



Forecasting cash flows of industrial enterprises in the context of implementing their development strategy: Accounting, analytical, and organisational aspects

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Abstract. The availability of cash at the disposal of any industrial enterprise provides a sense of economic freedom in the implementation of its development strategy. The total cash indicator is directly dependent on the cash flows across various types of activities. To meet the informational needs of managerial personnel of an industrial enterprise, the ability to forecast projected cash flow indicators is essential. The aim of this article was to present a methodology for forecasting the cash flows of industrial enterprises to ensure the successful implementation of their development strategies. A comparative analysis of statistical indicators of cash flows in Ukrainian bakery enterprises had made it possible to determine the share of cash in their total assets and to calculate their liquidity ratios. Analytical calculations have revealed predominantly low liquidity ratios, both at the national level and among individual bakery enterprises in Western Ukraine, with values falling below the normative thresholds of 0.1-0.2. The article presented indicators on cash flows generated from various types of activities of Ukrainian bakery enterprises, enabling the conclusion that there was a direct relationship between cash flow dynamics and the actual cash balances held in enterprise bank accounts. The dominant cash flow was the one generated from operating activities. It was this flow that should provide the main source of cash for the enterprise and serve as a driving force for both investment and financial activities. The balance among cash flows from various activities wasn't conform to standardised norms, but rather reflected the individual strategic vision of the enterprise's owner, as implemented by the hired personnel. Forecast calculations of cash flows were crucial for the implementation of any enterprise's development strategy. The article systematised approaches to organising cash flow forecasting. It outlined the construction of a cash flow model from operating activities, taking into account the forecasted sales volume. The practical significance of the research findings lies in the methodological substantiation of cash flow forecasting indicators, which can be utilised by economic entities in the industrial sector to predict both operational and strategic performance indicators

Keywords: operational cash flows; investment cash flows; financial cash flows; total cash flow; total receipts

Introduction

In order to survive in the contemporary business environment, any industrial enterprise must organise its cash flow in accordance with the capital formula: "Money – Commodity – Money*". In accordance with this capital formula, the amount of money at the final stage of the cash cycle should exceed the amount introduced into the business at the initial stage, generating a

certain level of economic return. Otherwise, the economic entity risks depleting its reserves (accumulated profits, non-current and current assets) and moving towards its eventual dissolution as a business unit. These considerations also affirm the principles of accounting as enshrined in the Law of Ukraine No. 996-XIV (2024), particularly the going concern principle, which assumed

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that the enterprise will continue to operate in the foreseeable future and, accordingly, its assets and liabilities were assessed on this basis. Forecasting cash flows represented a complex process encompassing the collection, accumulation, summarisation, processing, and presentation of analytical data in a specific format to define development benchmarks for an economic entity within a given business environment.

M.S. Shahriar *et al.* (2021) highlighted the importance of forecasting in decision-making under the uncertainties of modern business conditions and stressed the significance of selecting appropriate forecasting methods. According to the authors, the chosen methodology greatly influenced the quality of the forecasting project, which in turn motivated or discouraged sponsors and other stakeholders from investing in the enterprise. They noted the existence of a wide range of forecasting methods, though the reliability of each individual method remained uncertain, making the selection process for a particular business case quite challenging. A. Rahman & R.B. Sharma (2020) stated that an economic entity should primarily generate cash through its operating activities, which were dominant among all activity types. Failure to properly manage operational cash flows can lead to deteriorating financial performance and reduced business efficiency over time. According to the authors, it was the Statement of Cash Flows that provided the opportunity to forecast and manage the enterprise's cash flow.

F. Alnori (2020) conducted a study on the relationship between cash reserves and financial performance indicators of Saudi Arabian firms, excluding banks and insurance companies. The author concluded that a non-linear relationship exists between cash holdings (i.e., cash balances recorded in firms' balance sheets) and financial performance outcomes. The author also underscored the critical role of cash in both day-to-day operations and the long-term development of any firm. Based on the identified non-linear relationship, the study supported the "compromise theory" regarding optimal cash levels, which suggested that the ideal cash holding depends on cultural factors, industry-specific features, and a balance between the benefits of high liquidity and the costs of cash retention.

Scientist F. Nadeem (2024) explored the issue of optimal cash levels to enhance firm value, using a sample of energy companies listed on the Saudi Arabian Stock Exchange. The study investigated the relationships between cash holdings, return on capital (as a variable factor), and firm size (as a control variable). The results weren't confirmed a strong correlation between these indicators, suggesting that optimal cash levels depend on the management tasks, forecasting targets, regional business context, and other influencing factors. These aspects should be carefully considered, when forecasting cash flows for any enterprise.

X. Chen *et al.* (2021) conducted an in-depth study on cash flow forecasting using the CFF (cross-functional

flowcharts) method. The authors identified key factors affecting the accuracy and usefulness of forecasts within Australia's mining sector. Their conclusions can be adapted to various sectors of Ukraine's economy. The feasibility of conducting CFF analysis depended on investor demand and analyst capacity. Furthermore, generating the cash flow statement using the direct method reduced analytical processing costs and minimised forecasting errors. However, a large number of analysts wasn't always enhanced the forecasting process due to the increased complexity of coordination.

The authors S. Li *et al.* (2024) focused on the impact of applying international accounting and reporting standards on the quality of accounting information used for forecasting business activity. It was worth noting that Ukrainian accounting standards were based on international accounting frameworks. Order of the Ministry of Finance of Ukraine No. 73 (2013) included a template for the "Statement of Cash Flows", which can be completed using either the direct or indirect method. This report allowed comprehensive tracking of cash movements across operating, investing, and financing activities.

R. Ball & V.V. Nikolaev (2022) investigated the accrual method, which underpinned the recognition of income from operating activities and directly influences operational cash flows. The accrual basis assumes that recorded profit exceeds operational cash inflows, a fact that was particularly relevant for forecasting future cash flows. Unlike the cash basis, the accrual method generated more informative indicators for financial reporting. Profit calculated using this approach played a key role in predicting future cash flows, and actual cash movements helped to analyse discrepancies between accrued profit and net cash flow. These insights were utilised by the researchers to forecast industrial enterprise revenues.

Researchers B. Noury *et al.* (2020) examined the relevance of cash flow forecasting in the context of growing investment activity and its influence on strategic management decisions. They emphasised the importance of operational cash flows as the foundation of a firm's financial activities. Their study also compared the use of accrual and cash methods for cash flow forecasting, noting the absence of consensus among scholars. They concluded that the accrual method offered greater analytical capacity and serves as the foundation for forecasting operating cash flows. C.-W. Wang *et al.* (2023) asserted that a firm's financial policy was shaped by the uncertainty of its cash flows. The greater this uncertainty, the more cash was required to ensure the coordinated functioning of the enterprise's structural units. The aim of this study was to present an original approach to forecasting cash flows in industrial enterprises.

