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## Managing the Components of Working Capital in Terms of Economic Recession: A Synergistic Effect on the Financial and Economic Standing of a Company

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## ABSTRACT

*The paper substantiates the role and importance of working capital for efficient and stable operation during an economic recession. The purpose of the study is to assess the impact the components of working capital components have on the financial and economic standing of a company an economic recession. The subject of the study is the theoretical and methodological aspects of working capital of the company. This article uses the methods of theoretical generalisation, descriptive statistics and empirical research. Empirically, this paper uses test samples: transport companies in Ukraine and those in Montenegro and those in Poland. A deterministic factor analysis and descriptive statistics were used to confirm the results. The study focused on: analysing the components of current assets of transport companies; assessing the impact of accounts receivable on the financial and economic performance of transport companies; and developing a mechanism for managing accounts receivable as a component of a company's working capital to ensure a positive synergistic effect on the company's financial and economic performance. Methodology of factor analysis of receivables for the sale of services is provided. The results of this study are of practical interest for executives and managers of transport companies in terms of managing accounts receivable, strengthening the company's competitive advantage, implementing a supply chain support strategy, and achieving the goals of the*

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## INTRODUCTION

The modern business environment is an extremely complex system that comprises not only business agents but also the state and institutions whose ties are shored up by the strength of the global economy, the political situation, and other factors. The activity and efficiency of the company's economy in such an environment is determined by the availability and speed of changes in working capital. In the world of business economic relations, competent and effective management of working capital elements is an integral part of the company's business management practice, which has a different impact on the financial and economic condition of the company. Potential threats and risks in the business environment determine the importance of managing the components of the company's working capital in terms of financing and structuring to ensure the financial and economic health of the company: financial stability, sufficient liquidity, and income. The attitude to managing the components of working capital has changed and tends to take a more comprehensive perspective. A thorough analytics based on the principle of supporting managerial decision-making can be a specialised methodology for managing the components of working capital during an economic recession.

## 1. LITERATURE REVIEW

The sufficiency of academic research related to the economic category of working capital confirms the interest of theorists and practitioners to its various dimensions. To a large extent, this concerns the development and implementation of approaches to working capital management that would ensure financial stability, creditworthiness, and investment attractiveness of companies. The research results presented by A. Ali & S. Faisal's (2020) confirm the impact of capital structure, profitability, and financial performance on the success of business organisation of Saudi Arabian oil companies based on measurement methods. A set of the following variables is mathematically substantiated: asset structure, liquidity, working capital turnover, profitability, accounts receivable turnover, and inventory turnover. M. Sharif & M. Islam (2018) assessed the impact of working capital on the profitability of pharmaceutical companies in Bangladesh. The scientific result of N. Ahanga & F. Shah (2017) is evidence of an inverted U-shaped relationship: "working capital management" ↔ "firm performance" on the example of Indian companies. This is in contrast to the studies of S. Banos-Caballero et al (2012), Pais & Gama (2015), which demonstrate the result of a linear relationship between working capital management and business performance. This is an additional incentive for this study.

There are numerous studies of methods and approaches to managing the components of working capital in companies. According to the results of scientists, this is due to the fact that working capital is the basis of entrepreneurship and the authors of the scientific publication proved a direct correlation between the growth of a business and its working capital needs (Tran et al, 2017). In continuation of the scientific research in this area, Kaushik & Chauhan (2019) have identified key aspects that ensure effective working capital management. These include planning and controlling current assets and current liabilities in such a way as to eliminate the risk of inability to meet short-term obligations and at the same time avoid excessive investment in current assets (*Ibid.*). A number of researchers consider the strategy of managing working capital in the context of long-term and stable functioning of the company's operating system and its manufacturing products for markets with stable conditions and clearly predictable demand. However, the dynamics of the business environment indicate an increase in crisis amplitudes (Iershova et al, 2021). From this perspective, L. Naranchimeg et al. (2023) provide five main strategies for financing company assets. These strategies are aimed at achieving financial sustainability in a crisis economy. An interesting study conducted by T. Almomani et al. (2021) is focused on establishing the link between the efficiency of working capital management and financial performance of industrial companies listed on the Amman Stock Exchange (ASE) through working capital investment and financing policies. The study has shown that the turnover of inventories, accounts receivable, and current assets affect the financial

performance of manufacturing companies, while no significant differences were found between the direct and modelling systems in assessing financial performance. We agree with the scholars who emphasise the importance of ensuring a balance in the company's financial management, since either an excessive level or a low level of current assets equally have a negative impact on the business profitability and its stable operation (Duru et al., 2014). As the company's sales grow, experts recommend investing more in inventories and receivables.

