

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
НАЦІОНАЛЬНИЙ АВІАЦІЙНИЙ УНІВЕРСИТЕТ
ФАКУЛЬТЕТ ТРАНСПОРТУ, МЕНЕДЖМЕНТУ І ЛОГІСТИКИ**

Кафедра менеджменту зовнішньоекономічної діяльності підприємств

ДОПУСТИТИ ДО ЗАХИСТУ

Завідувач кафедри

Кириленко О.М.

“ ” 2023 р.

КВАЛІФІКАЦІЙНА РОБОТА
(ПОЯСНЮВАЛЬНА ЗАПИСКА)

ВИПУСКНИКА ОСВІТНЬОГО СТУПЕНЮ “МАГІСТР”

Тема: Розробка стратегії антикризового управління підприємством в сучасних умовах

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Київ-2023

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QUALIFICATION WORK

(EXPLANATORY NOTE)

GRADUATES OF THE MASTER'S DEGREE

Topic: Development of an enterprise crisis management strategy in modern conditions

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Kyiv-2023

NATIONAL AVIATION UNIVERSITY
Faculty of transport, management and logistics

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Level of education: Master's

Specialty 073 "Management"

Educational and professional program: "Management of foreign economic activity"

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« _____ » _____ 2023

TASK

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1. Topic of thesis: **Development of an enterprise crisis management strategy in modern conditions**

approved by the Rector order of 10/10/2023, № 2739/CT

2. Deadline of thesis: from 02/10/2023 to 31/12/2023.

3. Initial data for thesis: **Accounting reports of "Libyan engine" Co Ltd: balance, Report on financial results, scientific works, Internet resources.**

4. The content of the explanatory note (list of issues to be developed):

Required: **to consider and analyze the essence of anti-crisis strategy, the possibilities of assessing the company's development opportunities, the current state of the auto service market in Libya, to consider modern approaches to anti-crisis management in modern conditions; carry out an analysis of the financial and economic activity of "Libyan engine" Co Ltd; conduct an analysis of anti-crisis management strategy at the enterprise and identify weaknesses, propose proposals for anti-crisis management strategy at "Libyan engine" Co Ltd in a modern condition, develop anti-crisis management strategy for company and calculate the impact on the enterprise's activities after the implemented measures.**

The list of mandatory graphic material:

Theoretical part: tables –4, fig. – 15

Analytical and research part: tables – 18, fig. – 12,

Project and advisory part: tables –5, fig. – 8

SCHEDULE

| № | Stages of Qualification work performing | Deadline of stages | Comment |
|-----|---|-------------------------|---------|
| 1. | Collection and analysis of necessary information on "Libyan engine" according to the topic of the thesis. | 02/10/2023 - 12/10/2023 | done |
| 2. | Identification and analysis of the ways of increasing the efficiency of the "Libyan engine" service company. | 13/10/2023 - 18/10/2023 | done |
| 3. | Preparation the references used in the analysis of the development of the anti-crisis management strategy for the company | till 25/10/2023 | done |
| 4. | Preparation and execution of analytical and research part of the qualification work | till 27/10/2023 | done |
| 5. | Preparation of the theoretical part | till 01/11/2023 | done |
| 6. | Developing proposals for the personnel management efficiency increasing and direction for improving the personnel management | till 15/11/2023 | done |
| 7. | Design of advisory part of the qualification work | till 27/11/2023 | done |
| 8. | The final preparation of the Qualification work (contents, introduction, conclusions, appendices, etc.) | till 30/11/2023 | done |
| 9. | Report and presentation preparation | till 01/12/2023 | done |
| 10. | The signing of necessary documents in the established order, preparing to defend the qualification work and preliminary work defense on graduating department meeting | till 05/12/2023 | done |

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LIST OF SIGNS, ACRONYMS AND TERMS

GDP – Gross domestic product

LLC – limited Liability Company

Mln. – millions

NPV – net present value

Ths. – thousands

UAH – hryvna, Ukrainian currency

VAT – value-added tax

ABSTRACT

As a result of the study, proposals for the formation of an anti-crisis management strategy for the service enterprise "Libyan engine" are presented, taking into account the experience of international countries, which is especially relevant in the period of unstable political and economic situation in Libya.

The introduction describes the relevance of the chosen topic of the thesis, the object, subject, purpose and objectives of the study.

The first part considers the theoretical foundations of formation of an anti-crisis strategy at an enterprise. The main approaches to the formation of a model of anti-crisis management at an enterprise in modern conditions are described.

In the second part the activities of "Libyan engine" have been analyzed. The general characteristics of the car service market in Libya have been presented. The organizational and economic characteristics of "Libyan engine" are provided. The main sphere of activity of the company has been researched, the main performance indicators have been analyzed, the management system at the enterprise has been considered and analyzed in detail, and the weaknesses of the activity have been identified.

The third part identifies possible ways to develop a model of anti-crisis management of enterprise, describes the structure of the anti-crisis programme at the enterprise, scientifically substantiates proposals for improving the process of managing the anti-crisis strategy on the "Libyan engine", recommends a scheme of the equipment procurement process and calculates the efficiency of implementation of the anti-crisis strategy to reduce costs by choosing the optimal model of procurement of automotive products. The conclusions outline the main results of the study and provide proposals for the implementation of the tasks of the qualification work.

Key words: anti-crisis strategy, car service enterprise, crisis, optimal supply batch, procurement management, performance efficiency.

АНОТАЦІЯ

В результаті проведеного дослідження надані пропозиції щодо формування антикризової стратегії управління сервісним підприємством "Libyan engine" з урахуванням досвіду міжнародних країн, що особливо актуально в період нестабільного політико-економічного стану в Лівії.

У вступі зазначена актуальність обраної теми роботи, об'єкт, предмет, мета і завдання дослідження.

У першому розділі розглянуто теоретичні основи формування антикризової стратегії на підприємстві. Описано основні підходи до формування моделі анти-кризового управління на підприємстві в сучасних умовах.

У другому розділі проаналізовано діяльність "Libyan engine". Представлена загальна характеристика автосервісного ринку в Лівії. Надано організаційно-економічну характеристику "Libyan engine". Досліджена основна сфера діяльності компанії, проаналізовано основні показники діяльності, детально розглянута і проаналізована система управління на підприємстві, визначені слабкі сторони діяльності.

У третьому розділі визначено можливі шляхи розробки моделі антикризового управління підприємством, описана структура антикризової програми на підприємстві, науково обґрунтовано пропозиції щодо удосконалення процесу управління антикризовою стратегією на "Libyan engine", рекомендована схема процесу закупівлі обладнання та проведені розрахунки ефективності впровадження антикризової стратегії зменшення витрат за рахунок вибору оптимальної моделі закупівлі автотоварів. У висновках зазначені основні результати проведеного дослідження та надано пропозиції щодо реалізації завдань кваліфікаційної роботи.

Ключові слова: антикризова стратегія, автосервісне підприємство, криза, оптимальна партія постачання, управління закупівлями, ефективність діяльності

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INTRODUCTION

The conditions of crisis situations require the implementation of anti-crisis management. There are several approaches to defining this concept, such as preventive mechanisms, innovative exit from the crisis, restoration of solvency and financial stability, and industrial relations at the enterprise level. Depending on the interpretation of the concept, its purpose is determined, such as restoration of financial balance, equalization of disparities, ensuring the stability and vitality of enterprises.

Anti-crisis management includes such functions as planning strategies and programs, organizing the optimal structure, motivating personnel and controlling changes. For the successful implementation of anti-crisis management, it is necessary to adhere to the principles of early diagnosis, urgent response, adequate response and full implementation of internal capabilities.

The implementation of anti-crisis management involves four blocks: crisis diagnosis, management methodology, crisis forecasting and socio-economic aspects. State management is a separate aspect of anti-crisis management. It consists in creating a system of interaction between the state and the market economy to overcome macro- and microeconomic crises. This is achieved through regulatory and legislative regulation, financial regulation, industrial policy and income redistribution.

According to statistics, most Libyan companies are in a state of crisis, more than a third of them are in the late stages of the crisis and may be on the verge of bankruptcy. This is explained by the fact that, in practice, domestic companies focus mainly on solving current problems related to the effective use of their potential, ignoring the issue of ensuring development prospects taking into account changes in the external environment. The task of adapting the enterprise to the conditions of the increasing dynamics of the internal and external environment is due to the lack of an action plan, that is, an appropriate strategy of anti-crisis management.

Anti-crisis management of enterprises is, in its essence, a microeconomic category that characterizes financial and economic processes at the enterprise level and is aimed at applying measures to improve the financial condition. Disturbances at the micro level can cause economic, financial and social problems at the macro level. Therefore, in the conditions of formation and implementation of the strategy of anti-crisis management of the enterprise, it is expedient to overcome the negative consequences of the financial state of the enterprise and solve the problem of preventing bankruptcy.

Signs of a crisis in an enterprise include: a hidden long-term inability of management to make effective decisions; complete loss of opportunities, strategic initiative and innovative potential.

The system of choosing an anti-crisis management strategy for enterprises should use a comprehensive methodology that takes into account both theoretical and practical approaches to ensure the adoption and implementation of effective management decisions. At the same time, the problem of improving the methodology of diagnosis of various financial and economic indicators should become the subject of careful analysis, which will allow not only to accurately assess the degree of impact of the crisis situation on the economic activity of the enterprise, but also to increase the effectiveness of the selection of measures. Therefore, the anti-crisis development strategy can be considered as the basic concept of the implementation of strategic anti-crisis management of enterprises, which contributes to the achievement of the set goals of the implementation of anti-crisis management.

Formulation of the problem. The study of theoretical approaches to anti-crisis management has been actively used in the foreign and domestic scientific environment recently. The main goal of anti-crisis management is to create conditions for the stable operation of enterprises in the market, regardless of the economic, political and social transformations taking place in Libya. This includes developing strategic alternatives based on forecasting and predicting the development of the situation, avoiding financial problems and overcoming the threat of bankruptcy with the least losses, as well as implementing innovative changes in operations.

