FORMATION OF FINANCING SOURCES OF CURRENT ASSETS OF AGRICULTURAL ENTERPRISES

The article deals with the peculiarities of financing sources formation of the agricultural enterprises’ working assets and the conditions of use of various finance management models of working assets and outlines their main advantages and disadvantages for the enterprises of the agro-industrial complex. On the basis of critical analysis, it was proposed a normative management model of the investigated object as an optimum from a position of effective functioning of a company and the possibility of expanding the spectrum of financial resources attraction.

As a result of the study, it was discovered that the issue of choosing the optimal model for managing the structure of current assets financing sources nowadays is of particular importance in the financial and economic conditions of Ukraine. Therefore, it has been found out that among the currently known variants, the most suitable for agricultural enterprises is a normative model that allows using cheaper financial resources and lowering the risk of company’s liquidity reduction.

Key words: current assets, financing sources of an enterprise, self-financing, profit, valuation.

Introduction. The current economic environment is characterized by the influence of a large number of negative attributes, among them are: the global economic crisis, globalization of economic processes, creation of a number of additional international institutions and tough competition. In light of the outlined factors the acute question raises to maintain economic stability of entities and provide accelerated development of all sectors of the national economy. Considering the fact that the basis of the economy operation in Ukraine is the agricultural sector, we raise the question to enhance the influence and focus the actions concerning the development of this sector of the national economy.

Now the process of agricultural production is accompanied by reduction of land and material-and-technical resources, and is exposed to influence of a number of objective and subjective factors. They require implementation of innovative methods into production process that can neutralize the negative moments on the one side and on the other – to concentrate resources on priority areas: increasing of investment and spending with the aim to ensure efficiency of economic activities of agricultural enterprises and food security of the country.

Taking into account the seasonality of production, which is the defining feature of functioning of agricultural enterprises, the prerogative task is to ensure stability and continuous activity of enterprises in this sphere. We can obtain the above said by using internal and external leverage. The internal can include achieving of economically grounded correlation of sources of financing of current assets and external – development of a coherent and consistent program and methodical approach to search modern mechanisms of business management.

It is unstable economic situation, high inflation, increase of competition, enhancing of cost of credit resources that forced agricultural enterprises to change its strategy and tactics for finding alternative sources of financing of current assets that can provide their stable functioning.

Under modern conditions the problems of current assets management in general, and their financing sources in particular, are not just important, but the primary task of agricultural enterprises which positive solving directly affects ensuring of regular production process, increasing the volume of products creation, increase of their paying capacity. However, the current exploratory works are mostly results of the study of assessment of financing
sources of current assets. A scientifically reasonable ratio between own and attracted financing sources of current assets, minimizing of payable accounts as a source of financing, the use of bank loans to restore their element regulation and changes in organization of accounting still need to be solved.

**Literature Review.** The issue of current asset management is the object of attention of scientists over a long period of time. However, changes in the conditions of management and approaches to scientific substantiation of financial and economic aspects of the activity encourage searching for new variations in this area. In particular, recent studies emphasize that in order to achieve optimal results, it is necessary to be able to structure the sources of financing current assets and manipulate their composition to ensure the continuity of production at all stages of the economic about-face.

So, these problematic issues were considered by many scientific scientists-economists. In particular, the most important concepts of finances explaining the organization and main principles of developing the financial activity of enterprises are highlighted in the scientific report «The Basics of Finance: An Introduction to Financial Markets, Business Finance and Portfolio Management» Drake P. and Fabozzi F.J. [14]. Identifying cause-effect relationships of the financial activity, V. Kovaliev [5], Brigham U. and Gapensky L. [4] outlined the impact of a number of indicators on the results of the enterprise operation through the prism of financial analysis. These data criteria are now crucial in identifying the current state of financing current assets of agricultural enterprises and finding promising directions for its optimization.

Tarankov B. [10], B. Bechko [2], as well as Z. Hacherová and P. Szovics [15] focused on the peculiarities of forming and finding ways to improve the organization of current assets of agricultural enterprises outlining the decisive moments of their financing. Having analyzed the financial situation of enterprises, A. Checheta [11] stressed the need for proper financial support of current assets, based on their crucial role in the implementation of agricultural activities, characterized by significant peculiarities of production.

Scientific works by V. Andriyuchk [1] are monumental in terms of determining the role of own and loan capital in the formation of sources of financing current assets of agricultural enterprises. The author emphasizes the need to attract the latter into the production process which will enable to achieve its relative stability and improve the performance of enterprises in this area.