Materials and Methods

This scientific study employed analytical and synthetic methodological techniques. The analytical approach

facilitated the examination of the formation of specific types of cash flows from operating, investing, and financing activities; the analysis of changes in the volume and structure of cash flows over a defined period; the identification of trends and patterns; and the application of various financial ratios (such as the share of cash in current assets, the share of cash in total assets, and the absolute liquidity ratio) to assess the financial condition of enterprises and the effectiveness of their cash flow management. The synthetic method was applied to integrate the various types of cash flows by combining inflows from different activities to form a comprehensive picture of the enterprise's overall cash flow. It also allowed the identification of influencing factors and their impact on the formation and dynamics of cash flows, the establishment of cause-and-effect relationships, the development of a holistic view of the enterprise's financial standing, highlighting its strengths and weaknesses, the formulation of an effective cash flow management strategy aimed at ensuring financial stability and growth.

To study the economic processes associated with cash flows in industrial enterprises, the method of generalisation was applied at different stages of the research. This method allowed the systematisation of existing theoretical approaches to the study of cash flows, the identification of key research directions, and the detection of general trends and patterns in the formation and dynamics of cash flows based on the analysis of statistical data and corporate financial statements. Conclusions were drawn regarding the specific features of cash flow formation and management in industrial enterprises, and practical recommendations for forecasting cash flows were developed.

The research was based on statistical data on the operations of Ukrainian bakery enterprises obtained from open sources. To facilitate comparisons and draw generalised conclusions, aggregate indicators for all active enterprises in Ukraine and for enterprises engaged in the production of bread, bakery, and flour products were used, as provided by the Official website of State Statistics Service of Ukraine (2023). For the calculation of the share of cash in current and total assets and the absolute liquidity ratios, thematic summaries of the State Statistics Service of Ukraine were utilised, specifically the data on current assets by economic activity type, with a breakdown by large, medium, small, and micro-enterprises (2013-2023). The absolute liquidity ratio was calculated as the ratio between the value of the balance sheet item "Cash and cash equivalents, thousand UAH"

and the value of the item "Current liabilities and provisions, thousand UAH". To estimate cash flows from operating activities of all active enterprises in Ukraine and those producing bread and bakery products, the indirect method was used, based on statistical indicators from thematic datasets, including: Financial result before taxation of enterprises by types of economic activity with a breakdown into large, medium, small, and micro-enterprises (excluding banks) for the years 2010-2023 (profit or loss before taxation); Non-current assets of enterprises by types of economic activity with a breakdown into large, medium, small, and micro-enterprises (2013-2023) (depreciation of non-current assets); Current assets of enterprises by types of economic activity with a breakdown into large, medium, small, and micro-enterprises (2013-2023) (change in current assets); Current liabilities and provisions of enterprises by types of economic activity with a breakdown into large, medium, small, and micro-enterprises (2013-2023) (change in current liabilities and provisions) (Official website of State Statistics Service of Ukraine, 2023).

To validate the conclusions drawn from the statistical analysis of all active enterprises and the bakery sector, selected bakery enterprises in Western Ukraine were examined in detail, specifically: Additional liability company "Ivano-Frankivsk Bread Plant" (2024), Limited liability company "Believer" (2024), Private joint-stock company "Teremno Khlib" (2024). Additionally, data were analysed from: Limited liability company "Khlibodar" (2024), Limited liability company "Ternopilkhlibprom" (2024), Private joint-stock company "Concern Hlibprom" (2024).

The key selection criteria for these enterprises included: a strong regional reputation, high consumer demand for their products, and a workforce exceeding 100 employees. The methodology for calculating analytical indicators of cash flows for these selected enterprises mirrors the methodology used for calculating the same indicators across all active enterprises.

Results and Discussion

Cash flow forecasting should be conducted with consideration for the movement of cash from various types of business activities. According to Order of the Ministry of Finance of Ukraine No. 73 (2013), information on the cash flow of an industrial enterprise was disclosed in Form No. 3, "Statement of cash flows", broken down into operating, investing, and financing activities. The characteristics of cash flows by type of industrial activity were presented in Table 1.

Table 1. Characteristics of cash flows by type of industrial activity

Incoming cash flows	Outgoing cash flows
1. Operating activities	
Proceeds from sales of goods, products, services	Payment for goods, works, services to suppliers
Proceeds from rental income	Payment of employee wages
Receipts of fines, penalties, forfeits	Payment of single social contribution
Refund of overpaid taxes, fees, and charges	Payment of taxes, fees, and charges (excluding the single social contribution)

Table 1, Continued

Incoming cash flows	Outgoing cash flows
Refund of overpayments to suppliers for goods, works, services	Refunds to buyers for goods, products, works, services
Targeted financing from budgetary funds	Payment of interest on bank loans
	Payments under targeted financing agreements of budgetary programmes
Net cash flow from operating activities: difference between the total inflows from operating activities and the total outflows related to operating activities	
2. Investing activities	
Proceeds from the sale of non-current assets	Payment for the acquisition of non-current assets
Receipts of interest and dividends from corporate rights and securities	Payment for the acquisition of corporate rights and securities
Proceeds from derivatives	Payments on derivatives
Receipts of interest from deposits in bank accounts	
Net cash flow from investing activities: difference between the total inflows and outflows related to investing activities	
3. Financing activities	
Contributions from shareholders under the founding documents	Repurchase of the company's own shares
Receipts of loans from banks and other financial institutions	Repayment of loans to banks and other financial institutions
	Dividend payments to shareholders
Net cash flow from financing activities: difference between the total inflows and outflows related to financing activities	
4. Total cash flow: total value of net cash flows from operating, investing, and financing activities	

Source: based on Order of the Ministry of Finance of Ukraine No. 73 (2013)

The total cash flow generated from various activities directly influences the cash balance of the enterprise and, consequently, its financial stability indicators. Since Western Ukraine has largely adapted to the new economic realities and maintained business activity, the study was based on commonly accepted normative values for the absolute liquidity ratio, ranging from 0.2 to 0.35. The dynamics of cash balances of bakery enterprises in the western regions of Ukraine, in comparison with the overall indicators of all active enterprises

in Ukraine and those specifically in the production of bread, bakery, and flour-based products, were presented in Table 2. It should be noted that each region of Ukraine has a considerable number of enterprises engaged in the production of bread and bakery goods. These enterprises may vary in production volume, workforce size, and target consumer focus. The study concentrated on bakery enterprises in Western Ukraine that are well known within their respective regions and employ more than 100 staff members.