The reform of economic relations in the national economy gradually led to the deterioration of the financial situation of enterprises and the emergence of a national crisis. In addition, destructive flows due to unexpected negative trends in the world economy lead to a reduction in production, deterioration of financial results and loss of solvency of enterprises in Libya.

There is a need to find an anti-crisis way of doing business that allows you to get out of a crisis situation. Therefore, the validity of the subject of this study is that the need to form a system of anti-crisis management and develop a strategy for avoiding crisis situations will allow solving the problem of avoiding bankruptcy by implementing appropriate risk management measures.

Relevance of the research. Every enterprise periodically faces problems that can provoke an acute crisis, which can lead to a deterioration in the performance characteristics: liquidity, solvency, profitability, working capital turnover, financial stability. Market forms of management in conditions of fierce competition lead to the insolvency of some entities or to their temporary insolvency.

Crises can occur at any stage of the enterprise's life cycle. Today, in the conditions of the uncertainty of the external environment, the cyclical occurrence of crisis phenomena and integration transformations of the domestic economy, the question of the formation of an effective anti-crisis strategy acquires special importance, the underestimation of the importance of which restrains the pace of development of enterprises in all spheres of economic activity.

The relevance of the work lies in the fact that the application of anti-crisis strategy management by domestic enterprises will in the long run provide an opportunity to prevent or mitigate crisis phenomena occurring in their activities, as well as to effectively adapt to new conditions.

Assessment of the current state of the problem. The theoretical foundations of the formation of anti-crisis strategies at enterprises were studied in the works of such leading scientists as: Bocharova, N., & Tupitska, E. [38], Huriev, V. O. [12], Harshchal M.S. [15], Hudz O.E. [16, 17], Yershova, N., & Bukatenko, N. [19], Karvatska, N. [20], Aithal, R., Anil, R. K., & Angmo, D. [32], Ali, M., & Kinsey, D. F. [34], Al-Janabi, A. S. H., Mhaibes, H. A., & Hussein, S. A. [36], Cao, L. [43],

Chatzipanagiotou, P., & Katsarou, E. [46], Chaudhuri, R., Chatterjee, S., Kraus, S., & Vrontis, D. [47], Crespo, N. F., Crespo, C. F., Silva, G. M., & Nicola, M. B. [51], Hayirli, T. C., Stark, N., Hardy, J., Peabody, C. R., & Kerrissey, M. J. [58] and others.

The purpose of the qualification work is to substantiate the scientific and methodological provisions and practical recommendations for improving the effectiveness of the management of the anti-crisis strategy of “Libyan engine” Co Ltd.

The set goal conditioned the following tasks, which are solved in the work:

- consider the economic essence and types of anti-crisis management strategies;
- to investigate the essence of the process of managing the anti-crisis strategy at enterprises to ensure the stability of its activity
- generalize scientific and methodical approaches to evaluating the effectiveness of anti-crisis strategy management to ensure the stability of its activity;
- provide a description of the production and economic activity of "Libyan engine" Co Ltd;
- perform an analysis of the financial and economic status of "Libyan engine" Co Ltd;
- evaluate and analyze the effectiveness of the anti-crisis strategy management at "Libyan engine" Co Ltd;
- to evaluate the factors of formation of an effective management system of the anti-crisis strategy of "Libyan engine" Co Ltd to ensure the stability of its activity;
- to systematize scientific (theoretical, methodical) approaches to improving the process of managing the anti-crisis strategy of "Libyan engine" Co Ltd;
- carry out a scientific substantiation of the proposal to improve the process of managing the anti-crisis strategy of "Libyan engine" Co Ltd;
- carry out a scientific substantiation of the proposal to ensure the stability of the activity of "Libyan engine" Co Ltd;
- evaluate the impact of the proposed actions on the effectiveness of the management of the enterprise "Libyan engine" Co Ltd.

The object of the research is the process of managing the anti-crisis strategy of "Libyan engine" Co Ltd.

The subject of the research is the theoretical foundations, methodological approaches and practical recommendations for ensuring the effectiveness of the anti-crisis strategy management of "Libyan engine" Co Ltd.

Research methods. The following methods were used in the research process: analysis (analysis of the main indicators of the enterprise and the risks of the enterprise crisis), graphic (illustration of the data obtained during the execution of the work), tabular (summarization of the data obtained during the execution of the work in a table), statistical (investigation of the risks of the enterprise crisis), etc.

Scientific novelty of the obtained results. In accordance with the purpose and objectives of the conducted research, the work contains new scientifically based conclusions, which are the personal contribution of the student. The main provisions put forward for defense are as follows:

- systematized scientific (theoretical, methodical) approaches to improving the process of managing the anti-crisis strategy of "Libyan engine" Co Ltd;
- scientific substantiation of the proposal to improve the management process of the anti-crisis strategy of "Libyan engine" Co Ltd;
- scientifically based proposals to ensure the stability of the activity of "Libyan engine" Co Ltd;

The practical significance of the obtained results lies in the possibility of their use in justifying ways to improve the effectiveness of management of anti-crisis strategies of enterprises.

PART I

**THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF
ANTI-CRISIS STRATEGY MANAGEMENT AT ENTERPRISE**

1.1. Economic essence and types of anti-crisis management strategies

In recent years, the prevention of crisis phenomena has become very important in the work of business entities in most sectors of the economy. The components of the economic crisis at the microeconomic level were manifested primarily in unprofitability and low profitability, price and structural disparities, an insufficient level of competitiveness, a shortage of working capital, insolvency, etc.

The mentioned circumstances make the issue of organizing the fight against crisis phenomena as part of the creation of effective anti-crisis management mechanisms urgent.

As scientist Huang, L. notes in his work "A moderation of business misdeeds on corporate remedy strategies" [61, p. 23] the word crisis comes from the Greek "crisis", which in translation means "verdict, decision on some issue", and can also mean "exit, resolution of the conflict".

Note that initially the term "crisis" was used mainly in medicine and theater. In the 17th and 18th centuries, the concept of "crisis" began to be used in relation to the processes taking place in society - military and political crises. In the 19th century, this concept was transferred to economics.

According to Motarjemi, Y. (2023). Crisis management [76] The "classical" economic concept of crisis, which was formed at that time, meant an undesirable and dramatic stage in the economic system, which is characterized by fluctuations and negative phenomena. But this definition does not take into account many different schemes and stages of the development and functioning of the economy, therefore, it is now possible to give another, more accurate definition of the financial crisis [76, p. 975].

A micro-level crisis can be interpreted as:

- loss of solvency, competitiveness, deviation of actual data from the planned (including volume of production and sales, cash receipts, expenses, profit, profitability);
- aggravation of contradictions at the enterprise, which threatens its viability in the environment;
- limited possibility of influence of the management on the activity of the enterprise with difficult to predict consequences, which endanger its further development;
- an emergency situation, due to which there are significant disruptions in the company's activities.

Most authors, such as Al-Janabi, A. S. H., Mhaibes, H. A., & Hussein, S. A. [36], Cao, L. [43], Chatzipanagiotou, P., & Katsarou, E. [46], Chaudhuri, R., Chatterjee, S., Kraus, S., & Vrontis, D. [47], Crespo, N. F., Crespo, C. F., Silva, G. M., & Nicola, M. B. [51], highlight the main reasons for the emergence of crisis situations at enterprises (Fig. 1.1).

Note that according to Crespo, N. F., Crespo, C. F., Silva, G. M., & Nicola, M. B., there are three stages of the development of a crisis situation [51]:

- the early stage, characterized by individual cases of inefficiency in production and sales, which are manifested in the increase of commodity and material stocks at a slower rate of growth of sales volumes, acceleration of the turnover of accounts payable.
- an intermediate stage, which is characterized by a lack of materials (due to the saving of monetary resources), more frequent problems with quality, termination of credit sales by suppliers, late payment of wages.
- late stage. At this stage of the crisis, the enterprise as a whole is in a state of chaos. Production schedules are not met, production is slowed down by a chronic shortage of materials, and the repayment period for receivables is increasing. Suppliers demand cash payments, and creditors demand changes in credit terms.

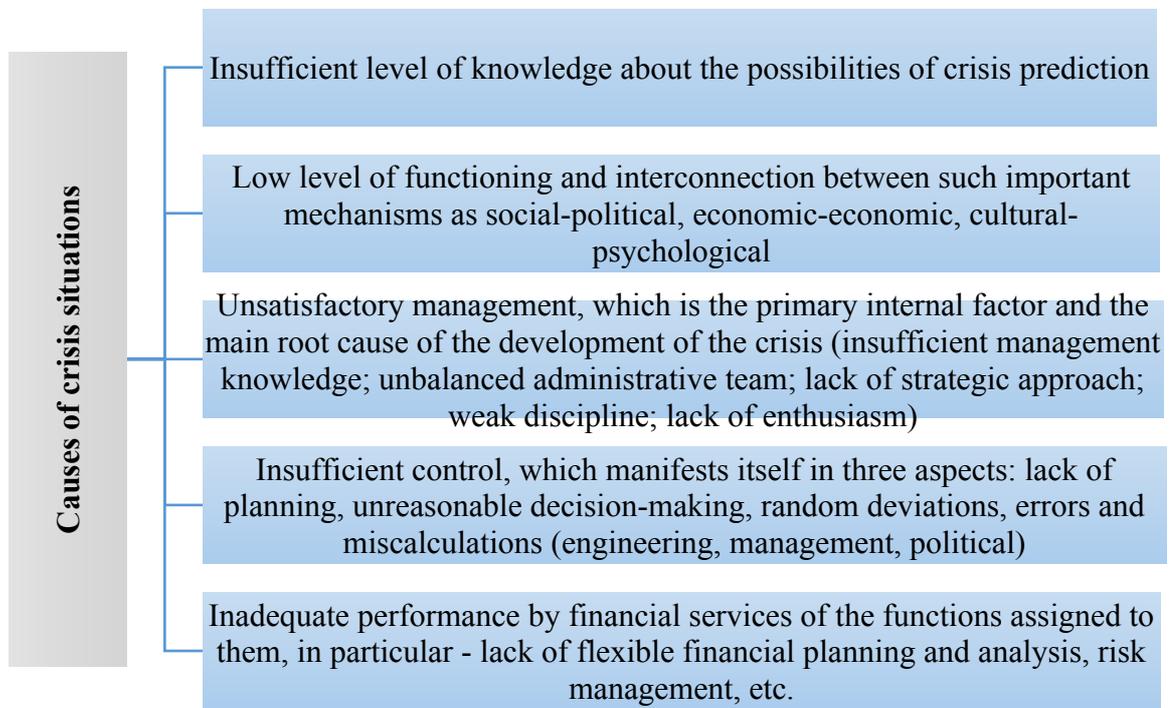


Fig. 1.1. The main causes of crisis situations at enterprises

Source: systematized by the author based on [36, 43, 46, 47, 51]

To ensure uninterrupted functioning, the enterprise should recognize and forecast crisis phenomena in time. Thus, management of the enterprise should be aimed at solving the following main tasks, which are presented in fig. 1.2.