In terms of economic recession, the effectiveness of an entity's business activities depends to a greater extent on the amount of financial assets as the most liquid part of current assets. With a high degree of probability, insufficient financial assets can lead to micro-level crises and bankruptcy of business entities. The very fact is that if an organisation has financial assets, it significantly influences its current financial position. The investment aspect is considered in the study by O. Portna et al. (2020) where the researchers substantiated that one of the indicators of investment decisions in a company is its short-term liquidity which is formed primarily by the company's current assets. Previous studies have recognised the effectiveness of financing current assets with short-term loans, liabilities and working capital (Sainjargal, 2020). However, we adhere to the thesis that "*among a large number of approaches to the structure of financing current assets, none of the approaches is completely satisfactory and acceptable*" (Rajendran, 2019). On the other hand, the most liquid part of current assets is cash and cash equivalents. Based on data analytics, S. Agbogun & J. Taiwo (2020) found that cash and cash equivalents significantly affect the return on assets of Nigerian-listed manufacturers of industrial goods.

The poor development of the sectoral aspects as for components of working capital management requires further improvement and maturing in this direction. In particular, the issue of assessing the impact of the value the current asset components have on the financial and economic performance as well as the use of forecasting methods to improve the efficiency of the company's economy, taking into account the industry aspect, has been fragmentarily studied.

## 2. DATA AND METHODOLOGY

This article uses the methods of theoretical generalisation, descriptive statistics and empirical research. The method of theoretical generalisation was used to formulate the purpose, hypotheses of the study and conclusions from the review of professional economic literature. For the empirical study, we took into account the sphere of company's economic activity which determines the composition of current assets, their share in working capital and, ultimately, the strength of influence on financial and economic indicators. To make a comparative assessment of the structural dynamics of current assets for transport companies and to evaluate the ratios in current assets, the method of descriptive statistics was used in terms of indicators such as arithmetic mean, standard deviation, coefficient of variation, the calculation of which and the formula basis are presented in Table 1. The article uses a comparative analysis to process macro-statistical data on the composition of current assets and financial performance of transport companies in Montenegro, Poland and Ukraine. The most significant trends in the structural components of working capital have been identified. A ratio analysis was used as a tool for assessing the structure of current assets for transport companies. Statistical tools such as averages and percentages were used to quantify the data.

In this study, we proceeded from the two-pronged impact of current assets on the company's performance. We assessed the impact of current assets on the company's financial performance through liquidity and solvency. Liquidity is measured by the following indicators: quick ratio – the ratio of cash and receivables to current liabilities; current ratio – the ratio of current assets to current liabilities. The impact of current assets on economic results is assessed through the indicator of income from the sale of transport services.

The researchers focus on the condition of accounts receivable of companies, which has a fairly high share in current assets (Figure 1). Therefore, the quantitative indicators for evaluation are the current assets to receivables ratio; receivables turnover ratio; and receivables collection period. To accurately formulate the relationship between the set of independent variables, mathematical methods were adapted to assess the quantitative impact of the factors. Based on the results of the current study, the authors introduced deterministic models to calculate the impact of accounts receivable on the turnover ratio on

revenue from the sale of services the transport companies made. The template of the models used in the study is as follows:

- two-factor model:

$$Z = x \times y \quad (1)$$

- three-factor model:

$$Z = x \times y \times c \quad (2)$$

where  $Z$  – performance indicator,  $x, y, c$  – factors,  $i (0,1)$  – previous and actual time periods, respectively.

The original sample includes 50 transport companies in Ukraine. The companies were selected in line with the following criteria: (a) book value of assets up to EUR 20 million; (b) net revenue from sales of products (goods, works, services) up to EUR 40 million; and/or (c) average number of employees up to 250 people inclusive. The respondents were represented by managers of the companies; they participated in a survey the results of which are shown in Figure 2.

The purpose of the study is to assess the impact the components of working capital components have on the financial and economic standing of a company. We understood that in terms of economic recession, it is extremely important for companies to effectively manage the components of their working capital and, thus, to ensure stable liquidity, solvency and profitability. The study tested the following hypotheses:

RQ1 Current assets have a significant impact on working capital, liquidity and financial results.

RQ2. Accounts receivable affects the financial and economic performance of transport companies.

RQ3. Managing the components of working capital is an economically justified necessity that allows achieving effective results in relation to competitors.

In accordance with the research objective, the results for each of the above questions were carefully analysed. The collected information was analysed, systematised and tabulated for use in the next stage of the study. A graphical method was used to visualise the results of the study. Using the structural-logical method and the method of scientific generalisation, the research structure was built and conclusions were drawn.