Table 2. Dynamics of cash balances in Ukrainian bakery enterprises

Period	Cash and cash equivalents, thousand UAH	Current assets, thousand UAH	Share of cash in current assets, %	Total assets, thousand UAH	Share of cash in total assets, %
1	2	3	4	5	6
All active enterprises in Ukraine (2013 – 393327 units, 2014 – 341001 units, 2015 – 343440 units, 2016 – 306369 units, 2017 – 338256 units, 2018 – 355877 units, 2019 – 380597 units, 2020 – 373822 units, 2021 – 370834 units, 2022 – 261924 units, 2023 – 307852 units)					
2013	207,799,071.5	3,069,041,563.6	6.77	5,712,274,810.1	3.64
2014	248,656,117.5	3,271,954,021.3	7.60	5,994,265,571.9	4.15
2015	301,587,227.7	4,108,602,679.3	7.34	8,073,783,376.4	3.74
2016	334,528,258.2	5,772,816,523.9	5.79	9,991,791,211.6	3.35
2017	365,615,871.6	5,650,817,419.4	6.47	9,961,779,060.4	3.67
2018	377,118,530.5	6,285,066,560.4	6.00	10,878,050,628.0	3.47
2019	463,514,738.0	6,640,282,371.6	6.98	11,494,975,428.7	4.03
2020	545,592,742.2	7,360,593,624.4	7.41	12,682,480,085.0	4.30
2021	631,067,419.2	8,411,902,475.0	7.50	14,070,487,840.4	4.49
2022	723,519,895.2	9,024,337,965.0	8.02	14,654,653,024.4	4.94
2023	1,099,212,362.8	10,193,400,959.3	10.78	16,442,568,885.4	6.69
Enterprises engaged in the production of bread, bakery, and flour products (2013 – 1362 units, 2014 – 1158 units, 2015 – 1133 units, 2016 – 1007 units, 2017 – 1036 units, 2018 – 1075 units, 2019 – 1102 units, 2020 – 1069 units, 2021 – 1113 units, 2022 – 838 units, 2023 – 923 units)					
2013	411,261.8	7,272,214.3	5.66	14,731,592.0	2.79
2014	578,497.7	7,418,985.6	7.80	15,074,022.2	3.84
2015	507,793.7	10,926,500.9	4.65	20,430,462.9	2.49
2016	477,987.7	11,617,683.2	4.11	18,467,113.3	2.59
2017	667,385.1	12,351,258.4	5.40	19,339,112.8	3.45

Table 2, Continued

1	2	3	4	5	6
2018	834,901.6	13,610,085.4	6.13	23,422,002.4	3.56
2019	821,783.1	14,423,307.6	5.70	25,653,231.4	3.20
2020	1,137,640.2	17,258,418.9	6.59	30,944,047.9	3.68
2021	1,302,529.1	19,948,005.8	6.53	36,062,066.6	3.61
2022	2,310,128.0	20,974,301.0	11.01	32,902,568.6	7.02
2023	3,387,637.8	26,192,663.8	12.93	41,193,111.5	8.22
Volyn region, Private joint-stock company "Teremno Khib"					
2019	3,472	36,966	9.39	111,147	3.12
2020	808	37,887	2.13	146,049	0.55
2021	739	39,036	1.89	143,589	0.51
2022	1,637	44,328	3.69	155,041	1.06
2023	2,264	53,635	4.22	179,343	1.26
Zakarpattia region, Limited liability company "Believer"					
2020	3,306	27,405	12.06	32,338	10.22
2021	6,930	59,170	11.71	75,966	9.12
2022	7,255	88,742	8.18	115,771	6.27
2023	25,679	121,050	21.21	159,470	16.10
Ivano-Frankivsk region, Additional liability company "Ivano-Frankivsk Bread Plant"					
2019	3,980	31,249	12.74	94,935	4.19
2020	3,659	79,707	4.59	161,228	2.27
2021	1,674	129,127	1.30	243,534	0.69
2022	4,951	152,907	3.24	253,634	1.95
2023	4,881	170,756	2.86	280,894	1.74
Lviv region, Private joint-stock company "Concern Hlibprom"					
2019	39,814	224,855	17.71	723,007	5.51
2020	9,972	229,643	4.34	714,776	1.40
2021	9,456	273,288	3.46	849,416	1.11
2022	35,439	333,939	10.61	915,178	3.87
2023	8,534	334,171	2.55	1,068,315	0.80
Rivne region, Limited liability company "Khibodar"					
2019	788	62,511	1.26	101,236	0.78
2020	682	57,325	1.19	111,116	0.61
2021	992	88,495	1.12	149,634	0.66
2022	2,367	96,194	2.46	205,458	1.15
2023	15,380	154,310	9.97	307,416	5.00
Ternopil region, Limited liability company "Ternopilkhlibprom"					
2019	535	6,019	8.89	16,243	3.29
2020	278	5,758	4.83	13,690	2.03
2021	123	5,307	2.31	13,128	0.93
2022	106	6,712	1.58	14,015	0.76
2023	97	6,263	1.55	15,689	0.62

Source: based on Additional liability company "Ivano-Frankivsk Bread Plant" (2024), Limited liability company "Believer" (2024), Limited liability company "Khibodar" (2024), Limited liability company "Ternopilkhlibprom" (2024), Private joint-stock company "Concern Hlibprom" (2024), Private joint-stock company "Teremno Khib" (2024)

Statistical data on cash balances indicated that their share in the assets of any enterprise remains relatively low. At the national level, the proportion of cash and cash equivalents in total assets of active enterprises ranged between 3% and 7%. For enterprises engaged in the production of bread, bakery, and flour products, this range extended to 3-8%. In general, a clear trend was observed: the share of cash and cash equivalents in total assets was consistently lower than their share in current assets. This trend was also evident among the selected bakery enterprises from Western Ukraine included in the study. However, it was important to note

that each enterprise was unique, and the variability of their indicators may be more pronounced due to individual circumstances.

A significant development was the increased concentration of cash across all Ukrainian enterprises, and particularly among enterprises involved in the production of bread, bakery, and flour products (Table 2). As of the end of 2023, cash and cash equivalents accounted for 6.69% of the total assets of all active enterprises in Ukraine. In the bread and bakery sector, the concentration was even higher – 8.22% (Official website of State Statistics Service of Ukraine, 2023).

This pattern, however, was not consistently observed across other individual bakery enterprises. These figures were likely the result of the full-scale war that has been ongoing in Ukraine since 2022, leading enterprises to adopt a more cautious approach to managing their cash reserves.

A critical benchmark in the operation of any industrial enterprise was the minimum level of cash required to

cover its most urgent needs. This was typically assessed using the absolute liquidity ratio, calculated as the ratio of the balance sheet item "Cash and cash equivalents, thousand UAH" to the item "Current liabilities and provisions, thousand UAH." Table 3 presented the absolute liquidity ratios of Ukrainian bakery enterprises, illustrating the relationship between cash, its equivalents, and current liabilities and provisions.

