# PROBLEMATIC ISSUES OF FORMULATING AND FUNCTIONING OF WORKING CAPITAL OF UKRAINIAN'S ENTERPRISES

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**Abstract.** The Article considers the theoretical essence of the working capital of enterprise. Modern condition of formulating and using working capital of enterprise has been analyzed. Main problems of working capital's functioning have been found.

**Keywords:** working capital of enterprise, working resources, current assets, operating cycle, inventories, receivables, cash.

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## Introduction

The current state of Ukraine's economy is characterized by a decline in production, a deterioration of payment discipline, an increase in interest rates on borrowed capital and an increase in inflation. In such circumstances, the issue of providing enterprises with working capital and its effective use become especially relevant, as the working capital of enterprises has an impact on various aspects of their production and economic activity: on the indicators of production and sales of products, the use of material resources in production, the structure of the cost of production, the balance cash flows of operational, investment and financial activity, financial condition of enterprises.

Rational use of working capital is one of the main tasks of any manufacturing enterprise. In order to ensure continuous production, in the conditions of inflationary processes, crises, and increase of competition, effective formation and functioning of working capital by enterprises of Ukraine is important. This affects the ability to implement its own production program of the company, compliance with obligations to consumers, ensuring a stable financial situation and creating conditions for further competitive development.

#### Analysis of recent research and publications.

The theoretical principles of the formation and use of current assets are set forth in the writings of F. Quesnay, A. Marshall. J.S. Mill, A. Smith, S. Fisher, J.Schumpeter. Problems of methodology, theoretical and practical substantiation of issues related to the analysis and management of working capital have been reflected in the works of many domestic and foreign scientists: V.A. Anikina, I.O. Blank, .1. Boyko, V.M.Ivakhnenko, A.M. Podderyogin, O.M. Burma, P.G.Bunich, D.V. Lysenko, V.E. Leontiev, M. Matthews, M. Perra, F.F. Button.

Despite the numerous theoretical developments, the problems of studying the theoretical foundations of working capital remain fragmentarily investigated and require further scientific substantiation. The development of knowledge related to current assets is impossible without the use of categorical apparatus of economic theory, finance of enterprises and financial management.

#### Formulation of the problem

The purpose of the article is to study the various approaches of Ukrainian and foreign scientists to the definition of the economic essence of working capital, as well as to determine the problems of its formation and functioning in Ukrainian enterprises in modern conditions.

## Presentation of the main research material

In modern economic theory and practice, there are many different approaches to determining the economic essence of working capital and there are various concepts associated with it. These are such as current assets, working capital, working capital, net working capital, gross working capital, short-term assets, current assets.

The concept of "working capital" and "current assets" are identified by many economists and used as synonyms. As an economic category, working capital expresses the relations of purchase and sale of money, which in the market act as a unique commodity. The acquisition of such goods by an entrepreneur means the emergence of financial resources for the advance of circulating assets, which, unlike the capital, are of a natural and real form and are fully consumed in one commercial and commercial cycle.

The falsity of the identification of working capital with current assets is due to the fact that capital advanced in working capital takes its natural and real form and only after the end of the operating cycle of the use of working assets is returned in the same amount and form. But working capital, unlike assets, is not consumed or spent, but only advanced, in order to return after the end of each of its turnover in the same form for the next advance. But still capital is not all the cash advances in working capital, but only those that provide an economic, social or environmental effect.

On the basis of the investigated material, three approaches to the interpretation of the essence of working capital can be distinguished.

The first group of economists believes that working capital has a monetary nature, performs the function of payment service circulating and defines it as a cash advance for the formation of working capital and circulation funds (Roshtein L.O, Zelgavils I.V, Parfyaniak P.O., Usatov I.A., Bilyechenko O.G., Bodi Z., Merton R.).

The second group of economists defines working capital as mobile assets that are used and sold by the enterprise during the year or the operating cycle (M.K Kreinina, R. Breeley, S. Meyers, M. B. Bilyk, V. V. Kovalev, N. Rusak. A., Holt R.N, Blank I.O, Sheludko V.M).

The third group of economists defines working capital as an advanced value (Podderyogin AM, Filimonenkov O.S., Lee C., Finneret J., Van Horn J., Vahovich J., Brigham Y). In contrast to the above definitions, here emphasis is placed, firstly, on the moving, renewable nature of the value, which is only advanced and returns after each cycle in monetary form. Secondly, in the characterization of working capital as an advanced value, it is emphasized that the created additional product does not relate to working capital. According to this approach, working capital - financial resources invested in objects that are used by the firm either within a single reproduction cycle, or within a relatively short period of time.