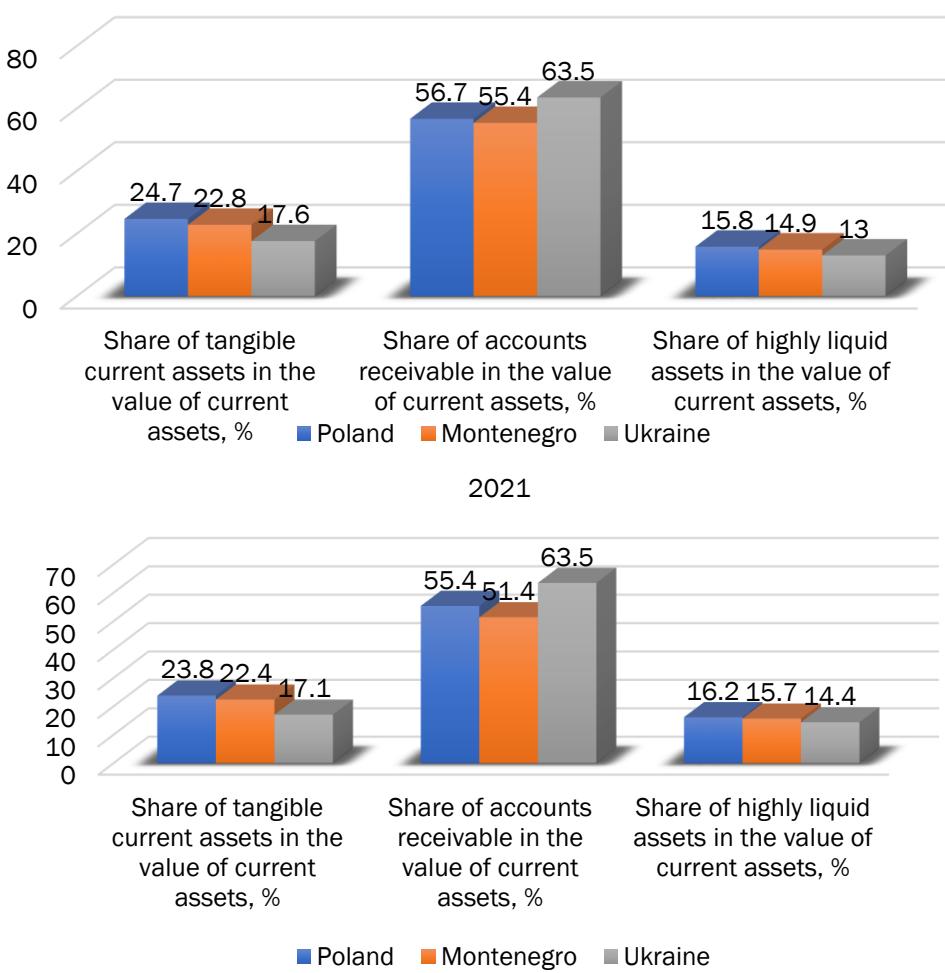
### 3. RESULTS AND DISCUSSION

#### 3.1 Working capital and its components in the focus of statistical measurement

In terms of economic recession, business entities operate in fierce competition. In this case, the efficiency of their business activities depends to a greater extent on the amount of working capital, especially its elements, i.e. current assets. This is confirmed by statistical analytics of companies in Poland, Ukraine and Montenegro. With the outbreak of the COVID-19 pandemic (Delibasic et al., 2021) and the impact of hostilities on the economies of Ukraine and the European Union, the value of current assets has fluctuated significantly. In this case, it is not so much the increase or decrease in their total value that is significant as changes in their structure. According to statistics, current assets of Ukrainian companies increased by 7.28% in 2022 compared to 2021. In the structure of these assets, inventories accounted for 18.1%, accounts receivable comprised 66.5%, and cash and cash equivalents equaled 15.4%. At the same time, the dynamics of the structure of current assets remained almost unchanged according to State Statistics Service of Ukraine. For comparison, the current assets of Polish companies increased by 19.0% compared to 2021. In the structure of these assets, 41.9% were short-term receivables (mainly accounts receivable for supplies and services), 25.5% were short-term investments (the largest share was accounted for by short-term financial assets), 30.0% were inventories, and 2.6% were short-term accruals (Transport industry in Poland — statistics & facts).

The economic activity of the transport sector is linked to such economic sectors as industry, agriculture, tourism, trade and many others. Therefore, the economy of transport companies has a significant

impact on the dynamics and efficiency of the movement of goods and services, contributing to the development of trade and entrepreneurship. According to statistics, transport services (% of exports of commercial services) in Montenegro amounted to 26.13% in 2023 according to the World Bank Development Indicators (Draskovic, 2019; 2019a), in Ukraine — 28.48% in 2023, Poland — 38.9% (Montenegro — Transport services). This confirms the relevance of the research purpose of this study. The current assets of transport companies in Ukraine increased by 10.3% in 2022 compared to the previous year, in Montenegro — by 13.2%, and in Poland — by 16.3%. To identify the elements that have the greatest impact on the value of current assets of transport companies, a sample was taken for the period 2021-2022 for the countries of Poland, Montenegro, and Ukraine (Figure 1).