Note that an effective strategy of anti-crisis management of an enterprise is necessary not only for its exit from a crisis situation, but also for suspending the crisis and overcoming it, Sharanov, R. S. [29].

An important component of the anti-crisis management system is its functions, that is, types of activities that reflect the subject of management and determine its outcome. It is they who determine what should be done in order to manage successfully at all stages of the crisis. There are six functions that are shown in fig. 1.3.

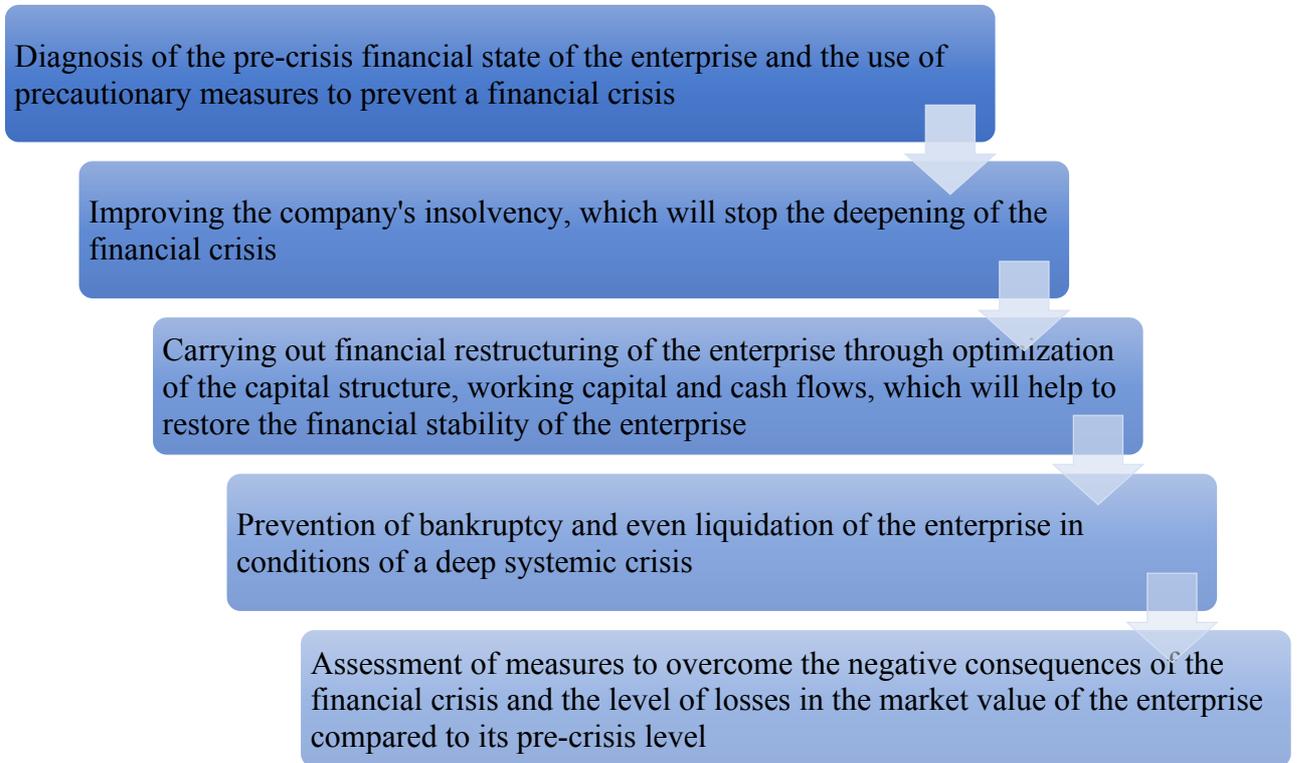


Fig. 1.2. The main tasks of anti-crisis management of the enterprise

Source: [29, p. 39]



Fig. 1.3. Functions of anti-crisis management

Source: [29, p. 40]

Thus, anti-crisis management of the enterprise is an economic category that characterizes the financial and economic processes of the enterprise and is aimed at improving the financial condition of the enterprise.

According to Akhshik, S. S., & Beglou, R. R., the main goal of anti-crisis management is to ensure a stable financial situation as a result of timely response to changes caused by economic, political, social and international factors through the implementation of anti-crisis tools that will help eliminate temporary financial complications on enterprise and overcome the harbingers of bankruptcy [33, p. 210].

Anti-crisis strategy is one of the tools for implementing anti-crisis management of a business entity, which helps to identify and develop market advantages, which are the main ones in competition. The anti-crisis management strategy will be effective if its type corresponds to a certain crisis situation that has developed at the enterprise [29, p. 41].

The concept of «anti-crisis strategy» can be synthesized on the basis of the conducted morphological assessment of "strategy" and "crisis". The results are presented in fig 1.4.

Therefore, the strategy of anti-crisis management of the enterprise is a set of actions and a sequence of management decisions made to evaluate, analyze and develop a valuable system of influence on the recovery of the enterprise to prevent bankruptcy or minimize the consequences of the crisis [24, p. 117].

Particular attention should be paid to the organization and improvement of all aspects of anti-crisis management, including:

- implementation of basic principles and methods of management in crisis situations;
- implementation of a set of measures to ensure their stable functioning;
- improvement of enterprise personnel management, to prevent and restore the insolvency of enterprises.

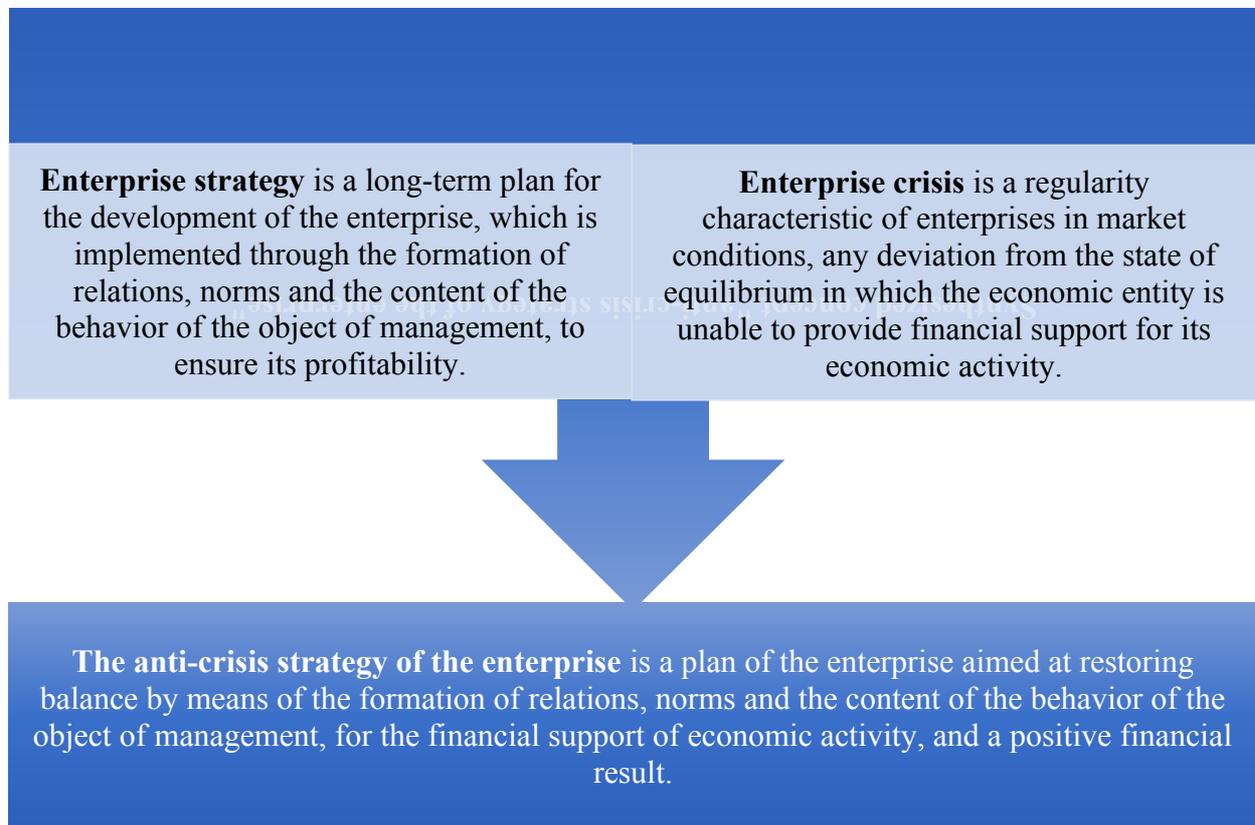


Fig. 1.4. Synthesized concept of «anti-crisis strategy of the enterprise»

Source: systematized by the author based on [18, 26, 28, 30]

The anti-crisis strategy of the enterprise includes all planned, organized and controlled changes in the field of the existing strategy, production processes, structure and culture of any business entity, including private and state enterprises.

The anti-crisis strategy of the enterprise can be effective in practice if the type and type of the crisis, its depth, the main causes and precursors of its development and stages of progress in the enterprise are taken into account. It is also important when developing an anti-crisis strategy to focus on the complex and systemic nature of crisis phenomena and the specifics of their impact on enterprise subsystems.