Table 3. Absolute liquidity ratios of Ukrainian bakery enterprises

Period	Cash and cash equivalents, thousand UAH	Current liabilities and provisions, thousand UAH	Absolute liquidity ratio
1	2	3	4
All active enterprises in Ukraine (2013 – 393327 units, 2014 – 341001 units, 2015 – 343440 units, 2016 – 306369 units, 2017 – 338256 units, 2018 – 355877 units, 2019 – 380597 units, 2020 – 373822 units, 2021 – 370834 units, 2022 – 261924 units, 2023 – 307852 units)			
2013	207,799,071.5	2,689,338,170.9	0.08
2014	248,656,117.5	3,151,253,038.8	0.08
2015	301,587,227.7	4,114,903,221.6	0.07
2016	334,528,258.2	5,846,688,669.2	0.06
2017	365,615,871.6	5,769,538,995.9	0.06
2018	377,118,530.5	6,408,553,734.3	0.06
2019	463,514,738.0	6,764,591,798.3	0.07
2020	545,592,742.2	7,424,970,644.4	0.07
2021	631,067,419.2	8,111,316,792.1	0.08
2022	723,519,895.2	8,713,997,338.1	0.08
2023	1,099,212,362.8	9,625,767,944.5	0.11
Enterprises engaged in the production of bread, bakery, and flour products (2013 – 1362 units, 2014 – 1158 units, 2015 – 1133 units, 2016 – 1007 units, 2017 – 1036 units, 2018 – 1075 units, 2019 – 1102 units, 2020 – 1069 units, 2021 – 1113 units, 2022 – 838 units, 2023 – 923 units)			
2013	411,261.8	6,614,120.4	0.06
2014	578,497.7	8,683,477.6	0.07
2015	507,793.7	11,304,604.5	0.04
2016	477,987.7	10,412,235.8	0.05
2017	667,385.1	11,926,521.7	0.06
2018	834,901.6	13,378,968.4	0.06
2019	821,783.1	13,177,083.4	0.06
2020	1,137,640.2	15,839,561.4	0.07
2021	1,302,529.1	19,460,076.2	0.07
2022	2,310,128.0	19,531,346.2	0.12
2023	3,387,637.8	23,301,709.3	0.15
Volyn region, Private joint-stock company "Teremno Khib"			
2019	3,472	40,517	0.09
2020	808	51,899	0.02
2021	739	59,356	0.01
2022	1,637	76,591	0.02
2023	2,264	87,822	0.03
Zakarpattia region, Limited liability company "Believer"			
2020	3,306	28,977	0.11
2021	6,930	70,692	0.10
2022	7,255	106,040	0.07
2023	25,679	138,594	0.19
Ivano-Frankivsk region, Additional liability company "Ivano-Frankivsk Bread Plant"			
2019	3,980	40,391	0.10
2020	3,659	82,915	0.04
2021	1,674	155,967	0.01
2022	4,951	191,914	0.03
2023	4,881	224,500	0.02
Lviv region, Private joint-stock company "Concern Hlibprom"			
2019	39,814	206,794	0.19
2020	9,972	223,160	0.04

Table 3, Continued

1	2	3	4
2021	9,456	281,158	0.03
2022	35,439	322,132	0.11
2023	8,534	367,017	0.02
Rivne region, Limited liability company "Khllobodar"			
2019	788	66,892	0.01
2020	682	70,298	0.01
2021	992	97,089	0.01
2022	2,367	139,238	0.02
2023	15,380	177,213	0.09
Ternopil region, Limited liability company "Ternopilkhlibprom"			
2019	535	7,069	0.08
2020	278	5,508	0.05
2021	123	8,685	0.01
2022	106	13,023	0.01
2023	97	14,483	0.01

Source: based on Additional liability company "Ivano-Frankivsk Bread Plant" (2024), Limited liability company "Believer" (2024), Limited liability company "Khllobodar" (2024), Limited liability company "Ternopilkhlibprom" (2024), Private joint-stock company "Concern Hlibprom" (2024), Private joint-stock company "Teremno Khllob" (2024)

The analytical indicators presented in Table 3 demonstrated that the absolute liquidity of all active enterprises in Ukraine during the period from 2013 to 2023 did not exceed the recommended normative levels. Only in 2023 did the absolute liquidity of all operating enterprises in the country rise to 0.11, compared to 0.08 in 2022. Similar conclusions can be drawn regarding the absolute liquidity of Ukrainian enterprises engaged in the production of bread, bakery, and flour products. The increase in absolute liquidity ratios among all active enterprises in 2023 can be attributed

to the impact of the ongoing war in the country, during which cash served as a stabilising factor in the economic activities of enterprises. Predominantly low absolute liquidity ratios were recorded at several of the studied bakery enterprises in Western Ukraine, indicating an insufficient volume of highly liquid assets and, at times, a lack of capacity to promptly settle short-term liabilities to other economic agents. This lack of highly liquid assets – primarily represented by cash – served as a basis for further analysis of cash flows by types of activity (Table 4).

Table 4. Cash flows by types of activity in Ukrainian bakery enterprises

Period	Net cash flow and cash equivalents, thousand UAH	Net cash flow from operating activities, thousand UAH	Net cash flow from investing and financing activities, thousand UAH
1	2	3	4
All active enterprises in Ukraine (2013 – 393327 units, 2014 – 341001 units, 2015 – 343440 units, 2016 – 306369 units, 2017 – 338256 units, 2018 – 355877 units, 2019 – 380597 units, 2020 – 373822 units, 2021 – 370834 units, 2022 – 261924 units, 2023 – 307852 units)			
2014	40,857,046	3,225,214,426	-3,184,357,380
2015	52,931,110.2	-7,075,184,129	7,128,115,240
2016	32,941,030.5	-116,912,023.1	149,853,053.6
2017	31,087,613.4	-260,016,125.2	291,103,738.6
2018	11,502,658.9	1,586,670,385	-1,575,167,726
2019	86,396,207.5	319,721,867.6	-233,325,660
2020	82,078,004.2	905,424,863.6	-823,346,859
2021	85,474,677	706,454,578	-620,979,901
2022	92,452,476	-1,190,910,227	1,283,362,703
2023	375,692,467.6	1,323,520,778	-947,828,311
Enterprises engaged in the production of bread, bakery, and flour products (2013 – 1362 units, 2014 – 1158 units, 2015 – 1133 units, 2016 – 1007 units, 2017 – 1036 units, 2018 – 1075 units, 2019 – 1102 units, 2020 – 1069 units, 2021 – 1113 units, 2022 – 838 units, 2023 – 923 units)			
2014	167,235.9	1,252,356.7	-1,085,120.8
2015	-70,704	13,271,629.8	-13,342,333.8
2016	-29,806	-2,820,277.3	2,790,471.3
2017	189,397.4	152,427.5	36,969.9