**Figure 1.** Comparative assessment of the structural dynamics of current assets at transport companies in such countries as Poland, Montenegro, and Ukraine for the period of 2021 to 2022.

Source: own

Annual statistics of transport, storage and communications – 2023 [https://www.monstat.org/uploads/files/publikacije/statistika%20saobracaja/2023/PUBLIKACIJA-%20GODISNJA%20STATISTIKA%20SAOBRACAJA%202023-en%20\(2\).pdf](https://www.monstat.org/uploads/files/publikacije/statistika%20saobracaja/2023/PUBLIKACIJA-%20GODISNJA%20STATISTIKA%20SAOBRACAJA%202023-en%20(2).pdf)

Montenegro - Transport services <https://tradingeconomics.com/montenegro/transport-services-percent-of-commercial-service-exports-wb-data.html>

State Statistics Service of Ukraine. URL: <http://www.ukrstat.gov.ua/> (access date 10.08.2024).

Transport industry in Poland - statistics & facts <https://www.statista.com/topics/6580/transport-industry-in-poland/>

Taking into account the statistical data of transport companies in the countries selected for observation and research, a high share of accounts receivable in current assets was noted. This situation may not only be a condition for an increase in the duration of the turnover and financial cycle, but also a decrease in the level of mobility and liquidity of assets. Descriptive statistics on the assessment of ratios in the current assets of small and medium-sized transport companies in Ukraine are presented in Table 1.

**Table 1.** Descriptive statistics of current asset ratios of Ukrainian transport companies for 2013-2022.

Ratio, $K_i$	Statistical indicators		
	Arithmetic mean $\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{N}$	Standard deviation $\sqrt{\frac{\sum(x - \bar{x})^2}{(n-1)}}$	Coefficient of variation $v = \frac{\sigma}{\bar{x}} \cdot 100\%$
Tangible current assets and current assets, $K_1$	0.176	0.023	0.123
Accounts receivable and current assets, $K_2$	0.606	0.047	0.073
Cash, cash equivalents and current assets, $K_3$	0.144	0.02	0.131
Cash, cash equivalents and current liabilities, $K_4$	0.128	0.023	0.167
Quick liquidity ratio, $K_5$	0.734	0.076	0.098
Solvency ratio, $K_6$	0.685	0.059	0.082

Source: own

Under generally accepted conditions, the quick ratio varies between 0.5 and 1, and the current ratio should be between 1 and 2 so that the company is able to repay its current liabilities in a timely manner (Madushanka & Jathurika, 2018). Therefore, the conclusion that the surveyed transport companies have a sufficient level of liquidity is not relevant. The companies selected for study and assessment may experience financial difficulties related to the failure to pay their current obligations. The average value of the cash to current liabilities ratio for the surveyed companies during the period under review is 0.128 with a standard deviation of 0.023. At the same time, the average value of the cash to current assets ratio is 0.144 with a standard deviation of 0.02. For transport companies, the correlation coefficient between the ratio of cash to current liabilities and liquidity, as measured by the current ratio, is 0.73, which confirms the positive correlation between them. In addition, our results show that the mean value of the quick ratio is 0.734 with a standard deviation of 0.076. The level of funds is positively related to liquidity as measured by the quick ratio for the analysed companies, and the correlation between them is positive and quite strong. Repeating the analysis of the impact of current asset components on the financial position of transport companies through the solvency ratio, we found its average value to be 0.685 with a standard deviation of 0.059. The solvency ratio is below the recommended value. The level of cash and cash equivalents is positively related to solvency. The positive correlation between the variable level of funds and liquidity, measured by various ratios, indicates that changes in the level of funds are associated with consistent and equivalent changes in the level of liquidity.

The amount of cash and cash equivalents is determined by the speed of the debtors' response to the payment for the transport services received. This results in a direct dependence of sales revenue (income) on the amount of accounts receivable. In general, the economic activity of a transport company is aimed at generating a positive financial result that is profit. In 2021, 72.3% of all Ukrainian companies operating in the transport sector made a profit. In 2022, this figure decreased to 68.4%. According to the observation data, Ukrainian transport companies made a pre-tax profit of UAH 31246.8 million in 2021. However, in 2022, Ukrainian transport companies made a loss of UAH 23035.5 million (financial results).

### 3.2 Factor analysis of the impact the accounts receivable have on the company's financial and economic performance

In order to develop mechanisms and tools for managing receivables and thus to influence economic performance, we propose to estimate the change in revenue (sales income) depending on the change in the average receivable and the receivables turnover ratio using the following algorithm. The general model for deterministic analysis is as follows:

$$R = AR \times Rt/o \quad (3)$$

where R – revenue, ie. sales income, AR – average annual value of accounts receivable, Rt/o – accounts receivable turnover ratio, i – time period (0 – previous, 1 – current).