The work of the author’s team consisting of O. Stoianova, E. Bykov and I. Blank [9] is interesting for our study. They focused their attention on current asset management. As a result, they think that a considerable attention should be paid to sources of financing current assets for the successful functioning of the enterprise, especially the agricultural sector. This will establish production activities and help to increase profitability of the enterprise. Iva Živilova and Radka Redlichova [22] stress the need to stabilize financing of agricultural enterprises through investments.

The useful and decisive moment for this research was the work of R. Mann and O. Bilyk [18]. By means of factor analysis, they outlined the factors that affect stability of the economic growth of the Ukrainian agricultural enterprises and emphasized the importance of the impact of current assets on the results of studied enterprises.

O. Vovchak and V. Rudewska [21] emphasize the need to use bank loans as an additional source of financing innovative development of enterprises which will increase the circulation of current assets. This opinion is supported by L. Lipych, S. Bortnik, O. Tovsteniuk, O. Khilycha and M. Kushnir [17].

Works of the above-mentioned scholars cover the current situation of problems of current asset management in general and sources of their financing, as well as the assessment of the scientifically based ratio of sources of financing current assets. These moments became the impetus for the research and identified directions for its implementation.

**Aims.** The study aims to identify the main trends of management of financing sources of current assets of agricultural enterprises and highlight practical recommendations for the prospects of their improving and implementation into production activities of economic entities of this sphere.

**Results.** Transition to a market-oriented economy in terms of post-Soviet economy proved to be long-lasting and quite problematic for agricultural enterprises. Lack of provision of the entities of agricultural sector with current assets became a primary reason for this. Weakening of the state’s role in regulation of the food sector of the country’s economy and lack of economic instruments to improve credit mechanism in agriculture came to be the basis of the above-mentioned issue. Also global economic crisis added extra negative conditions.

But now, regardless of the preconditions that provoked the current state of the agricultural sector, there is an urgent necessity to prepare measures for improving the efficiency of agricultural enterprises activity in general and management of current assets in particular. Hereby reserves of sustainable development and profitability of agricultural production and increasing the efficiency of current assets use are set in rational organization of their management, scientifically proved proportion of
financing sources, reducing of production cycle, increasing of gross production output and decreasing of its cost price.

However, one of the most important factors that always affect the circulation of agricultural production is seasonality of the process. Because of it, enterprises of the agricultural sector have to accumulate current assets of the production sphere during some periods, including inventories which will not be involved in the production process for a long time. This fact has a negative effect on efficiency of using current assets and leads to slowdown of their rotation and inefficient use in times of decline in production.

An effective way out from the situation mentioned above is conducting a constant monitoring of available financing sources of current assets by agricultural enterprises. The results of these studies should be used for development of methodical approaches of effective management of current assets, and also measures for searching the variants of their scientifically proved proportion that can provide savings in production costs, resource and energy conservation.

O. Stoianova [9, p. 340] and Brigham U.F. [4, p. 434] while studying this issue concluded that the value of borrowed funds for financing of current assets should not exceed 30% of the value of equity capital in agricultural enterprises.

That is why, current economic conditions of agricultural enterprises require formation of financing sources of current assets at a fixed amount which would meet scientifically proved proportion between own and borrowed financing sources.

Thus, the main advantage should be given to own sources which amount has to provide both minimum and maximum need for current assets in order to keep financial independence and flexibility while funds using to ensure uninterrupted circulation of production.

This issue is reflected in the Regulations of the National Bank of Ukraine "On credit" [6]. In particular, this regulatory document says that the main criterion for evaluating the credit solvency of the borrower is his security with own funds of at least 50% of all his expenditures.

Conducted estimation of the state of financing sources of current assets of the agricultural enterprises in Cherkassy region confirmed information indicated above, because own financing sources prevail in their vast majority. First of all, this demonstrates the desire of the agricultural enterprises to protect themselves from lack of sources of the current assets and inflation via above the normal accumulation of reserves. However, in modern terms it only strengthens the problem of paying capacity and poor financial situation because reserves convertibility slows down, efficiency of their use reduces and need for additional financing sources increases. The structure of financing sources of current assets of the agricultural enterprises in Cherkassy region is shown in Table 1.