Table 4, Continued

1	2	3	4
2018	167,516.5	1,653,228.3	-1,485,711.8
2019	-13,118.5	-3,529,830.4	3,516,711.9
2020	315,857.1	28,912,597.5	-28,596,740.4
2021	164,888.9	-35,151,402.5	35,316,291.4
2022	1,007,598.9	1,439,346.7	-431,747.8
2023	1,077,509.8	2,152,783.3	-1,075,273.5
Volyn region, Private joint-stock company "Teremno Khib"			
2020	-2,664	18,338	-21002
2021	-69	3,842	-3911
2022	898	12,252	-11354
2023	627	6,919	-6292
Zakarpattia region, Limited liability company "Believer"			
2020	349	349	0
2021	3,624	3,624	0
2022	325	325	0
2023	18,424	18,424	0
Ivano-Frankivsk region, Additional liability company "Ivano-Frankivsk Bread Plant"			
2020	-321	14,187	-14,508
2021	-1,985	1,257	-3,242
2022	3,277	4,976	-1,699
2023	-70	10,857	-10,927
Lviv region, Private joint-stock company "Concern Hlibprom"			
2020	-29,842	71,380	-101,222
2021	-516	83,785	-84,301
2022	25,983	71,596	-45,613
2023	-26,905	123,659	-150,564
Rivne region, Limited liability company "Khibodar"			
2020	-106	5,637	-5,743
2021	310	2,878	-2,568
2022	1,375	143	1,232
2023	13,013	25,477	-12,464
Ternopil region, Limited liability company "Ternopilkhlibprom"			
2020	-257	1,175	-1,432
2021	-155	470.1	-625.1
2022	-17	-678	661
2023	-9	679	-688

Source: based on Additional liability company "Ivano-Frankivsk Bread Plant" (2024), Limited liability company "Believer" (2024), Limited liability company "Khibodar" (2024), Limited liability company "Ternopilkhlibprom" (2024), Private joint-stock company "Concern Hlibprom" (2024), Private joint-stock company "Teremno Khib" (2024)

The analytical indicators presented in Table 4 demonstrated a direct relationship between cash flow and the available cash balances in the bank accounts of enterprises. The dominant cash flow was that generated from operating activities, which was expected to be the principal source of funds for the enterprise and to serve as a driver for both investment and financing activities. In cases where cash generated from operating activities was insufficient, the enterprise was compelled to seek

alternative sources to support its statutory operations, particularly through activating financial or investment activities. Thus, the analytical data concerning enterprise cash flows at the national level in Ukraine allowed to draw the following conclusion: a positive cash flow from operating activities serves as a resource for expanding investment and financing operations, whereas a negative operating cash flow necessitates the search for additional financial resources to cover the immediate needs

of the enterprise's core operations. There were also instances where positive cash flows from all types of activities can be observed. In such cases, an increase in the cash balance on enterprises' bank accounts occurs. On one hand, this may reflect a planned accumulation of cash for a specific strategic objective or the execution of an operational-tactical task. On the other hand, such a situation may indicate the unjustified accumulation of cash and its inefficient use due to a lack of dynamic turnover. A third scenario was also possible, where the enterprise engages solely in operational activities without involving cash in financial or investment operations. In this case, the enterprise extracts all potential value from its initially invested resources, without constructing a future-oriented development strategy. Over time, such an approach to economic activity may result in a loss of production capacity and, ultimately, the exit of the enterprise from the business environment.

These arguments provided a basis for concluding that all areas of enterprise activity were of significant importance. The balance between cash flows from various types of activities was not governed by standards, but rather determined by the individual strategic vision of the enterprise's owner, which was implemented by the employed staff. Therefore, forecast calculations of cash

flow movements have become critical for the implementation of any enterprise's development strategy.

Cash flow forecasting was a set of sequential actions that must be properly organised. Issues related to the organisation of cash flow forecasting have been explored by both Ukrainian and international scholars. G. Chumak (2023) viewed budgeting as a tool for enterprise expenditure management. The author presented a structured system of budgets, which was considered in the course of this study. S. Tereshchenko & A. Pietukhov (2024) addressed the issue of short-term forecasting through budgeting systems for medium-sized enterprises. Given that most bakery enterprises, including those studied in this work in Western Ukraine, fall under the category of medium-sized businesses, the operational budgeting approach described by S. Tereshchenko & A. Pietukhov (2024) merits attention. The authors Z.-M.V. Zadorozhny *et al.* (2023) aimed to present a widely accepted methodology for cash flow forecasting using accessible and simple examples. The practical application of the proposed forecasting approaches may vary depending on the specific operational characteristics of each individual enterprise. The organisation of cash flow forecasting involves the following key stages (Table 5).

Table 5. Stages of forecasting cash flows

Forecasting stage	Purpose of the forecasting stage	Sources of information	Responsible executives
Familiarisation with the enterprise development strategy and identification of forecast development indicators for the forecast year	To define forecast performance indicators for the enterprise for the upcoming year	Approved enterprise development strategy with established annual targets for achieving strategic goals	Head of the forecasting team
Development of a methodology for forecasting key cash flow indicators	To establish a unified approach to forecasting cash flow indicators; to develop a set of forecast reports (budgets) for cash flow forecasting	Review of international and Ukrainian accounting practices; regulatory framework on cash flow accounting	Head of the forecasting team
Collection of accounting and analytical information	To define principles and methods of collecting and summarising accounting information; to develop internal analytical and consolidated registers for cash flow forecasting	Primary documents, analytical and synthetic accounting registers, financial statements, external statistical data, expert assessments, and unofficial information sources	Members of the forecasting team
Processing and analysis of accounting information	To present all possible alternative management decisions regarding cash flows and select the optimal one	Internal analytical and consolidated registers used to summarise accounting and analytical information for various forecasting scenarios	Members of the forecasting team
Development of a forecast model of cash flows	To forecast cash flows according to the optimal management decision selected by the management team	Forecast reports (budgets) confirming projected cash flow indicators	Members of the forecasting team
Analysis of forecast indicators for compliance with strategic development targets	To assess adherence to the enterprise's development strategy over the forecast year	Developed cash flow model; approved development strategy with annual performance indicators	Members of the forecasting team
Decision-making on the forecast cash flow model and adjustment of forecast cash flow indicators	To adjust cash flow forecasts if necessary	Forecast balance model; liquidity indicators of the enterprise	Senior management of the enterprise

Source: developed by the author

All stages of organising cash flow forecasting are sequential and interdependent. However, the quality of the forecast calculations was directly influenced by the

methodology used to forecast cash flow indicators. At this stage of organising forecasting operations, a general set of forecast cash flow indicators and the sequence

of their forecasting was established. In organising the forecasting calculations, it was advisable to distinguish between general and analytical forecast indicators. Only after this distinction should the forecasting methodology for these indicators be determined. It was recommended

that the enterprise formalise this methodology through an internal order or directive addressed to the accounting and analytical department or an individual specialist. The set of general forecast cash flow indicators and the sequence of their forecasting were presented in Table 6.