Mathematical expression for assessing the impact of the average annual receivable on revenue received from the sale of services:

$$\Delta R(AR) = AR_1 \times Rt/o_0 - AR_0 \times Rt/o_0 \quad (4)$$

Mathematical expression for assessing the impact of accounts receivable turnover ratio on revenue received from the sale of services:

$$\Delta R(Rt/o) = AR_1 \times Rt/o_1 - AR_1 \times Rt/o_0 \quad (5)$$

Total impact of the two factors on revenue from services is calculated according to the formula:

$$\Delta R = \Delta R(AR) + \Delta R(Rt/o) \quad (6)$$

The turnover ratio characterises the speed of turnover of settlements with debtors and shows the number of turnovers that occurred during the period under review. Thus, the growth of both components has a positive impact on the company's economic result that is revenue received from the sale of services.

Another important indicator that affects sales revenue is the collection period of receivables. In order to achieve accurate calculations, we have complied with the condition that the analysed period should be constant. It can be a reporting period or an operating cycle.

The general model for a deterministic analysis is as follows:

$$R = t \times AR \times 1/Trs \quad (7)$$

Where  $t$  – time period for which the receivables are collected;  $t$  – time limit in days.

Change in sales revenue depending on the change in the average annual amount of accounts receivable:

$$\Delta R(AR) = t_1 \times AR_1 \times 1/Trs_0 - t_1 \times AR_0 \times 1/Trs_0 \quad (8)$$

Change in sales revenue depending on the change in the collection period of receivables (with the analysed period unchanged):

$$\Delta R(Trs) = t_1 \times AR_1 \times 1/Trs_1 - t_1 \times AR_1 \times 1/Trs_0 \quad (9)$$

Total impact of the two factors on sales revenue:

$$\Delta R = \Delta R(AR) + \Delta R(Trs) \quad (10)$$

The duration of one turnover (collection period) is a discouraging factor, i.e. it has a negative impact on sales revenue. Accordingly, an increase in the inverse of this indicator is assessed positively. Here are the calculations to confirm the relationship between the results of managing settlements with debtors and sales revenue. Table 1 presents the results of a deterministic factor analysis to assess the extent to which the factors influence the amount of sales revenue for three transport companies.

**Table 1.** Assessment of the impact the accounts receivable and its turnover ratio have on service sales revenue using the chain substitution method

Factor indicators	Company 1		Company 2		Company 3	
	i = 0	i = 1	i = 0	i = 1	i = 0	i = 1
Sales revenue, B	18950	19457	32784	33467	45787	46978
Change in sales revenue, $\Delta$	507		683		1191	
Average annual value of accounts receivable, AR	3564	3697	6794	7154	11547	12005
Accounts receivable turnover ratio, Rt/o	5.317	5.263	4.825	4.678	3.965	3.913

Impact of the average annual value of accounts receivable on revenue, $\Delta R(AR)$	707.17	1737.16	1816.09
Impact of receivables turnover ratio on revenue, $\Delta R(Rt/o)$	-200.17	-1054.16	-625.09

Source: own

As can be seen, Companies 1 to 3 experienced a decrease in the accounts receivable turnover ratio, which had a negative impact on sales revenue. In Company No. 2, the situation is such that during the reporting period, the amount of sales revenue was significantly reduced due to the impact of the receivables turnover ratio. The presented model is useful in conducting a regular analysis in order to make timely adjustments and further to improve the impact of accounts receivable on revenue the transport companies received from the sale of services by reducing it and increasing the turnover of accounts receivable. It is proved that one of the important conditions for stabilising the financial and economic situation in companies is the process of accelerating the turnover of working capital by accelerating the turnover of relevant assets (including receivables) and optimising the ratios between all its components.

When dealing with accounts receivable, companies strive to achieve the optimal level of liquidity. For this purpose, our study used forecasting methods to compare the results and select the most appropriate one for the company's management. The implementation of the accounts receivable forecasting methodology is presented in Table 2.

**Table 2.** Calculation of the forecast value for accounts receivable on the example of transport companies with the possibility to compare forecasting methods