<table>
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Structure of financing sources of current assets of the agricultural enterprises in Cherkassy region, by years [7]

<table>
<thead>
<tr>
<th>Years</th>
<th>Own financing sources of current assets</th>
<th>Bank loan</th>
<th>Accounts payable</th>
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<tbody>
<tr>
<td></td>
<td>amount, mln. UAH</td>
<td>share, %</td>
<td>growth rate in % by previous period</td>
</tr>
<tr>
<td>2009</td>
<td>2741,3</td>
<td>76,7</td>
<td>1,7</td>
</tr>
<tr>
<td>2010</td>
<td>2831,9</td>
<td>77,6</td>
<td>3,3</td>
</tr>
<tr>
<td>2011</td>
<td>3232,8</td>
<td>70,3</td>
<td>14,2</td>
</tr>
<tr>
<td>2012</td>
<td>4703,8</td>
<td>61,5</td>
<td>45,5</td>
</tr>
<tr>
<td>2013</td>
<td>4716,3</td>
<td>44,5</td>
<td>0,2</td>
</tr>
<tr>
<td>2014</td>
<td>5231,1</td>
<td>60,3</td>
<td>10,9</td>
</tr>
<tr>
<td>2015</td>
<td>5101,8</td>
<td>55,1</td>
<td>-2,5</td>
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</table>

The results of the conducted study indicate that agricultural enterprises financed on average 63.7% of current assets at the expense of own sources for the analyzed period. Their share in the structure of financing sources was from 77.6% in 2010 to 44.5% in 2013, and the growth rates were characterized by positive values, except 2015. Also, agricultural enterprises while lack of own funds to finance current assets used temporarily free funds of creditors according to the study. Data showed that accounts payable of large majority of agricultural enterprises of the region exceeded lack of own current assets during 2009–2015.

However, uncontrolled use of accounts payable as a financing source leads to the fact that individual agricultural enterprises wipe out bad management.
connected with the operating activity at the expense of accounts payable.

Proportion breaking between own and borrowed sources of financing led to share growth of accounts payable in general structure of financing sources of current assets. In particular, if a share of own financing sources was 76.7%, accounts payable was 15.9% in 2009, then these indexes became 55.1% and 41.3% respectively in 2015. Thus, a share of own financing sources of current assets decreased by 21.6 percentage points, while a share of accounts payable increased by 25.4 percentage points in 2015 compared to 2009.

Choosing the sources of current assets formation is determined by several factors, the main of which is ratio of income and risk. Using of accounts payable as the main source leads to worsening of financial situation of agricultural enterprises. Although the latest has a significant advantage as cost-free use of funds unlike paid bank credits.

However, in the case of abuse, using of funds of accounts payable is characterized by loss of business reputation of entities in consequence of breaking the payment discipline, and as a result, risk increasing as reduction of paying capacity level that leads to limitation of bank credits attraction.

Today, bank credits are one of the main financing sources of current assets despite existing internal capabilities of enterprises. In recent years, agricultural enterprises of the region significantly reduced attraction of bank credits. The reason of this is rise in NBU (National Bank of Ukraine) discount rate for the credit, and then - cost increasing of bank loans. Declared state soft-window facility of agricultural enterprises does not work in practice because banks limit farmers’ access to credits through long production season.

Another negative factor in credit terms between banks and farmers is absence of compulsory property insurance of agricultural enterprises, cancellation of single-item regulation of current assets, changes in accounting organization. In this connection, bank credits occupy a small part in the structure of financing sources of current assets of agricultural enterprises of the region over the period of study. And if this index was 7.4% in 2009, then it became only 3.6% or 3.8 percentage points less in 2015. Such situation with agricultural enterprises crediting prompts to search new forms of relations between farmers and financial - credit institutions.

One of such promising forms is factoring crediting. Its main advantage for both supplier and buyer is more efficient using of current assets and accelerating of their convertibility. Factoring provides minimization of risks for the buyer concerning purchased goods of poor quality, and growing the number of customers for the supplier whiles such minimization of risks. Besides, factoring operations contribute increasing of competitive ability in suppliers and enlarging the volume of purchased goods, work and services in buyers. Use of factoring operations also creates protection of need reduce for financing of current assets, limiting of the value of expenses connected with credits servicing, collection of accounts receivable and its accounting, protection against dubious debtors.

Conducted study of the agricultural enterprises in Cherkasy region showed that the effective management of current assets could be reached by proportions meeting in financing of fixed and current assets capable to ensure reproductive function. Fixed assets of the agricultural enterprises in Cherkasy region increased by 22.3% and current assets by 17.3% during the period from 2009 to 2015. There is a significant growth outpace of current assets over fixed assets in some years. Thus, it was 20.3 in 2009, 16.1 in 2010, 30.3 in 2013 and 7.9 percentage points in 2015. 1.77 UAH of current assets is due for 1 UAH of fixed assets in 2012, to 3.29 UAH in 2011, while the average rate was 1.98 UAH in the result of this situation over the period of study of the agricultural enterprises in the region.