Features that distinguish the anti-crisis strategy from other types of strategies are shown in fig. 1.5.

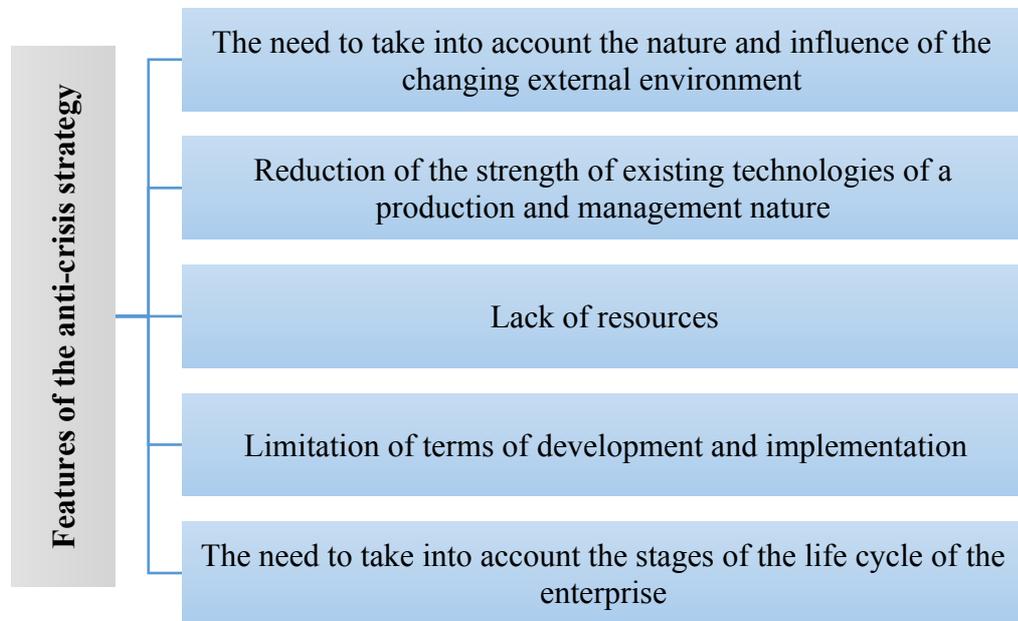


Fig. 1.5. Features of the anti-crisis strategy

Source: systematized by the author based on [24, p. 38-42]

The characteristic features of the anti-crisis strategy, as a special type of management, are shown in fig. 1.6.

Thus, an effective strategy of anti-crisis management determines the actions that will allow the enterprise to restore dynamic stability in the conditions of a changing external environment. This is what the authors Petryk T.M., Panakhid M.M., & Ivashko T.P. note in their research [26, c. 284-290].

Perspective, the ability to choose and implement a rational development strategy is of particular importance for anti-crisis management. Various crisis management strategies are used for this purpose.

From the point of view of the business entity's behavior in crisis situations, a number of authors distinguish 4 types of anti-crisis strategies of the enterprise: defensive, delegation of powers, offensive and compromise strategies (Table 1.1) [16, 20, 21].

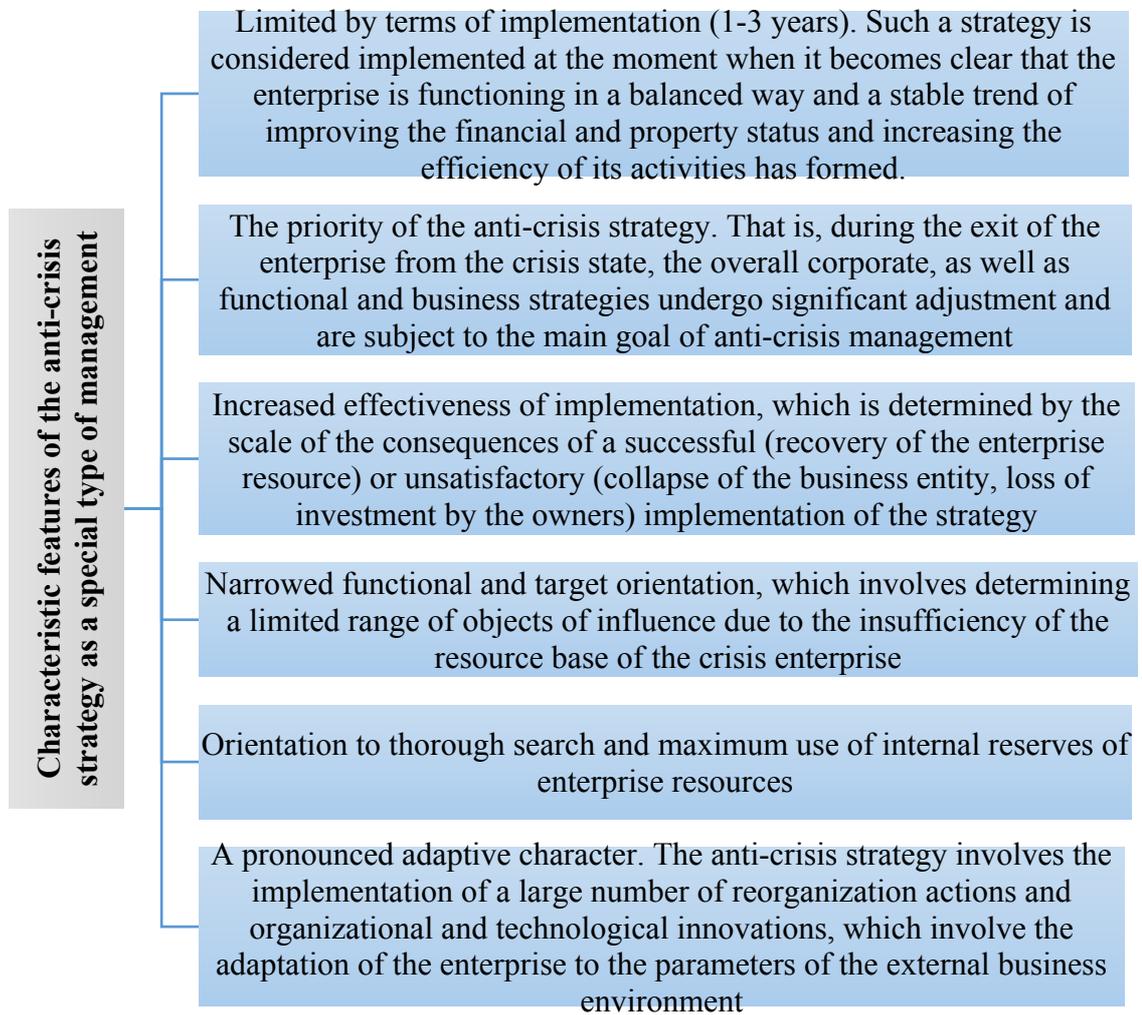


Fig. 1.6. Characteristic features of the anti-crisis strategy as a special type of management

Source: built by the author based on [30]

Table 1.1

Types of anti-crisis strategies from the standpoint of the company's behavior in crisis strategies

| Type of strategy | Characteristic |
|----------------------------------|--|
| Defensive strategy | It is aimed at significantly reducing costs, closing unprofitable production and maintaining promising areas of activity |
| Strategy of delegation of powers | Provides for the transfer of the right to solve the company's problems to third parties |
| Offensive strategy | Aimed at the implementation of active actions regarding the introduction of modern technologies, improvement of marketing activities and expansion of the market segment |
| Compromise strategy | It provides for the organization of some market participants to conduct joint economic activities to reduce costs and increase revenues |

Source: [20, p.34]

Thus, according to the basicity of the definition of the main vector of enterprise management, the types of anti-crisis strategies are stabilization, reduction and restructuring strategies (Table 1.2).

Table 1.2

Types of strategies based on the basicity of determining the main vector of enterprise management

| №п/п | Strategy | Substrategies |
|------|---------------------------------|--|
| 1 | Stabilization strategy | Pause (deliberate suspension of sales growth) Cautious promotion (promotion of started programs in anticipation of success) No changes (freezing of the situation, termination of investments) Withdrawal of profit (termination of current investment in the product) |
| 2 | Survival strategies (reduction) | <i>according to implementation methods, they are divided into:</i> - reversal strategies; - separation strategy; - liquidation strategy. <i>by the nature of approaches:</i> - cost reduction - close to the strategy of reducing organizational forms, because the main idea is to find opportunities and take actions to reduce the company's costs; - "harvesting" - implies the rejection of the long-term perspective of the existence of a certain business in order to obtain maximum income in the short term period, that is, the understanding that the business will bring quick and relatively large money, but a short period; - reduction of the organizational structure of the enterprise, when the enterprise closes or sells one of its divisions for a long-term change of business boundaries; - liquidation, which is an extreme case of the downsizing strategy and occurs when the enterprise cannot continue activity. |
| 3 | Strategy of restructuring | |

Source: [20, p. 35]

Fig. 1.8 shows anti-crisis management strategies according to the types of anti-crisis management and relative to the stage at which the economic entity is in a crisis state.