Indicators	Data for the period ( $i = 0, 1$ ) and their change, $\Delta$		
	$i = 0$	$i = 1$	$\Delta$
<i>Baseline indicators for analysis</i>			
Sales revenue			
Company 1	18950	19457	507
Company 2	32784	33467	683
Company 3	45787	46978	1191
Average annual value of accounts receivable			
Company 1	3564	3697	133
Company 2	6794	7154	360
Company 3	11547	12005	458
Share of accounts receivable in turnover (revenue), %			
Company 1	18.81	19.00	0.19
Company 2	20.72	21.38	0.66
Company 3	25.22	25.55	0.33
<i>Additional indicators for forecasting (actual growth rates), %</i>			
Sales revenue			
Company 1	103.4	102.68	-0.72
Company 2	102.4	102,08	-0.32
Company 3	101.1	102,6	1.5
Accounts receivable			
Company 1	110.4	103.73	-6.67
Company 2	102.3	105.3	3
Company 3	104.8	103.97	-0.83
Receivables turnover period			
Company 1	67.71	68.40	0.69
Company 2	74.60	76.95	2.35
Company 3	90.79	92.00	1.21
<i>Target indicators to forecast accounts receivable</i>		$i = n+1$	
Sales revenue			
Company 1	20977.36		
Company 2	35464.54		
Company 3	47180.24		

<i>Forecast values of accounts receivable calculated by the methods such as:</i>		
Percentage of turnover (sales revenue)	Company 1	3985.88
	Company 2	7581.00
	Company 3	12056.68
Elasticity factor	Company 1	7723.887
	Company 2	14973.79
	Company 3	24222.11
Turnover rate	Company 1	3931.28
	Company 2	7477.15
	Company 3	11891.52

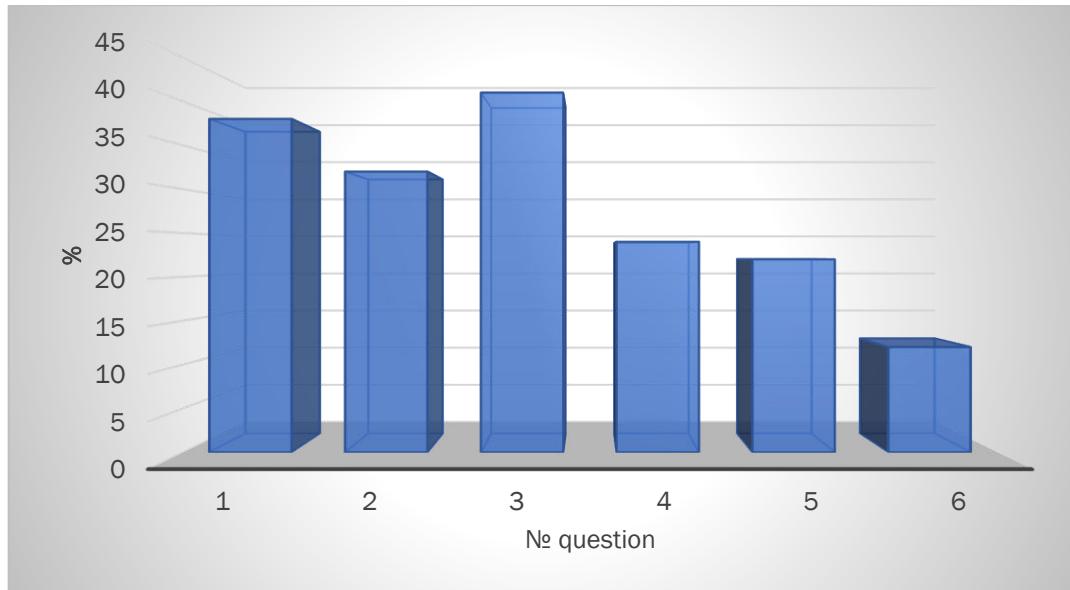
Source: own

The use of the elasticity coefficient to build a forecast value of accounts receivable of transport companies provided a pessimistic forecast of its value since it is the highest among the forecasting methods used. However, this method is based on taking into account the ratio between the growth rates of accounts receivable and sales revenue. Its use will further allow tracking this ratio for management activities aimed at reducing the share of accounts receivable in sales revenue. This will undoubtedly require new approaches to the organisation of work with receivables and credit policy in the company as a whole.

### **3.3 A mechanism for managing accounts receivable as a component of the company's working capital to achieve a positive synergistic effect on the company's financial and economic standing**

The structure of working capital in a differentiated form fully reflects the individual nature of the company's business. Ensuring an increase in the efficiency of working capital management requires the creation of a flexible mechanism based on the synthesis, updating, modernisation of all existing models and management tools that would take into account the effect of various factors that influence the formation and use of working capital of a transport company. The results of the current research on the example of transport companies have shown that structuring working capital makes it possible to perform methodically more accurate assessment of the impact produced by its elements and the total amount of working capital, income received from the sale of services and the impact on liquidity and solvency indicators.

Managing accounts receivable properly and at high standard ensures further maintaining and increasing the efficiency of a company's working capital as well as meeting its obligations. The authors' suggestion is based on the fact that, according to a survey of managers of Ukrainian transport companies, periodic control of accounts receivable often fails to produce the desired result. Debt collection periods are growing. Uncollectible accounts receivable are appearing more frequently and in larger amounts, and this means an additional cost for the company. A survey of the management of Ukrainian transport companies revealed certain problems with accounts receivable as a significant share of current assets (Figure 2).