Deformation of proportion between non-current and current assets is caused by financial problems and it is not associated with additional financing sources of current assets but with decrease in providing enterprises with basic means in the result of their mental and physical deterioration. Conducted analysis of indicated proportion depending on the size of agricultural enterprises showed that this index was 58.6: 41.4 at large enterprises; 41.8: 58.2 at medium ones and 20.9: 79.1 at small ones. Based on the above, we can confirm that only large enterprises are able to keep economically reasonable proportion between fixed and current assets.

Significant influence of financing sources proportion of current assets has a structure system of accounting under which financing of operation and investment activities carries out by a single current account [2]. Hereby distribution of balance sheet profit of agricultural enterprises does not expect obligatory use of its share for these activities financing. Accordingly, such system of accounting can be applied only at large enterprises which formed sufficient authorized capital and get a steady profit.

It is necessary to determine and keep to a particular model of current assets financing for efficient operation of agricultural enterprises.

Today, economics is known of four such models: ideal, aggressive, compromise, conservative [3, p. 45] (Table 2).
### Characteristic of models of management of financing sources of current assets

<table>
<thead>
<tr>
<th>Types of models</th>
<th>Description</th>
<th>Own current assets</th>
<th>Impact on volume of current assets</th>
<th>Degree of risk</th>
</tr>
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<tbody>
<tr>
<td>Ideal*</td>
<td>1. Current liabilities and provision are sources to cover current assets. 2. Current assets are equal to current liabilities and provision. 3. Net current assets are equal to zero</td>
<td>Own sources are not involved in financing of current assets and equal to zero</td>
<td>Characterized by constant volume of stocks, cash, current financial investments, accounts receivable</td>
<td>The riskiest from a perspective of liquidity loss</td>
</tr>
<tr>
<td>Aggressive*</td>
<td>1. Current liabilities and provision are sources to cover fixed amount of current assets. 2. Net current assets are equal to fixed amount of current assets. Own sources are minimal</td>
<td>Own sources are minimal due to which fixed amount of current assets is financed</td>
<td>Characterized by creating of minimum volumes of production stocks and conducting of tight monetary policy which result in financial costs due to lowering of sales volumes</td>
<td>Risky from a perspective of liquidity. There is a risk of production discontinuity</td>
</tr>
<tr>
<td>Compromise*</td>
<td>1. Current liabilities and provision serve as sources to cover fixed and approximately half of unfixed amount of current assets. 2. Net current assets are equal to the sum of fixed and approximately half of unfixed amounts of current assets</td>
<td>At the cost of own sources the fixed and approximately half of unfixed amount of current assets is financed</td>
<td>Characterized by the fact that in certain periods the company can have excessive volumes of production stocks that do not participate in the production process due to the specific of production</td>
<td>Minimum level of liquidity loss and minimal risk of production discontinuity</td>
</tr>
<tr>
<td>Conservative*</td>
<td>1. Current liabilities and provision serve as sources to cover current assets. 2. Net current assets are identical with current assets</td>
<td>At the cost of own sources all the current assets are financed</td>
<td>Characterized by creation of large-sized reserves of production stocks and monetary funds, performing of liberal credit policy. Excessive amounts of production stocks reduces the efficiency of current assets using</td>
<td>There is no risk of liquidity loss and almost no risk of production discontinuity</td>
</tr>
<tr>
<td>Normative (standard)**</td>
<td>1. Sources of covering fixed and unfixed amount of current assets is the normative value of current assets calculated using elemental standards. 2. Excess value of current assets is covered by bank loans</td>
<td>Normed current assets are funded at the cost of own sources and excess-normed current assets - by bank loans</td>
<td>Enterprise does not need to accumulate production stocks, which will not be involved in production process during the decline in production. Probability of stocks damage reduces due to their prolonged storage. Storage costs associated with the production stocks are decreasing.</td>
<td>There is no risk of liquidity loss and discontinuity of production process</td>
</tr>
</tbody>
</table>

*generalized by authors  
**offered by authors

Ideal model shows a situation when current assets by size are equal to short-term liabilities and own financing sources of current assets is equal to zero. That is, in this case, current assets are fully covered by accounts payable and current expenditure by their amount coincides “perfectly” with current liabilities. However, this model is unacceptable for agricultural enterprises unable to pay because of a high risk of bankruptcy. 34.1% of agricultural enterprises in Cherkasy region had a negative index of own financing sources of current assets over the period of study. Such model from a perspective of liquidity loss is the riskiest one; because the enterprise may be facing a dilemma whether to sell fixed assets to pay off short-term liabilities under unfavorable conditions (if it would be necessary to pay all the creditors once).