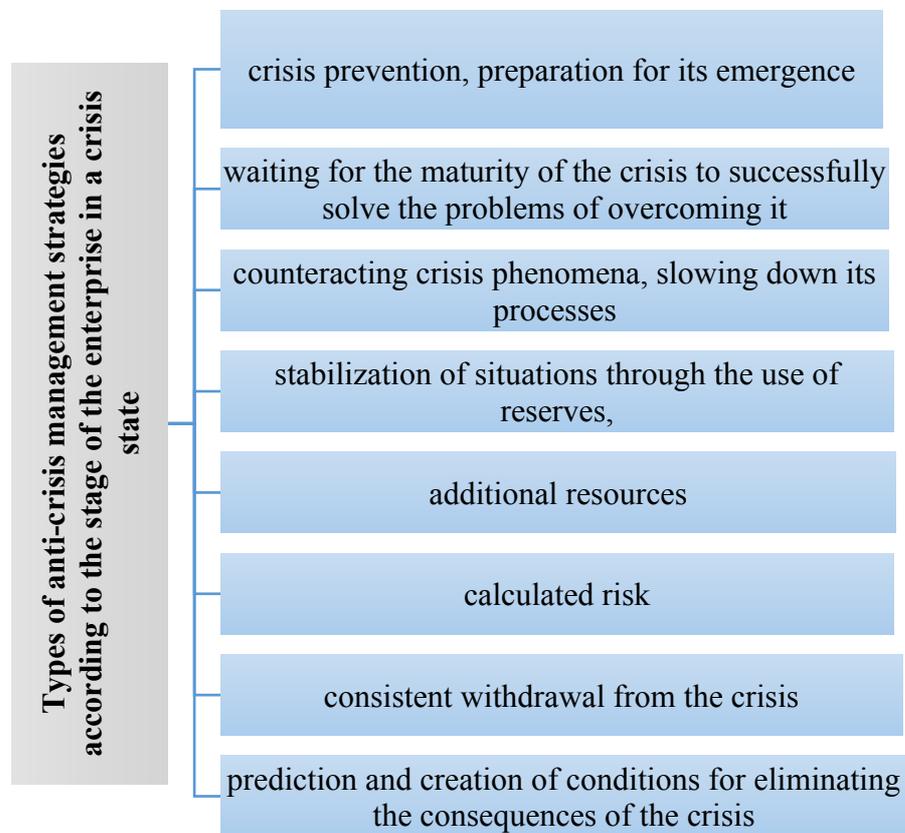


Fig. 1.8. Types of anti-crisis management strategies according to the stage of the enterprise's stay in a crisis state

Source: [12, p. 71]

It is also worth noting that the anti-crisis strategy should be based on the interconnection of four functional strategies [16, p. 8]:

- marketing strategy, that is, the company's behavior on the product markets;
- production strategy, i.e. organization, structure, scope and range of production;
- personnel policy, i.e. organization of personnel work and internal management;
- financial strategy, i.e. methods of attracting, accumulating and spending financial resources.

Therefore, in crisis conditions, the company's development strategy is in the first place in anti-crisis management. Provided that the enterprise forms and uses an anti-crisis management strategy, negative consequences in the financial situation of the enterprise are overcome and the problem of preventing bankruptcy is solved.

1.2. Study of the essence of the process of managing the anti-crisis strategy at enterprises to ensure the stability of its activity

The mechanism of planning and implementation of the anti-crisis development strategy is based on the process of preparing management decisions and includes a strictly defined sequence of stages (Fig. 1.9).

Distinctive features of this mechanism are as follows [17, p. 38]:

- it should be used exclusively at the stage of implementing the main strategy;
- in the process of implementation of this mechanism, two cyclical instructions are included: in the operational aspect - choosing a strategy for overcoming the crisis and in the strategic aspect - choosing a strategy for preventing the crisis;
- the need to carry out diagnostics of the pre-crisis state of the enterprise, which will strengthen the preventive function of anti-crisis management, the use of forecasting of the system of key strategic indicators of the anti-crisis development of the economic entity.

The mechanism of anti-crisis management makes it possible to form its goals and objectives in the context of the development and implementation of a set of measures to overcome crisis phenomena at domestic enterprises. Anti-crisis management of the activities of business entities is important in the modern economic conditions of the development of business structures, as it ensures effective activity based on forecasts and timely response to negative situations.

It is worth noting that the modern approach to the development and implementation of the anti-crisis strategy of the economic entity should be carried out within the framework of the cycle presented in Fig. 1.10.

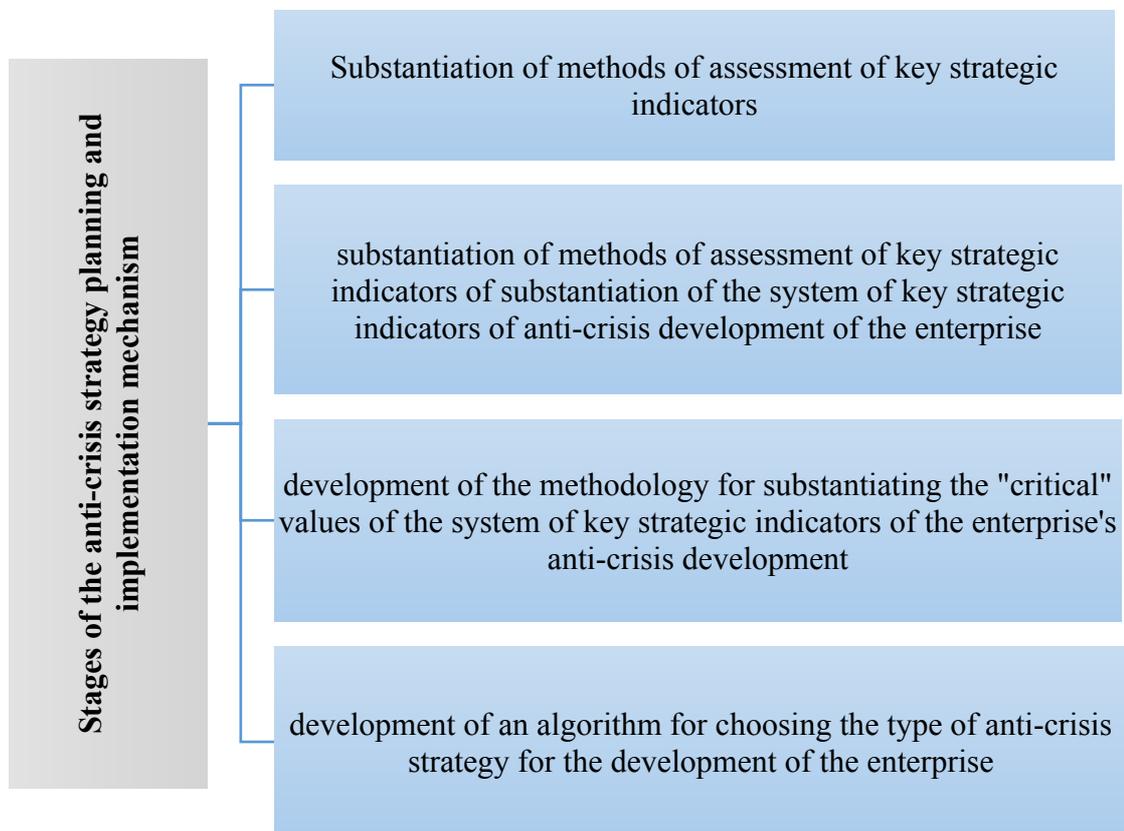


Fig.1.9. Stages of the mechanism of planning and implementation of the anti-crisis strategy of the enterprise

Source: [17, p.38]

The presented cycle makes it possible to substantiate a dynamic anti-crisis strategy, in which, as additional crisis factors appear, adjustments can be made, which will be aimed at further increasing the effectiveness of the anti-crisis system at the enterprise.

The anti-crisis strategy is developed after conducting an assessment of the internal and external environment of the economic entity, which provides for the measures shown in Fig. 1.11.

Taking into account the specifics of the activity of production entities and the results of a diagnostic assessment of the level of their crisis state, the management should justify strategic alternatives for exiting the crisis: a survival strategy, a stabilization strategy or a growth strategy.

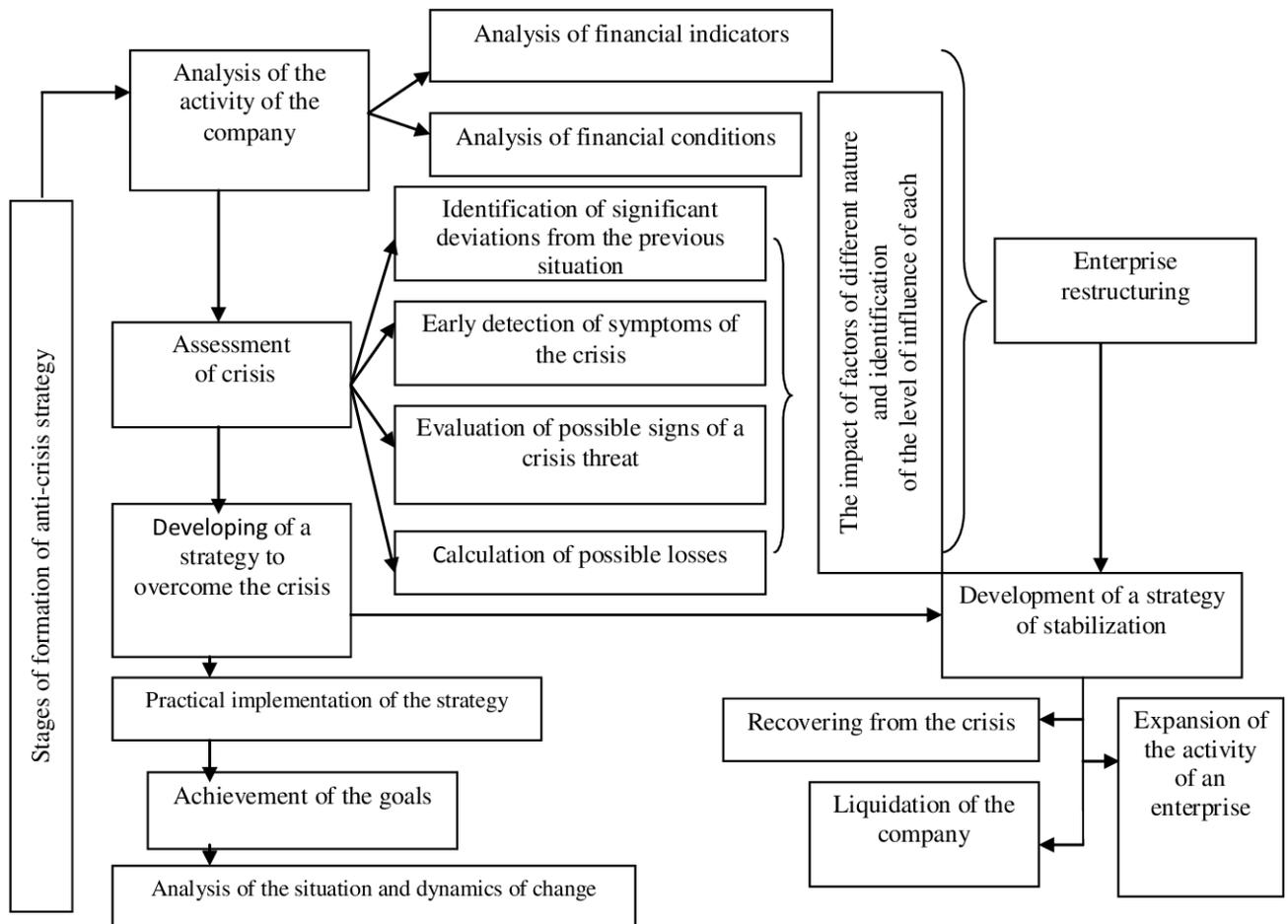


Fig. 1.10. Stages of development of the enterprise's anti-crisis strategy

Source: [20, p.71]

At the stage of choosing one of the above-mentioned anti-crisis strategies, it is necessary to thoroughly consider the ways of its formation, taking into account the problems that were discovered in the process of diagnosing the level of the crisis state, taking into account the relevant directions of research that should be carried out and the specificity and depth of the crisis state, by each production enterprise.