This way, the turnover of working capital (Figure 1) is carried out during one production cycle: cash is advanced into production reserves, in the process of production, new products are created, products are sold (possibly on terms of commercial loans that cause the appearance of receivables), revenue for realized the product goes to the current account and is

re-paid to the production. If an enterprise operates efficiently, the working cycle of working capital ensures the continuity of the production process and the growth of capital of the enterprise, since in this case the proceeds from sales of products will exceed the funds advanced in production.



## Fig. 1. Circulation of working capital of the enterprise

In the organization of working capital it is necessary to distinguish between their composition and structure. Under the working capital stock means a set of its elements (articles). The structure of working capital - is the ratio between their individual elements in their total volume.

The composition and placement of working capital depend on the area in which it operates: production, trade and intermediary, services (including financial ones).

Improving the management of working capital of Ukrainian enterprises is largely due to the study of modern trends in their formation, the definition of factors that affect them, the rationale for the main reserves to increase the efficiency of such management. The study of working capital can be done through the volumes of the composition and structure of the current assets of economic entities.

Trends in changes in the volumes of assets of Ukrainian enterprises in recent years reflect their constant growth (Table 1).

These tables show that the valuation of non-current assets of Ukrainian enterprises in relation to GDP from 2009 to 2017 ranges from 144.3% to 200.1%. And the estimated value of current assets relative to GDP varies from 189.7% to 211.2% at the end of 2013. In general, changes in the volumes of working capital and non-working capital are comparable and have a single tendency. Along with this, the growth trend is characteristic both for volumes of working assets, and for irreversible ones.

Despite the fact that the volume of assets, including turnover and irreversible, increase, the value of the coefficient characterizing the ratio of GDP to their volumes, does not have a stable tendency

The increase in assets is accompanied by the influence of various factors that are positive and negative. The first group of factors includes the growth of the number of enterprises in the Ukrainian economy due to the need to attract additional funds, the transition of Ukraine to the National Accounting Standards (accounting standards) and, as a consequence, to new methods for estimating non-current and current assets, the development of the financial market and, as a result, empowering enterprises to make long-term and ongoing financial investments.

Table 1

Indicator **	At 31.12.								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP, milliard UAH	913,3	1082,6	1302,1	1408,9	1454,9	1566,7	1979,5	2383,2	2982,9
Total assets of enterprises, milliard UAH	3676,1	4097,0	4676,1	5419,7	5712,3	5994,3	8073,8	9991,8	9961,8
including non- current assets, milliard UAH	1749,2	1832,9	2051,0	2456,0	2639,8	2717,6	3960,1	4212,8	4303,3
% of GDP	191,5	169,3	157,5	174,3	181,4	173,5	200,1	176,8	144,3
current assets, milliard UAH	1926,9	2264,1	2625,1	2963,7	3072,5	3276,6	4113,6	5779,0	5658,5
% of GDP	211,0	209,1	201,6	210,4	211,2	209,1	207,8	242,5	189,7

# Dynamics of assets of Ukrainian enterprises in 2009-2017 \*

\* Without including the results of activities of banks, budgetary institutions, temporarily occupied territories of the Autonomous Republic of Crimea, Sevastopol and parts of the zone of anti-terrorist operation

\*\* calculated according to data (State Statistics Service of Ukraine)

The second group of factors includes the lack of adaptability of Ukraine to market conditions and, consequently, the presence of unjustified stocks due to ineffective management of them, the inflationary impact on the country's economy, which leads to the need for a revaluation of fixed assets and tangible assets, reducing the solvency of domestic enterprises, which is accompanied by the growth of such a component of current assets as receivables.

The economy of Ukraine suffered a deep decline in 2014-2016 due to political instability, the escalation of the conflict in Donetsk and Luhansk oblasts and the unfavorable situation on the world markets of the main export-oriented industries. Despite the fact that, starting in 2017, the economic situation improved against the backdrop of general stabilization of the macroeconomy, which was based on the growth of domestic investment, the growth of the general level of demand, agricultural and industrial production, construction industry and improvement of the situation on foreign markets. The sign of this is the gradual growth of GDP in recent years.

