner to cash shortages and take prompt measures to maintain the liquidity of the enterprise in the short term;
- 4) limits on budget items should be controlled by reflecting the planned and actual values of the calendar indicators and their analysis;
- 5) the analytics on the items of the movement of funds can correspond to the information needs of management and the

conditions for carrying out the activities of the enterprise [12].

Drawn up for the short term, the payment calendar allows distributing the inflows and outflows of funds with details for each day and line of business. Its main goal is to identify the balances of financial resources at the beginning and end of each period, and the need to minimize their surplus or fill deficiencies [13].

Also, with its help, the riskiest operations of the enterprise are traced in terms of the occurrence of cash gaps. As a result, it becomes possible to timely detect “bottlenecks” in the process of cash flow, as well as reserves that can be used for their redistribution to ensure a more rational use. A visual representation of this process is the most convenient form of financial resource management, which is especially important in the context of unstable prices for agricultural products, the dynamics of which can have a significant impact on the amount and rate of change in enterprise costs. The payment calendar allows distributing upcoming payments in a short period so that the company’s cash balance is at the minimum acceptable, but necessary level [14].

Such planning is carried out based on data from all departments of the enterprise regarding the expected volumes of production, sales, taxes, etc. That is, in one document all the most important final performance indicators are summarized with the possibility of making changes to reduce the tax burden, improve the financial condition of an economic entity.

The advantage of the payment calendar in comparison with the cash flow budget is its construction, considering the existing contracts and primary payment documents. This means that in the current situation, this document ensures the formation of a schedule for the receipt and expenditure of financial resources in such a way that the most urgent payments are payable first, and the funds remaining at the disposal of the enterprise are at the minimum necessary level corresponding to its needs in the near future. A well-designed payment calendar is characterized by a slight excess of its income over expenses and deductions.

In the current practice of market relations, the most difficult moment in drawing up a payment calendar for an agricultural enterprise is forecasting the flow of funds at any given time.

As the analysis of the practice of planning cash flows in several agricultural enterprises shows, the amounts of actual payments differ significantly from those planned. First, this is due to the absence or insufficient cash flow on the day when payments are scheduled. As a result, their terms are violated, the volume of accounts payable is growing. There are obligations to pay penalties and forfeits provided for in contracts, to hastily redistribute available funds in the most important areas. All this negatively affects the expediency of the work of an agricultural enterprise.

The study also revealed that all departments involved in the processing of economic information and associated with making management decisions do not sufficiently use computer software. The modern information technology market offers many programs that can be configured in accordance with the needs of the enterprise and features of his activities to solve this problem. For the purposes of planning and analyzing cash flows, programs such as SAP, Intalev,

Microsoft, Alt-invest or 1C: Financial Planning are widely known and applicable [15].

The most versatile and understandable program is 1C: Enterprise, the standard set of functions of which at the initial stages of implementing changes allows avoiding mistakes and obtaining results that have a beneficial effect on overall performance. The block “1C: Financial planning” is expediently complementary to it (version 8.3) [16].

The combination of the proposed measures and adherence to the established regulations and plans will allow agricultural enterprises of the Novgorod region to bring the cash flow management system to a qualitatively new level and use the available financial resources as efficiently as possible, taking into account the rapidly changing external and internal economic conditions. In the long term, this will make it possible to achieve a significant synergistic effect, contributing to the development of the regional economy and improving the quality of life.

III. CONCLUSION

The relevance of the presented results, their scientific and practical significance is due to the need to modernize the university development model to ensure the balance of the regional economy and meet the needs of its promising economic structure, as well as create a mechanism for the effective use of the university in regional development [17]. The scientific results presented in the article are important for organizational science – from the point of view of studying the features of the practices of managing interactions of participants in regional ecosystems “University-Region”; for the economy – from the point of view of analyzing the economic component of the modernization of interaction between universities and regions, as well as an increase in the third role and responsibility of flagship universities for the development of the region.

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