During its activity, every enterprise is constantly in contact with processes that it can control, as well as processes that cannot be controlled. These processes can lead to both negative and positive consequences. The process of anti-crisis development is managed, aimed at overcoming the crisis, but at the same time it should not contradict the goals of the enterprise.

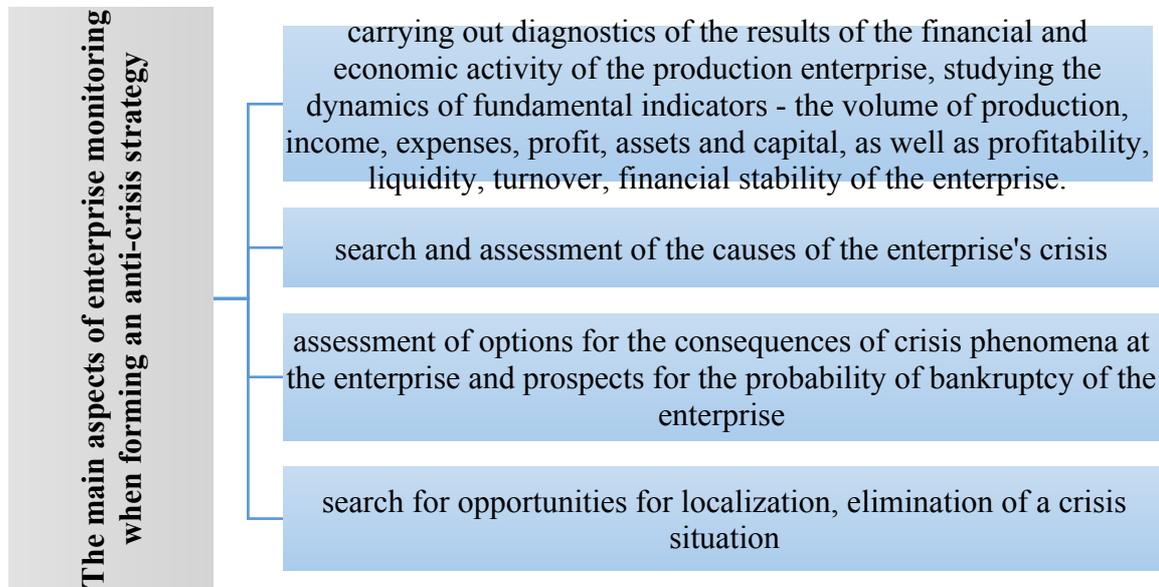


Fig. 1.11. The main aspects of enterprise monitoring during forming an anti-crisis strategy

Source: [33, p. 210]

All factors affecting crisis management are interrelated and both internal and external in nature, and may also be random, unpredictable, and lead to unexpected financial results. All this points to the need to create a universal anti-crisis management system, which would include operational, tactical, strategic and preventive mechanisms for financial stabilization of the enterprise.

Every management should bring results. Increasing the effectiveness of management causes an increase in its resource and leads to positive changes.

Taking into account the theoretical foundations of strategic management and the practice of industrial entities regarding the implementation of measures to exit the crisis, we suggest using the model of choosing and developing an anti-crisis strategy of a manufacturing enterprise (fig. 1.12).

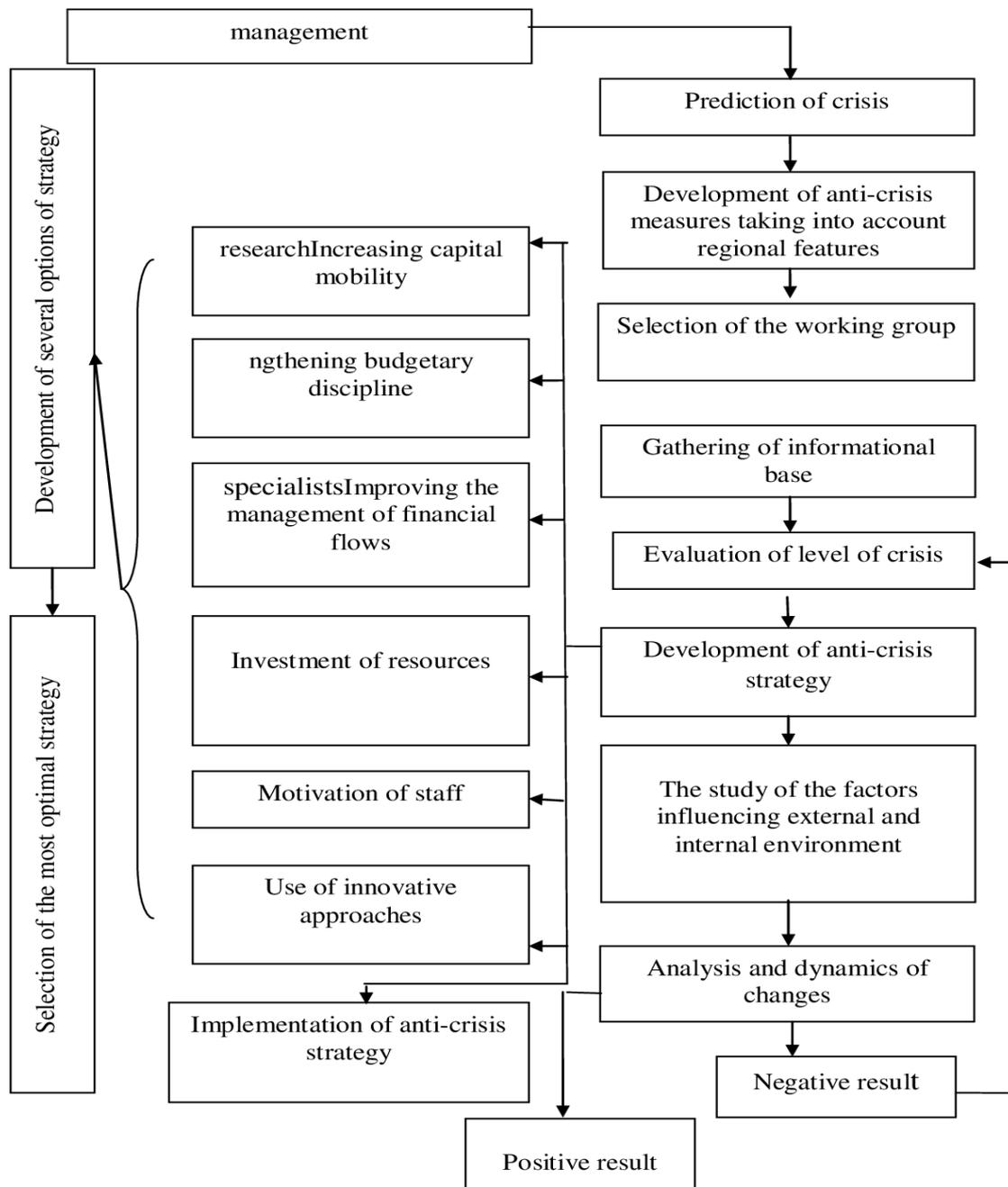


Fig. 1.12. Model of selection and development of an anti-crisis strategy of a manufacturing enterprise

Source: [83, p. 179]

The proposed mechanism reflects a complex interrelated system of strategic and operational measures, each of which is subject to single goals and tasks related to the implementation of the enterprise's anti-crisis policy, and its components can be both defensive and offensive in nature, the use of which will allow the production enterprise in crisis conditions, not only to solve the problem of survival, but also to realize the prospect of sustainable growth.

Emphasis in the process of anti-crisis management should be placed on the combination of strategy and tactics; strategic decision-making takes place at the initial stages of management, when signals about adverse factors may still be reliable; tactical decisions are made on the basis of sufficiently complete information, but in conditions of limited time to carry out a complete restructuring of the enterprise's activities. The management of the enterprise is forced to make a decision either to apply emergency measures to prevent a crisis, or to find ways out of the crisis.

The essence of these measures depends on the stage of the crisis in which the enterprise is located. A decrease in profitability and the volume of profit, a reduction in the sources and reserves of the business entity's development are the harbingers of the first stage. A way out of this situation can be implemented both through the use of strategic actions, including changing the company's strategy, its restructuring, and through the adoption of tactical decisions - reducing costs, increasing labor productivity.

A sign of the second stage of the crisis is the unprofitability of the enterprise; if the enterprise has reserve funds, their value decreases, otherwise, the third stage of the crisis begins. If reserve funds are actually available, strategic measures can be used, namely restructuring; in the third phase, when there are no reserves, restructuring is impossible.

If the company's management cannot stabilize its financial condition, the fourth stage of the crisis occurs - insolvency, i.e. reaching such a critical limit when there are no funds to finance even reduced production and payment of previous obligations. Production stoppage and bankruptcy become real. The use of emergency measures to restore solvency and support production becomes obvious.