The structure of assets of Ukrainian enterprises is shown in Figure 2.

The diagram shows that the share of non-working capital in the structure of the assets of enterprises from 2009 to 2011 decreased from 47.6 to 43.9%, however, during 2012-2015 it grew to 49%. The next reduction of their share occurred in 2016-2017 years. During the research period, the ratio of irreversible and working capital remains in favor of working



#### Fig. 2. The structure of assets of Ukrainian enterprises as at 31.12. 2009-2017 years,%

We should also keep in mind that the type of economic activity of the enterprise and branch affiliation influence the structure of assets. The relationship between non-negotiable and current assets plays an important role in the management of current assets. On the one hand, the lack of current assets leads to periodic failures in the enterprise, reducing liquidity and reducing its financial stability, on the other hand, the lack of irreversible - the failure to meet planned production volumes, the lack of equipment and work premises and, as a result, to the deterioration of the economic potential of the enterprise.

At the same time, the previous amount of defense assets causes the company to have temporary free assets, inactive assets, excessive costs of financing, as well as a reduction in the company's profit; excessive volume of irreversible - to donate their usefulness and reduce the cost of the enterprise. Therefore, the optimization of the structure of irreversible and current assets requires the rejection of industry features, the duration of the operating cycle of the enterprise, the restoration of positive and negative features of the functioning of these assets.

In general, the formation of property by a business entity is a rather complicated process and depends on the real conditions of an enterprise's activity (Figure 3).

So, for industrial enterprises, a significant proportion of non-current assets is more characteristic, and for the enterprises of trade and enterprises of financial activity - the prevailing working capital. In construction and agriculture, working capital is also dominated by the structure, but more than 30% is owned by fixed assets.

For enterprises of all economic orientation, a small proportion of non-current assets and retirement groups is characteristic.

In the future it is necessary to analyze in more detail the working capital of domestic



enterprises (Table 2).

■ Non-current assets □ Current assets ■ Non-current assets and retirement groups

# Fig. 3. Structure of assets of enterprises by individual types of economic activity as at 31 December 2017,%

Table 2

# Dynamics of working capital components of Ukrainian enterprises in 2014-2017, UAH million\*

Indicator **	At						The pace of growth, %				
	01.01. 2014	31.12. 2014	31.12. 2015	31.12. 2016	31.12. 2017	2014	2015	2016	2017		
Inventories	553124,5	654061,8	850835,4	1046468,0	1294619,9	118,2	130,1	123,0	123,7		
Current biological assets	12409,0	13450,4	15782,4	18925,4	21488,7	108,4	117,3	119,9	113,5		
Receivables	1566626,5	1962772,1	2517203,5	3945631,4	3459248,2	125,3	128,2	156,7	87,7		
Current financial investments	229289,6	249932,8	225269,6	189081,8	167440,7	109,0	90,1	83,9	88,6		
Cash	95646,0	248656,1	301587,2	334528,3	365615,9	260,0	121,3	110,9	109,3		
Costs of future periods	37478,0	60485,6	82562,0	93097,0	87395,0	161,4	136,5	112,8	93,9		
Other current assets	75578,9	82595,2	115362,4	145084,6	255009,0	109,3	139,7	125,8	175,8		
Current assets	2670152,5	3271954,0	4108602,7	5772816,5	5650817,4	122,5	125,6	140,5	97,9		

\* Without including the results of activities of banks, budgetary institutions, temporarily occupied territories of the Autonomous Republic of Crimea, Sevastopol and parts of the zone of anti-terrorist operation

\*\* calculated according to data (State Statistics Service of Ukraine)

The table shows that there is an increase in the volumes of all components of working capital. In recent years, there has been a general tendency towards an increase in financial resources invested in accounts receivable. Not least this is due to the deterioration of settlement and payment discipline. Among all types, the largest volume of receivables of enterprises accounts for the arrears of buyers for shipped products. In the total amount of accounts receivable, settlements with buyers account for 80-90%

Analysis of the structure of working capital by the directions of investment at the macro level (Figure 4) shows that in recent years, the structure of working capital invested in current assets by individual articles almost did not change.



## Fig. 4. The structure of working capital of Ukrainian enterprises in 2014-2017,%

The share of working capital invested in inventories for the period 2014-2017 fluctuated by 1-2% and by the end of 2017 it is 22.9%.