Table 6. Set of general forecast indicators of cash flow and the sequence of their forecasting

Indicator	Initial data for calculations	Sources of information and forecasting recommendations
1. Cash balances at the beginning of the forecast period	Form 1 of financial reporting "Balance sheet (Statement of financial position)"	Actual figures from official reporting or initial forecast indicators, if the forecast period covers multiple years
2. Net cash flow from operating activities	Result of mathematical calculations of forecast indicators 2.1-2.4	
2.1. Forecast of sales of products, works, services	Forecast data on product assortment, list of works and services, pricing policy, expected payments from customers	Extract from the enterprise's strategic development plan for the forecast year; amendments to the annual development plan considering external and internal factors
2.2. Forecast of other operating income	Forecast of types and volumes of non-core operational activities, pricing policy, expected payments	
2.3. Forecast of main production costs	Forecast production volume of goods, works, and services; norms for material, labour, and overhead costs	
2.4. Forecast of other operating expenses	Forecast staff numbers in administration, sales, and non-production areas; salaries, bonuses, indexation rates; tax policy; material and other costs for administrative, sales, and non-production activities	
3. Net cash flow from investing activities	Result of mathematical calculations of forecast indicators 3.1-3.2	
3.1. Forecast of investment income	Forecast of sales of non-current assets; income from corporate rights and securities; interest on deposits	Extract from the enterprise's strategic development plan for the forecast year; amendments to the annual development plan considering external and internal factors
3.2. Forecast of investment expenditures	Forecast of expenditures for acquisition of non-current assets; corporate rights and securities	
4. Net cash flow from financing activities	Result of mathematical calculations of forecast indicators 4.1-4.2	
4.1. Forecast of financing income	Forecast of contributions from shareholders; forecast of bank loans and borrowings from financial institutions	Extract from the enterprise's strategic development plan for the forecast year; amendments to the annual development plan considering external and internal factors
4.2. Forecast of financing expenditures	Forecast of expenditures on share buybacks; forecast of repayments of loans and borrowings	
5. Total cash flow from all types of activities	Result of mathematical calculations based on forecast indicators 2, 3, 4	
6. Cash balances at the end of the forecast period	Result of mathematical calculations based on forecast indicators	It is advisable to compare this with the absolute liquidity ratio and the liquidity indicator at the beginning of the forecast period

Source: developed by the author

The core of the forecast calculations was based on the projection of sales volumes of products, works, and services. This indicator was the most crucial among all forecast indicators, as it directly influenced the forecasted revenues and expenses of core operations, and enabled the development of investment and financing activities. It was important to track the construction of the cash flow model from operating activities while considering the forecasted sales volume factor. The initial sales forecast was based on the approved enterprise development strategy for the specific forecast year. However, the final decision regarding the baseline sales forecast should be made based on the following factors:

- ▣ product, work, and service assortment;
- ▣ available production capacity;
- ▣ availability of financial resources;
- ▣ availability of raw materials;
- ▣ availability of human resources;
- ▣ regulatory framework and tax policy;
- ▣ pricing policy;
- ▣ competitive environment.

Each factor may be taken into account using a scoring method, which forms the basis for making decisions on the production of a particular product. An example of applying a scoring method to assess the influence of a set of factors on the decision to produce specific types

of products at the industrial enterprise PJSC “Teremno Khlib” was presented in Table 7. The products were

selected among those known and in demand by consumers in the relevant region.

Table 7. Analysis of factors influencing the forecast product assortment

Influencing factor	Product assortment, points		
	“Rodynniyi” bread	“Zdorovia” bread	“Domashnii” bread (sourdough)
Available production capacity	10	8	5
Availability of financial resources	10	10	10
Availability of raw materials	10	7	3
Availability of human resources	10	7	4
Regulatory framework and tax policy	10	9	6
Pricing policy	10	7	5
Competitive environment (absence of competitors)	10	6	4
Consumer demand	10	6	4
Total	80	60	41

Source: developed by the author

The approach to scoring the ranking of product types should be developed by the analytical team of the specific enterprise. This means that the list of factors influencing the forecast product assortment can be further expanded, and the scoring scale for each factor may even follow a 100-point system. The choice of the scoring system and the list of influencing factors should be formalised in an internal order or directive of the enterprise. Thus, the ranking assessment of the product assortment presented in Table 7 made it possible to identify priority product types and adjust the forecasted sales volumes for the relevant year. The forecasting team made decisions regarding the percentage adjustment of the forecast sales volumes. For instance, the bread type “Rodynniyi” received a score of 80 points, the

highest among the assessed assortment, and can be used as a benchmark. Assuming a maximum forecasted increase in sales volume of 10% for “Rodynniyi”, the corresponding growth for “Zdorovia” bread would be 7.5%. As for “Domashnii” bread, the forecasting team may decide to reduce its forecasted sales volume, as consumer demand for this type was assessed at only 4 out of 10 points. The final forecast indicators were determined by the head of the forecasting team. Therefore, based on the total score, it was possible to establish a ranking of individual product types and adjust the forecasted production volumes for the year accordingly (Table 8). These evaluative judgements will directly affect production volumes and all related forecasted expenses, thereby influencing cash flow.

Table 8. Product, work, and service assortment

Type of product	Forecasted sales volume according to the strategic plan for the respective year, units	Change in forecasted sales volume, %	Adjusted forecasted indicator, units
“Rodynniyi” bread	12,000	+10.0%	13,200
“Zdorovia” bread	7,000	+7.5%	7,525
“Domashnii” bread (sourdough)	5,000	-4.0%	4,800

Source: developed by the author

It was worth noting that, in many cases, the percentage change in the forecasted sales volumes of individual product assortments may reflect the personal judgement of the head of the forecasting team. These decisions were often based not only on the expert evaluations of the analytical team, but primarily on the business intuition of the team leader. In Table 8, the key factor influencing the changes in forecasted sales volumes for “Rodynniyi” and “Zdorovia” bread was identified as the competitive environment. As for “Domashnii” bread, a decision may be made to reduce its production volume, as the majority of influencing factors received a score of 5 or below. The overall model of cash flow forecasting was presented in Figure 1.

Figure 1 illustrated the sequence of forecasting operations for obtaining the total projected cash flow of an enterprise from various types of activities. Thus, the determination of forecast sales indicators enabled the estimation of production volumes. The forecasted production volume was equal to the forecasted sales volume, adjusted for the change in the expected inventory of finished goods at the beginning and end of the forecast period. Based on the forecasted production volume, the enterprise’s analytical department calculates all forecasted operating expenses and forecasted operating revenues. Adjusting the forecasted operating expenses for non-cash items (such as depreciation), and aligning the forecasted operating revenues with expected cash inflows,

allowed for the calculation of net forecasted operating cash inflows (Mamchur & Studinska, 2024). This indicator directly influenced the subsequent forecasting of cash flows from investing and financing activities. It was

advisable to present a mechanism for forecasting cash flows from operating activities, using as an example a single type of product from a bakery enterprise that was consistently in demand among end consumers (Table 9).