As defined by the authors Yeager, K. R., & Roberts, A. R., in order for the enterprise to come out of the crisis, it should [96, p. 212]:

- to restore solvency and stabilize the company's financial condition, i.e. to eliminate the consequences of the crisis;

- to develop a development strategy and carry out restructuring of the enterprise in order to prevent the recurrence of crisis phenomena in the future, that is, to eliminate the causes of the crisis.

Restoration of the solvency of the enterprise can be carried out due to successful maneuvering of funds, which will make it possible to either increase their amount or reduce the current need for them.

As evidenced by the experience of the functioning of business entities in crisis conditions, it is possible to increase funds at the expense of [96, p. 214]:

- transferring assets into monetary form, although this is associated with significant losses;
- sale of short-term financial investments;
- sale of receivables;
- sale of stocks of finished products and surplus production stocks;
- disinvestment (long-term investment projects in crisis conditions - guarantee of bankruptcy);
- sale of unprofitable productions and non-production facilities.

After solving the issue of lack of funds, it becomes necessary to radically reduce inefficient expenses; in the case of achieving a positive effect on the temporary restoration of the financial stability of the enterprise, measures should be used to increase the cash flow from the main activity. It is also important to conduct appropriate marketing research to form a complex of anti-crisis marketing measures.

An analysis of the management behavior of business entities in crisis conditions confirms that the two most common mistakes are panic at the loss of financial assets and taking urgent measures to reduce staff. Anti-crisis policy should be based on a reasoned approach to decision-making related to changes in the staff structure. The reduction of qualified specialists forces them to exist either on state unemployment benefits, or to agree to work that leads to the loss of valuable skills and the level of professionalism [96, p. 214].

Personnel policy should be based on the concept of preserving a resource that is of particular value to the enterprise, using all appropriate measures, including temporary employment at a similar enterprise, redistribution of additional obligations between employees, retraining.

The activity of any business entity is accompanied by the probability of the occurrence and development of a crisis, which determines the need for specialized

anti-crisis management, which is characterized by: the specificity of the purpose of implementation, the use of special management tools, significant resource and time constraints, a high level of riskiness of management decisions made and are implemented

The bankruptcy prevention strategy should be considered as a permanent element of the general strategy of the enterprise, which involves a justified choice of strategic decisions within the limits of product, price, investment and other elements of the economic strategy to ensure sustainable development, prevent crisis situations, and achieve a high level of enterprise competitiveness.

Therefore, the formation of an anti-crisis strategy of the enterprise, aimed at the formation of adaptive measures to adverse conditions, becomes especially significant during crisis phenomena in the state's economy. The anti-crisis strategy can be successful if its implementation is timely and if it is preventive in nature. Therefore, the implementation of only such a strategy in today's changing market environment will help the company to get out of the crisis and get the maximum profit.

1.3. Scientific and methodical approaches to evaluating the effectiveness of anti-crisis strategy management to ensure the stability of its activity

Considering the scientific works of the authors Zahry, N. R., McCluskey, M., & Ling, J., 89. Shahbazi, M., they agree that the methods of anti-crisis management include the entire range of methodological tools from the methods of preliminary diagnosis of the crisis (diagnostic methods) to methods for its elimination and overcoming (methods aimed at overcoming the crisis) [98, 89].

Diagnostics of a crisis in an organization is a set of methods aimed at identifying problems, weaknesses and "bottlenecks" in the management system, which are the causes of unfavorable financial conditions and other negative performance indicators [89, p.124]. Diagnostics is interpreted both as an assessment of the company's activity from the point of view of obtaining a general management effect, and as a determination of deviations of existing system parameters from the initially set ones,

and as an assessment of the organization's functioning in a changing external environment for crisis prevention [89, p.135].

The tools for diagnosing a crisis state include: statistics, modeling, forecasting, experiment, expertise, marketing research, etc., which are used depending on the type of crisis and the form of its manifestation. A systematic analysis of signals about possible changes in the state and competitive status of an economic entity makes it possible to consider in aggregate a number of parameters that serve as indicators of crisis phenomena, increasing threats to the fulfillment of the enterprise's mission, or, on the contrary, can speak about the expansion of the enterprise's capabilities. This technique is effective at the stages of early diagnosis of crises, when the goal is to prevent their occurrence and prevent further deterioration of activity indicators.

The most popular methods of diagnosing a crisis at an enterprise [87]: assessment of the financial state of the enterprise; monitoring of the external environment; identification of risks.

Let's briefly consider each of the methods.

1. Monitoring of the external environment.

In modern scientific literature, the external environment is understood as a complex multi-level structure of elements that are outside the enterprise and affect its activities in different ways.

Two levels of the external environment are distinguished:

- general environment (macroenvironment), which includes global factors that reflect socio-economic relations in society;
- operational environment (microenvironment), which includes factors that directly affect a specific enterprise.

As a rule, the following groups of factors are considered: buyers, suppliers, competitors, employees, owners of capital, contact audiences, government institutions.

In contrast to the macro level, factors of the operational environment are more influenced by the enterprise, and the extent of this influence depends on the stability of the enterprise's position on the market.

Monitoring of the external environment is a constant monitoring of current and new information. Enterprises that use strategic management technology in their activities usually create a special system for monitoring the external environment. Employees of this system conduct not only regular observations of critical factors of the external environment, but also special observations.

Monitoring, as a rule, does not end only with the collection of information, it is also aimed at revealing the reasons for the change in the state of the studied factors and predicting the directions of their development. This approach to monitoring the external environment makes it possible to calculate opportunities and threats that will promote or hinder the company's activities. Note that the effectiveness of monitoring the external environment will increase under the conditions when it [55]: is supported by top management; closely related to the planning department at the enterprise; the work of specialists of the external environment analysis system is directly related to the work of specialists of the strategic division.

The general algorithm for monitoring the external environment of a business entity consists of five stages (Fig. 1.13).

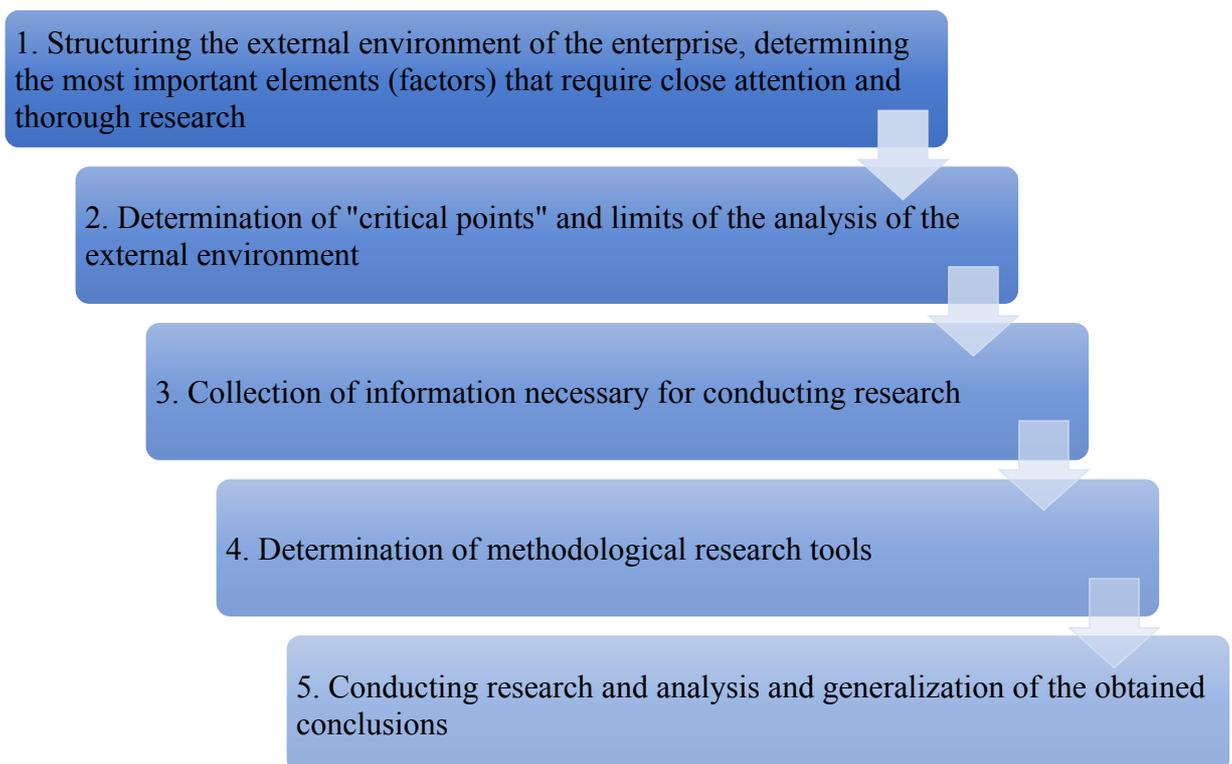


Fig. 1.13. Algorithm for monitoring the external environment

Source: [86, p. 140]

It is also worth noting that the following are currently known among the external environment analysis models (Fig. 1.14).

2. Assessment of the financial state of the enterprise.

Usually, the assessment of the company's financial condition includes: an assessment of the company's assets and liabilities, an assessment of its financial results, an analysis of the liquidity of the balance sheet and financial indicators.

3. Identification of risks. The probability of risk of each enterprise is easy to predict based on the use of available methods. One of them is the R-analysis (multiplicative method) or the analysis of coefficients characterizing the financial condition of the enterprise.