Question number:

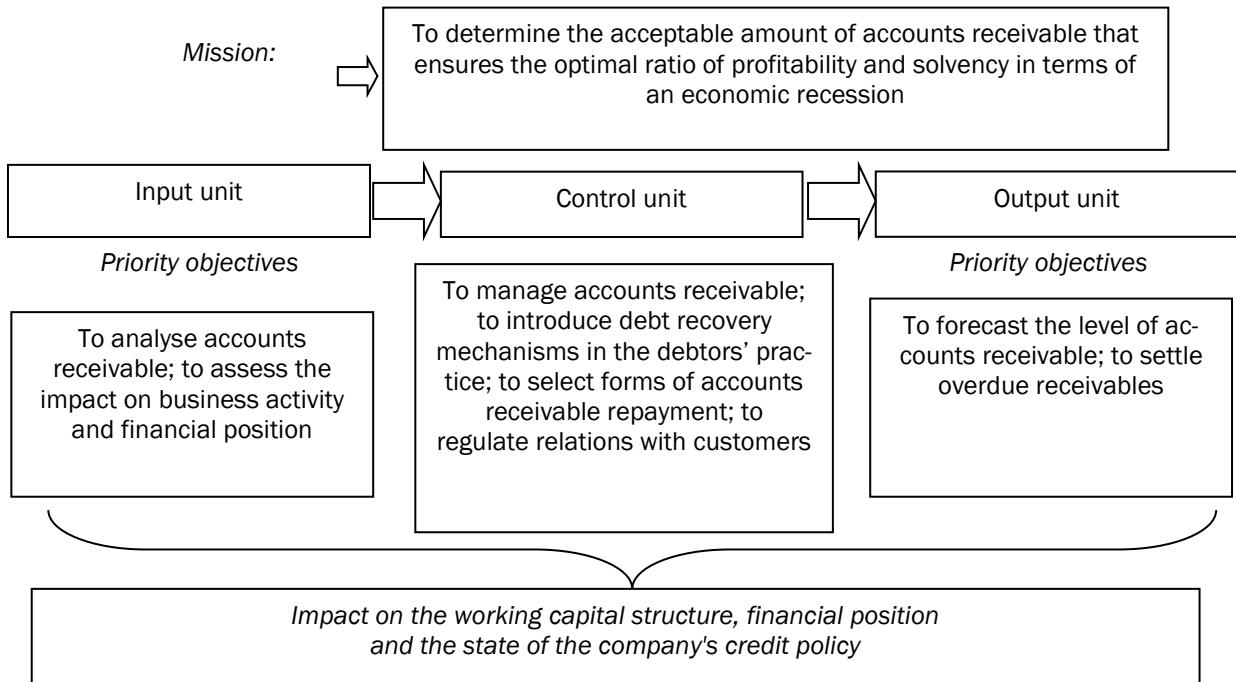
- There are no clearly defined and understandable regulations for working with elements of current assets, including accounts receivable
- There is no regular data (monitoring information) on the actual maturity dates of counterparties' liabilities
- There is no data on the amount of expenses caused by negative trends in a certain element of current assets, there is no dynamics of these expenses
- There is no regular assessment of the reliability of counterparties (there is no counterparty database formed and monitored)
- The economic effect of granting a commercial loan is not calculated
- Other issues

**Figure 2.** A list of problems with receivables as a significant share of current assets identified through a survey of transport company managers (n=50).

Source: own

The most frequent problem in making decisions on accounts receivable is poor analytics for forecasting and estimating the amount of losses from its growth. According to the survey, 38% of respondents saw the lack of clearly defined and understandable procedure for handling any issues couple with accounts receivable. Managers noted that they occasionally track the maturity of liabilities with counterparties periodically, but it never happens on a regular basis. A significant percentage of respondents indicated that there is insufficient analytical support for calculating losses caused by an increase in accounts receivable, and there is no assessment of the dynamics of such costs. In addition, 22% of respondents indicated that there do not perform calculations on the efficiency of transport services with deferred payment.

A high share of accounts receivable in the total value of the company's current assets leads to an increase in the turnover duration, financial cycle, and a decrease in the level of mobility and liquidity of assets. All this affects the amount of income. In terms of economic recession, it is not enough for a company's economic stability to use preventive measures such as collecting information about the counterparty (potential debtor) and its financial condition. It is not enough to only monitor the debt repayment under existing contracts. Successful work with this type of debt should be based on a flexible mechanism. To this end, the authors propose a model that takes into account the priorities and constituent elements (Figure 3).