The share of receivables during the 2014-2017 period has slightly increased (from 58.7% to 61.2%). The timely fulfillment of financial obligations between economic entities contributes to accelerating the circulation of funds and strengthening the financial position of enterprises, while the low level of settlement and payment discipline leads to the diversion from circulation of a significant amount of working capital, which is settled in the calculations.

Analysis of the dynamics of the specific weight of working capital in cash showed its increase more than twice during 2014-2017 from 3.6% to 6.5%.

The reduction of the specific weight of working capital invested in cash is a relatively positive trend, and its increase is relatively negative, since the amount of working capital in cash should be sufficient to make current calculations, but no more and not less, that is, the optimal amount which would not divert working capital from circulation and did not create excessive solvency.

The negative trend is a gradual reduction in working capital invested in current financial investments (from 8.6% in 2017 to 3% in 2017), which are highly liquid and, under favorable circumstances, can generate a stable income.

Insignificant is the share of such components as current biological assets and costs of future periods.

The next step is to consider the efficiency of working capital (Table 3).

Table 3

		Ye	ear	Deviation			
Indicator **	2014	2015	2016	2017	from 2015 to 2014	from 2016 to 2015	from 2017 to 2016
Net revenues, UAH million	4181654,0	5164124,3	6226583,2	7621974,8	982470,3	1062458,9	1395391,6
Net profit, UAH million	-590066,9	-373516,0	29705,0	168752,8	216550,9	403221,0	139047,8
Return on assets,%	-10,1	-5,3	0,3	1,7	4,8	5,6	1,4
Return on current assets, %	-18,6	-10,1	0,6	2,95	8,5	10,7	2,4
Reversibility of assets, days	504	490	522	471	-13,6	31,9	-51,0
Reversibility of current assets, days	256	257	286	270	1	28	-16
Reversibility of receivables, days	152	156	187	175	4	31	-12

Efficiency of Working Capital Use by Ukrainian Enterprises in 2014-2017 \*

\* Without including the results of activities of banks, budgetary institutions, temporarily occupied territories of the Autonomous Republic of Crimea, Sevastopol and parts of the zone of anti-terrorist operation

\*\* calculated according to data (State Statistics Service of Ukraine)

So, the least efficient use of resources was in 2014 - the enterprises were operating at a loss, and the periods of asset turnover were significant. This is explained by the rather difficult state of the economy after the political crisis. In 2016-2017, the situation was corrected.

The main external factors that influence the efficiency of working capital are the following: the political crisis and the financial and economic crisis associated with it; lack of solvent demand of the population; reduction of demand of other industries for domestic products; increase in imports; decrease of competitiveness of products; increase of interest rates on loan capital; depreciation of the national currency; imperfection of the regulatory system.

The internal factors on which the size and condition of working capital depends:

- reduction of working capital financing at the expense of own sources;

- the optimality of determining the size of the formation of working capital in general and individual elements in particular;

- the lack of administrative and managerial staff of enterprises to effectively manage

their financial resources and ensure control over the circulation of working capital.

# **Conclusions and suggestions**

Thus, the formation, management and analysis of working capital - an important direction for improving the financial condition of enterprises. Establishing an optimal ratio between the components of working capital is important for providing cash, the execution of the production program, as well as being one of the main factors in increasing the efficiency of the use of working capital. Today, in the enterprises there are negative changes in the structure of working capital, which manifests itself in an increase to a critical level of receivables and a reduction of highly liquid working assets, which primarily have cash.

This tendency continues to adversely affect the financial position of enterprises, does not contribute to economic growth and increase the competitiveness of Ukrainian commodity producers.

# References

Arbidane, I. (2015). Management of current assets in the context of increasing the enterprise's profitability. Vide. Tehnologija. Resursi - Environment, Technology, Resources, no. 2, 27-34. [in English].

Blank, I. A. (2003). Asset management and capital of the enterprise. Kyiv: Nika-tsentr; Elga. [in Russian].

Chubka, O. M., Rudnytska, O. M. (2009). Evaluation of methods for working capital management industry. Problems of Economics and Management, no. 640, 440-445. [in Ukrainian].

Nobanee, H. (2015). Efficiency of working capital management and profitability of uae construction companies: Size and crisis effects. Polish Journal of Management Studies, no. 18 (2), 209-215. [in English].

State Statistics Service of Ukraine. (Data file). Official site. [Electronic resource]. Retrieved from http://www.ukrstat.gov.ua/. [in Ukrainian].