Aggressive model assumes that current liabilities and provision are sources to cover fixed amount of current assets. Also, use of own financing sources in a minimum amount is peculiar to this model. However, there is a risk of production discontinuity while using this strategy. This can cause problems in providing current paying capacity and financial stability of the enterprise. In addition to that, aggressive model allows creating only minimum
volume of production stocks needed to pay in advance in the production process.

Current liabilities and provision serve as sources to form fixed and approximately half of unfixed amount of current assets when applying a compromise model. That is why the enterprise can have excessive volumes of production stocks that do not participate in the production process because of seasonality in certain periods. There is a minimum level of liquidity loss and breaking of production discontinuity when using this model. Own financing sources of current assets must be no less than 75% of all their needs, and remaining 25% must be covered by bank loans in order to ensure conditions of a compromise model. That is, proportion between own financing sources of current assets and borrowed ones should be 1:3.

Conservative model assumes that only own funds can be financing sources of current assets. Agricultural enterprises achieve the highest financial stability under these conditions while limiting a growth rate of production output. At the same time, they cannot ensure the formation of additional assets in the periods of the most favorable market situation. However, such model for agricultural enterprises is absolutely unacceptable because of distinct seasonality of production and unnecessary large amount of current assets which are not used during a year but they are accumulated as a reserve.

In our opinion, normative (standard) model is the most acceptable for agricultural enterprises among four offered models of current assets financing. This model has withstood the test of time and has widely been used in planning and directive economy. Its basis is single-item regulation of current assets and sources of covering fixed and unfixed amount of current assets is the normative value. Estimation of the latter is based on calculations using the standards and covered by their own sources of funding. Excess value of current assets is covered by bank loans.

Under this model, the enterprise does not need to accumulate production stocks, which will not be involved in production process during the decline in production. Therefore, probability of stocks damage reduces due to their prolonged storage, storage costs are decreased, and as a result - production costs are reduced. In addition, there is no risk of liquidity loss and discontinuity of the production process. In view of the above, normative (standard) model is the most appropriate for management for financing sources structure of current assets of agricultural enterprises.

Use of normative (standard) model allows performing structure management of financing sources of current assets, promotes increasing a share of borrowed funds and production profitability. However, there is a negative side: decline of financial stability is observed by high profitability because paying capacity significantly reduces under share growing of borrowed funds in the structure of financing sources of current assets and the problem of debts repayment for credit institutions and counterparties appears.

Thus, choosing of appropriate management model of current assets depends on the financial condition of the enterprise in commodity and financial markets, its financial stability, specialists’ qualification, etc. However, it should be kept in mind that there is an economic limit of attracting loan capital, when reaching it the price increases to a critical point, absorbing positive effect achieved by its use. In addition, it should be taken into consideration while formation the mechanism of financial self-regulation that processes accompanied strategic and tactical business objectives influence on the dynamics of own financing sources of current assets of agricultural enterprises. Economic growth of the enterprise depends on its ability to finance the necessity in current assets and the availability of sufficient amount of own financial resources. A steady growth is known to be based on the level of involvement of borrowing credits (financial leverage), efficiency of assets use (return on assets), and net profit dynamics. Basic analysis of steady growth helps to determine the ability of agricultural enterprises to increase production and products sale under the condition that profitability and need for the current assets concerning sales remain stable. The enterprise meanwhile must comply with the relevant correlation between debt and own sources of financing.

**Conclusions.** Under current economic conditions the agricultural enterprises due to objective and subjective reasons prefer their own sources of financing of current assets, and funds in the form of accounts payable. Bank credit resources, unfortunately, are rather limited for enterprises of agrarian sphere due to the high risk of failure to return funds that triggered by specific of agricultural production. Under such conditions, the issue of choosing the optimal model of management of financing sources structure of current assets acquires particular relevance. Among the currently known variations, the most acceptable for agricultural enterprises is the normative model which allows using cheaper financial resources and lowering the risk of the company liquidity reducing. In addition, renewal of current assets norm setting, use of profit normative distribution and introduction of compulsory insurance of property will give farmers an opportunity to solve the problem concerning scientifically proven correlation between financing sources of current assets, which positively affect the efficiency of agricultural production in general and management of current assets in particular.
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