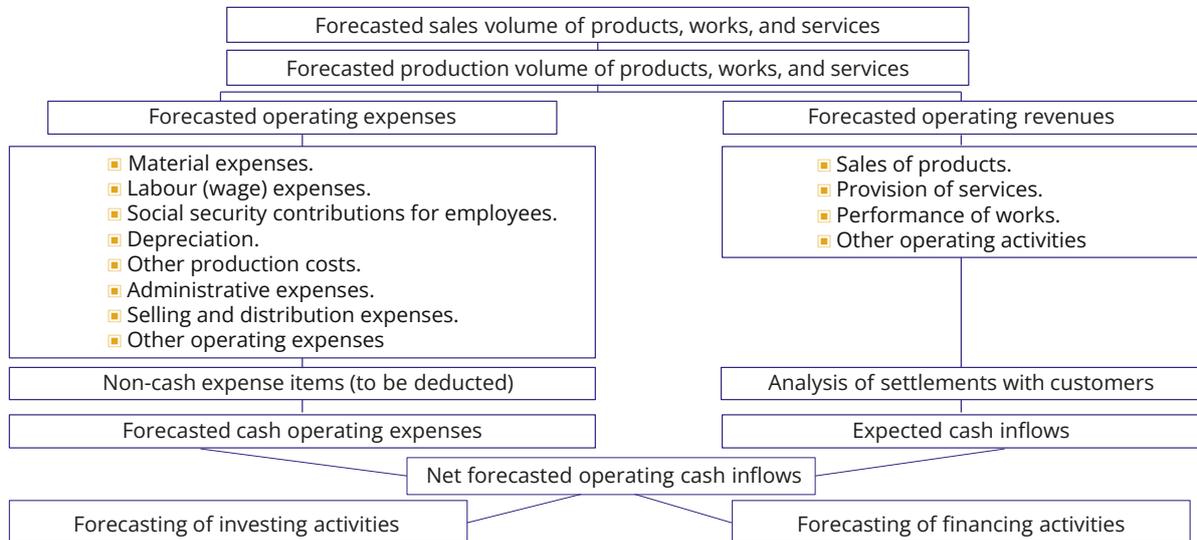


Figure 1. Revenues in the global online lottery market (USD billion) and the number of users (million)

Source: developed by the author

Table 9. Forecasted production and sales volumes of "Rodynni" bread

Indicator	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total for the year
Forecasted sales volume, units	3,300	3,300	3,300	3,300	13,200
Opening inventory of finished goods, units	300	330	363	396	-
Closing inventory of finished goods, units	330	363	396	462	-
Forecasted production volume, units	3,330	3,333	3,333	3,366	13,362
Forecasted production volume, tonnes (1 unit = 0.7 kg)	2,331	2,333.1	2,333.1	2,356.2	9,353.4

Source: developed by the author

Table 9 provided a quarterly breakdown; however, more detailed calculations can also be performed for each month of the forecast year. Since the baseline assumption of the forecast involved a product with consistent and stable demand, the quarterly distribution

was set at 25%. The inventory of finished goods must ensure the ability to meet continuous consumer demand for a specific product. Based on the forecasted production volume, it was possible to calculate the forecasted operating expenses (Table 10).

Table 10. Forecasted material costs for "Rodynni" bread

Indicator	Rate per 100 kg	Requirement for forecasted production volume, tonnes	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1	2	3	4	5	6	7
1. Raw Materials and Ingredients:						
Rye flour, coarse (per 1 kg)	40	3,741.4	935.3	935.3	935.3	935.3
Wheat flour, first grade (per 1 kg)	40	3,741.4	935.3	935.3	935.3	935.3
Drinking water, litres	16.8	1,571.4	392.8	392.8	392.8	392.8
Yeast, kg	0.5	46.8	11.7	11.7	11.7	11.7
Table salt, kg	1.2	112.2	28.1	28.1	28.1	28.1
White sugar, kg	1.5	140.3	35.1	35.1	35.1	35.1
2. Price, UAH:						
Rye flour, coarse (per 1 kg)	-	-	18	19	20	22
Wheat flour, first grade (per 1 kg)	-	-	16	17	18	19

Table 10, Continued

1	2	3	4	5	6	7
Drinking water (per cubic metre)	-	-	30.38	30.38	30.38	30.38
Yeast, per kg	-	-	170	172	175	180
Table salt, per kg	-	-	20	22	23	24
White sugar, per kg	-	-	25	26	27	28
3. Total cost of raw materials to meet forecasted needs, UAH	-	-	35,239.18	37,224.44	39,193.33	42,120.94
4. Total annual cost of raw materials and ingredients, UAH	-	-	-	-	-	153,777.9

Source: developed by the author

Typically, enterprises take into account the quantity and projected value of raw material inventories at the beginning and end of each reporting period in order to ensure the consistent support of the production programme. It was also essential to consider the terms of settlements with suppliers of raw materials and components, as these factors directly influence

the cash outflows associated with core operational activities. However, these aspects were not reflected in the calculations presented in the article. Similarly, the forecasting of other operational expenses was carried out in accordance with Figure 1. The projected calculation of revenue from the sale of finished products was presented in Table 11.

Table 11. Projected revenue from the sale of "Rodynni" bread

Indicator	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total for the year
Projected sales volume, units	3,300	3,300	3,300	3,300	13,200
Price per unit, UAH	27	29	30	32	
Projected sales volume, UAH	89,100	95,700	99,000	105,600	389,400
Percentage of unpaid customer invoices, %	3	4	2	5	
Expected cash inflows from sales, UAH	86,427	91,872	97,020	100,320	375,639

Source: developed by the author

When compiling the indicators in Table 11, it was advisable to pay attention to the percentage of unpaid invoices. This indicator was determined based on a retrospective analysis of settlements with customers over an extended period. The analysis of customer payments made it possible to identify unreliable customers and to calculate the average percentage of customers, who either do not intend to settle their accounts for the

products supplied or pay with various delays. The expected cash inflows from the sale of finished products, as indicated in Table 11, were reduced by the percentage of unpaid customer invoices. A comparison of cash inflows and cash outflows (taking into account only material costs) enabled the forecasting of expected operational cash flows and facilitated planning of cash movements to ensure funding for other activities (Table 12).

Table 12. Net projected operational cash inflows

Indicator	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total for the year
Expected cash inflows from product sales, UAH	86,427	91,872	97,020	100,320	375,639
Cost of annual requirement for raw materials and components, UAH	35,239.18	37,224.44	39,193.33	42,120.94	153,777.90
Net projected operational cash inflows, UAH	51,187.82	54,647.56	57,826.67	58,199.06	221,861.10
Percentage of absolute liquidity coverage, %	15	15	15	15	10
Projected cash available for investment and financial activities, UAH	43,509.65	46,450.43	49,152.67	49,469.20	188,581.90

Source: developed by the author

The author O. Stepanenko (2024) explored the characteristics of cash flows and their impact on a company's financial stability. The researcher summarised the groups of internal risks that influence the formation of enterprise cash flows and provided a detailed description of the consequences associated with these risks. The study highlighted the necessity of effective cash flow management, where forecasting and planning are

integral components of the overall cash management system. Conceptual approaches were proposed to ensure sustainable financial stability of enterprises.

An important direction in the study of cash flow dynamics was reflected in the work of N. Boiko *et al.* (2021), who examined methods for analysing enterprise cash flows at various levels of complexity. The authors introduced a methodology encompassing horizontal,

vertical, comparative, and ratio analysis of cash flows. The choice of analytical complexity level was determined by the company's leading analysts. The approaches proposed by N. Boiko *et al.* (2021) may be applied in the assessment of cash flows to support adjustments in managerial decisions regarding the enterprise's future operations and to enhance the informational basis of forecasting calculations.