**Figure 3.** Analytical model of accounts receivable management for companies operating under an economic recession

Source: own

If the company has a weak system of control over debtors for the supply of goods and services, this can lead to adverse consequences for the transport company. These include a possible failure in the technological process (route departure), lack of funds for infrastructure development and replenishment of the vehicle fleet, which ultimately leads to additional and/or unplanned expenses or hinders the development of the company as a whole. According to the proposed model (Fig. 3), accounts receivable, like other elements of current assets, is one of the aspects of financial administration in a company. The effectiveness of financial administration is determined by various factors, including the existing internal information system. It is important for the management of a transport company to understand the importance of such a system from the point of view of the possibility to obtain an integrated view of the management decision-making process. To achieve the goal of this study, the authors propose requirements that make information interaction in the management system more efficient and effective. These requirements are as follows:

- creation of a unified internal information space that will enable effective information interaction between departments, specialists and managers whose everyday work is based on dealing with counterparties-debtors;
- application of modern information and communication technologies; this will increase the validity of management decisions on the efficiency of the formation and use of current assets at different stages of production and financial cycles);
- combination of functional subsystems (accounting, analysis, planning and forecasting through the order book to form the debtor base, sources of financing current assets, production stocks, receivables and cash).

The created information space is systematically coordinated, both formally and economically, with the transport company's management system. In the course of the current research of Ukrainian companies, the authors did not find any facts of an information service having been created as a separate unit. In the practical activities of transport companies, the creation of the information space is an integrated part of running business and managing it. It is as important as marketing, financial accounting, internal control,

etc. However, the basis of a transport company's information management system should be laid through a database that is divided into different parts and linked to its functional subsystem. It is the combination of such databases that will ensure the creation of a common information environment for the management system at all levels.

## CONCLUSION

This study presents the authors' developments and extension to the management of working capital components in terms of an economic recession from the standpoint of the synergistic effect produced on the financial and economic state of the company. The research topic is motivated by the fact that working capital is the basis of modern entrepreneurship and an important economic category in a market economy. Its significance further increases when the economy enters a recession, competition increases, etc. The authors of the present paper focus on transport companies which act as an important pillar for the convenient and free movement of people, goods and services in the European Union. Transport is also an important pillar for other sectors. The analytical diagnostics of the balance sheet components of companies in Ukraine, Montenegro, and Poland confirmed the thesis that current assets are the most sensitive to recessionary processes in the economy. It was also found that at the stage of recession, most companies are characterised by a decrease in the turnover of current assets due to the concentration of resources in excessive stocks of raw materials and supplies, overstocking of warehouses with finished goods that are not in demand among consumers in terms of price and quality, freezing of funds in accounts receivable.

The authors of this study have found that the features inherent in the current assets of transport companies as an object of management include liquidity, exploitation within one year or an operating cycle, ability to generate income, interconnection of the production and financial cycle, diversity of species composition, priority in ensuring the rhythmicity in the process of selling transport services, and the need for continuous planning and control.

The study assessed the situation with companies' accounts receivable. The deterministic factor analysis demonstrated a direct relationship between accounts receivable and revenue obtained from the sale of services. Based on these results, it is substantiated that in terms of economic recession business entities seek a strong need to implement an effective mechanism for managing accounts receivable as an important component of current assets of transport companies. Tactical planning of accounts receivable should be in line with the strategic guidelines of an enterprise, and this is reflected in the system of indicators used to calculate the normative values of the structural elements of material working capital and its model. Unlike the existing approaches to calculation of working capital ratios, the efficiency of the built model is ensured by the methods of fuzzy logic; they allow taking into account the factors of external and internal environment that best meet the modern requirements for enterprise management on the principles of continuous operation and sustainable development (Delibasic et al, 2022). In this study, the authors confirmed the two-vector influence of current assets on the company's performance through the amount of accounts receivable.

The authors of this study applied scientific and practical tools to justify changes in working capital and thus to ensure the financial and economic stability of transport companies. The presented developments are relevant for business researchers and managers seeking to better understand how they can create conditions for the development of the transport business. They are also relevant for executives working to ensure the financial and economic stability of their own businesses. Taking into account the importance, complexity and systemic nature of this problem, the authors of this study propose the concept of managing accounts receivable for transport companies. This development can be adapted to enterprises in other industries that have similar problems. The authors realised that the total number of transport companies selected for the study was too small to be statistically significant. However, it is assumed that all those interested in solving the problem would find the research findings useful. And this study will help to draw qualitative and quantitative conclusions from the following analytical material.

This research makes an important contribution to the understanding of corporate economics. First, the authors show that effective working capital management requires monitoring of its components; second, it is revealed that the valuation of accounts receivable can contribute to finding solutions to the problems of improving liquidity, solvency and revenue. The detail of the procedural aspect of the current asset

management methodology depends on the goals set and the available collateral. Finally, the present study finds evidence that current assets, and their most liquid part, play a crucial and unique role for the financial and economic stability of economic agents.

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