Zh.M. Zhygalkevych & O.V. Kamyanska (2022) presented their own vision of the concept of corporate cash management, which was based on budgeting and the calculation of analytical indicators such as required cash reserves, optimal cash reserves, and the average cash balance in the cash register. These indicators proved informative and useful for organising further forecasting calculations related to cash flows. However, in this case, the forecasting process may be complicated by complex mathematical computations. Therefore, the feasibility of applying these indicators should be determined by the project team leader. H. Koshelok & R. Hrinchenko (2020) emphasised the importance of analysis in the effective management of cash resources. They outlined both theoretical and practical aspects of cash flow analysis as a component of the overall enterprise management system. For the purposes of their research, the authors classified current assets according to their level of liquidity.

T.Yu. Chaika *et al.* (2018) discussed a methodology for analysing liquidity ratios. The authors raised concerns about existing discrepancies among scholars regarding the normative values of various liquidity ratios and emphasised the risks of superficial cash flow analysis, when industry-specific characteristics were not taken into account. The researchers recommended that the absolute liquidity ratio should range between 0.2 and 0.6. If the value of this ratio was below 0.2, it may indicate ineffective management of accounts receivable and an insufficient level of current assets.

A different opinion regarding the normative value of the absolute liquidity ratio was presented by M.I. Krupka *et al.* (2019), who argued that the "lower limit of this ratio is 0.2". Nevertheless, the authors did not rule out the possibility of setting the normative level at 0.25. H. Kindratska (2019), in analysing various methodologies for assessing corporate solvency, cited the normative values of the absolute liquidity ratio as defined by the Order of the Agency for the Prevention of Bankruptcy of Enterprises and Organizations No. 22 (1998) and Order of the Ministry of Economy of Ukraine No. 14 (2006). These documents recommend a range of 0.2 to 0.35. Yu. Kostenko *et al.* (2022) addressed the challenges of liquidity management under wartime conditions. In their view, normative liquidity indicators should be higher during wartime than in peacetime due to businesses operating primarily with their own funds. The authors recommended increasing the absolute liquidity ratio to 0.7. Therefore, in this study, the expected cash inflows were

adjusted based on the level of unpaid customer invoices. The analysis of the ratio between inflows and material costs enabled forecasting of cash from operating activities. This, in turn, facilitated the effective planning of cash movements and the provision of financial support for other business activities.

Conclusions

This study presented the results of an analysis of the availability and movement of cash at the level of all active enterprises in Ukraine, with a particular focus on enterprises engaged in the production of bread, bakery, and flour-based products. An assessment of statistical indicators revealed a consistently low share of cash in the structure of total assets across all active enterprises. During the period from 2013 to 2022, the share of cash in total assets did not exceed 5%. An important development was the 35% increase in this indicator during the 2022-2023 period, reaching 6.69%. Slightly higher values were observed among enterprises producing bread, bakery, and flour-based goods. However, this trend was not evident at the level of individual bakery enterprises. Most of the analysed bakery enterprises in Western Ukraine demonstrated a low proportion of cash within the structure of total balance sheet assets. As a result, all entities studied recorded a low absolute liquidity ratio. These enterprises lacked a sufficient amount of highly liquid assets, one of the reasons being the impact of military actions on their economic activity. In general, the state has been compelled to prioritise the military sector of the economy, thus enterprises in the bread and bakery sector were forced to focus on operational activities and carefully evaluate their capacities, when engaging in financial and investment operations.

Cash flow forecasting has become an essential component of the entire set of predictive calculations and should be carried out in accordance with the developed methodology for forecasting the key indicators of the projection model. The selection of a forecasting method should be based on the balance between rationality and the feasibility of the computational operations. This implied that the efforts of analysts to perform complex mathematical calculations must be justified and should generate significantly higher economic benefits compared to the resources invested – such as the remuneration of in-house accounting and analytical personnel or fees paid to external consultants. If complex forecasting computations merely confirm information already known to managers, it would be reasonable to simplify such mathematical procedures and reduce the financial costs associated with them.

Prospective areas for further research include examining the impact of military operations on the territory of Ukraine on the structure of cash flows in industrial enterprises; analysing cash flow forecasting methodologies across large, medium, and small enterprises; and

evaluating the effectiveness of the selected cash flow forecasting method for industrial enterprises.

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Conflict of Interest

None.

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Прогнозування руху грошових коштів промислових підприємств у контексті реалізації їхньої стратегії розвитку: обліковий, аналітичний та організаційний аспект

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Анотація. Наявність грошових коштів у розпорядженні будь-якого промислового підприємства дає відчуття економічної свободи при реалізації стратегії його розвитку. Сумарний показник грошових коштів перебуває у прямій залежності від руху грошових коштів у межах різних видів діяльності. Для забезпечення інформаційних потреб управлінського персоналу промислового підприємства необхідною є можливість передбачати прогнозні показники руху грошових коштів. Метою статті було висвітлення методики прогнозування руху грошових коштів промислового підприємства для забезпечення реалізації стратегії його розвитку. Порівняльний аналіз статистичних показників руху грошових коштів хлібопекарських підприємств України дав можливість визначити питому вагу грошових коштів в сукупних активах хлібопекарських підприємств, розрахувати коефіцієнт їх ліквідності. Аналітичні розрахунки засвідчили про переважно низькі коефіцієнти ліквідності, як для всієї країни, так і на рівні окремих хлібопекарських підприємств Заходу України, також ці показники менші за прийняті нормативні 0,1-0,2. Наведено показники руху грошових коштів від різних видів діяльності хлібопекарських підприємств України, які дали можливість зробити висновок щодо безпосереднього зв'язку між рухом грошових коштів та наявними грошовими коштами на банківських рахунках підприємств. Домінуючим грошовим потоком став грошовий рух від операційної діяльності. Саме він повинен приносити основну масу грошових коштів підприємству і давати поштовх для інвестиційної та фінансової діяльності. Питання співвідношення між рухом грошових коштів від різних видів діяльності не підпорядковується нормативам, а є виключно індивідуальним баченням стратегії розвитку підприємства його власником, яку реалізує найманий штат працівників. Для реалізації стратегії розвитку будь-якого підприємства важливими стали прогнозні розрахунки руху грошових коштів. У статті було систематизовано підходи до організації прогнозування руху грошових коштів. Висвітлено побудову моделі руху грошових коштів від операційної діяльності, враховуючи фактор прогнозного обсягу реалізації продукції. Практичне значення результатів дослідження полягає в методичній обґрунтованості прогнозних розрахунків показників руху грошових коштів, що дає можливість використовувати пропозиції суб'єктами господарювання промислового сектору економіки для прогнозування оперативних та стратегічних показників розвитку

Ключові слова: операційні грошові потоки; інвестиційні грошові потоки; фінансові потоки грошових коштів; загальний грошовий потік; суми сукупних надходжень