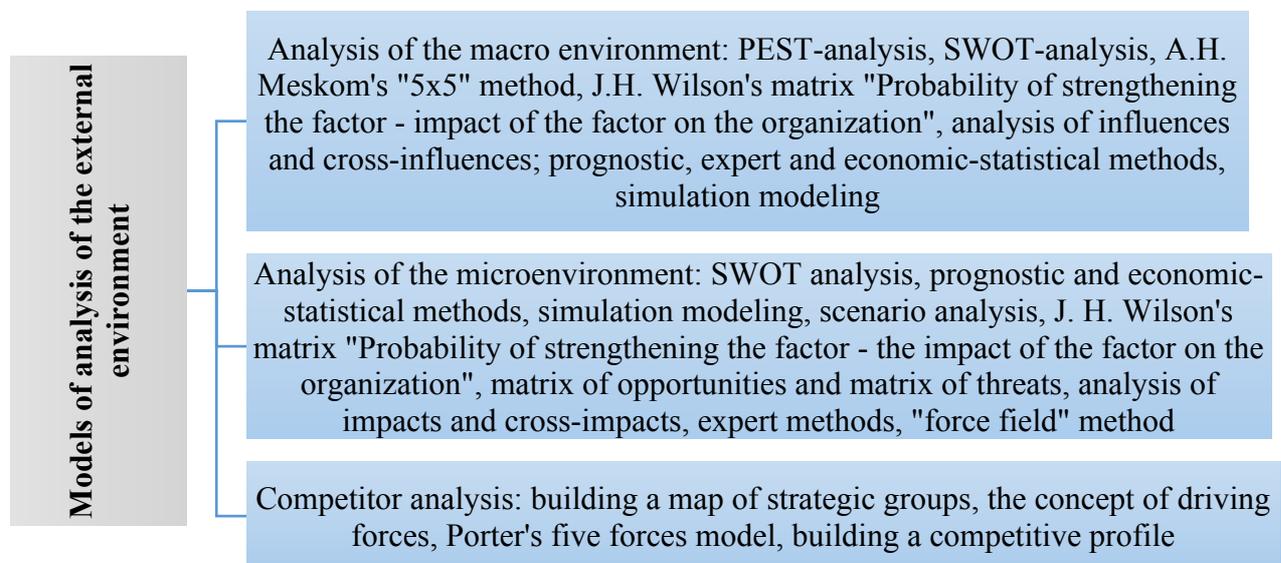


Fig. 1.14. Models of external environment analysis

Source: [89]

Usually, two groups of indicators are used to assess the financial risk of enterprises:

- absolute coefficients of financial stability and solvency (on the basis of their analysis, the level of financial risk can be qualitatively assessed);

- relative coefficients of financial stability and solvency (applied in the integrated model of financial risk, which makes it possible to quantitatively assess the overall level of financial risk) [45].

The risk of solvency, or liquidity, is usually assessed by comparing the relevant groups of assets and liabilities (Table 1.3).

Table 1.3

Grouping of assets and liabilities by level of liquidity

| The procedure for grouping assets according to the level of speed of their conversion into cash | The procedure for grouping liabilities according to the level of urgency of fulfilling obligations |
|---|--|
| A1 - the most liquid assets | P1 - the most urgent obligations |
| A2 – assets that are quickly realized | P2 - short-term liabilities |
| A3 – slowly liquid assets | P3 - long-term liabilities |
| A4 - hard liquid assets | P4 – permanent liabilities |

Source: [45]

The data of grouped assets makes it possible to determine their relationship with the corresponding groups of liabilities. The resulting combination makes it possible to calculate the risk zone in which the business entity is located.

An integral point assessment of the company's financial condition is presented 63. Iveson, A., Hultman, M., Davvetas, V., & Oghazi, (table 1.4) [63, p. 395].

Table 1.4

Liquidity risk assessment model using absolute indicators

| Type of liquidity condition | | | |
|--|---|--|--|
| Conditions | | | |
| $A_1 \geq \Pi_1; A_2 \geq \Pi_2; A_3 \geq \Pi_3; A_4 \leq \Pi_4$ | $A_1 < \Pi_1; A_2 \geq \Pi_2; A_3 \geq \Pi_3; A_4 \sim \Pi_4$ | $A_1 < \Pi_1; A_2 < \Pi_2; A_3 \geq \Pi_3; A_4 \sim \Pi_4$ | $A_1 < \Pi_1; A_2 < \Pi_2; A_3 < \Pi_3; A_4 > \Pi_4$ |
| Absolute liquidity | Admissible liquidity | Disturbed liquidity | Crisis liquidity |
| Liquidity risk assessment | | | |
| Risk-free zone | Zone of acceptable level of risk | Zone of critical risk level | Zone of catastrophic risk level |

Source: [63, p. 395]

To assess the type of financial stability, indicators of the availability of sources of formation of reserves and costs are calculated, which correspond to three indicators of the availability of reserves and costs of sources of formation:

- surplus or shortage of own working capital;
- surplus or shortage of own and long-term loan funds;
- surplus or shortage of the total value of the main sources.

Bankruptcy or insolvency are categories of the market economy that characterize the financial condition of economic entities [5]. According to the Law of Libya “Law no. 19 of 1992 on Production Tax” bankruptcy is the inability of a business entity to fulfill its own monetary obligations to creditors recognized by an arbitration court [5].

Note that there are several models for assessing the risk of bankruptcy. Thus, the Altman index is calculated as follows [38]:

$$Z = 1,2 \cdot X_1 + 1,4 \cdot X_2 + 3,3 \cdot X_3 + 0,6 \cdot X_4 + 1,0 \cdot X_5, \quad (1.1)$$

where, X_1 – the ratio of current assets to the sum of all assets of the business entity;

X_2 – the ratio of retained earnings reserves to the sum of all assets of the business entity;

X_3 – the level of profitability of assets (the ratio of gross profit/loss to the sum of all assets of the business entity);

X_4 – ratio of equity and debt capital;

X_5 – turnover of assets in the number of turnovers (the ratio of net sales from sales to the sum of all assets of the business entity) [63].

The level of the threat of bankruptcy of a business entity in Altman's model is evaluated according to the scale given below. If Z:

- 1.80 and less – very high;
- 1.81-2.70 – high;
- 2.71-2.99 – possible;

- 3.0 and above is very low [63].

An alternative is the Taffler model, which is calculated according to the formula [63]:

$$ZT = 0,53 \cdot x_1 + 0,13 \cdot x_2 + 0,18 \cdot x_3 + 0,16 \cdot x_4, \quad (1.2)$$

where, x_1 – the ratio of profit from the sale of products, works, services to short-term working capital;

x_2 – ratio of current assets to total liabilities;

x_3 – the ratio of short-term liabilities to total assets;

x_4 – the ratio of revenue from sales of products, works, services to total assets.

If:

- $T > 0,3$ – the economic entity has excellent long-term prospects;

- $ZT < 0,2$ – bankruptcy is likely.

Scientists Boin A. and Rhinard M. propose an R-model for predicting the risk of bankruptcy, which has the form [39]:

$$R = 0,38 \cdot K1 + K2 + 0,054 \cdot K3 + 0,63 \cdot K4, \quad (1.3)$$

where, $K1$ – the ratio of working capital to the average annual amount of assets;

$K2$ – the ratio of net profit to the average annual amount of equity;

$K3$ – the ratio of revenue to the average annual amount of assets;

$K4$ is the ratio of net profit to total costs [39].

If $R=0$ - the probability of bankruptcy is maximum (90-100%), 0-0.18 - high (60-80%), 0.18-0.32 - average (35-50%), 0.32-0,42 – low (15-20%), more than 0.42 – minimal (up to 10%) [39].

The model for estimating the probability of bankruptcy according to Al-Janabi A. S. H., Mhaibes H. A., Hussein, S. A., the basis of several bankruptcy forecasting techniques has the form [36]:

$$Z = 1,5 \cdot X_1 + 0,08 \cdot X_2 + 10 \cdot X_3 + 5 \cdot X_4 + 0,3 \cdot X_5 + 0,1 \cdot X_6, \quad (1.4)$$

where X_1 is the ratio of revenue to current liabilities;

X_2 – ratio of balance currency to liabilities;

X_3 – the ratio of net profit to the average annual amount of assets;

X_4 – ratio of net profit to revenue;

X_5 – ratio of production stocks to revenue; X_6 is the ratio of revenue to fixed capital.

If:

$Z > 2$ – the company is not in danger of bankruptcy;

$-1 < Z < 2$ – financial stability is violated;

$-0 < Z < 1$ – there is a threat of bankruptcy.

Models of credit and operational risk assessment are also used in practice. It is customary to determine credit and operational risk based on indicators of the influence of financial leverage and the influence of operating leverage. The higher the financial leverage, the higher the financial risk. Related to the enterprise - the risk of not repaying the loan with interest increases. The greater the operating leverage, the higher the risk [36].

In the scientific practice of determining the general level of financial risk for an enterprise, there is no model that would take into account all typical risks for a business entity. The most common model is an integrated model for determining financial risk based on relative indicators of liquidity and financial stability.

The assessment of liquidity risks and financial stability using relative indicators is carried out using the analysis of deviations from normative values. This model makes it possible to integrally assess the financial risk for the enterprise, taking into account the main indicators.

The essence of the method of comprehensive assessment of the financial condition of the business entity is based on the determined level of financial risk, that is, the enterprise belongs to a certain class depending on the number of points scored, based on the actual value of its financial ratios.

We can say that the most common method of assessing the company's financial risks is the use of models based on absolute and relative indicators. These methods make it possible to qualitatively assess the level of risk - to indicate the risk zone.

The main condition for choosing an anti-crisis strategy is its relevance to a certain situation.

In addition, it is important to comply with other basic requirements (Fig. 1.15).

1. The ability to model the situation, predict problems related to the influence of the internal and external environment of the enterprise
2. The ability to identify the need for changes, which requires management to: - willingness to respond to trends arising as a result of the influence of important factors in a certain industry; - intelligence and a creative approach, which make it possible, based on taking into account a combination of known and unknown quantities, to make the enterprise effective in any unforeseen situations, to find potential opportunities to increase its competitiveness
3. Ability to develop a change strategy. Defining and forming a new strategy is an intellectual, creative process aimed at finding an acceptable option for further development of the enterprise
4. Understanding the role of strategic management, which requires the use in the process of changes of strategic models based on the method of operations research and other economic and mathematical methods
5. The ability to implement the developed strategy into life, because otherwise the mental and creative efforts invested in the formation of the strategy may turn out to be useless
6. Involvement in the development of the strategy not only managers of all levels of management, but also employees of the enterprise, which involves the coordination of the interests of all persons who make and implement decisions

Fig. 1.15. Requirements for the anti-crisis strategy of the enterprise

Source: [22]

Constant monitoring of the progress of implementation is a guarantee of effective implementation of the anti-crisis strategy. It is quite possible that additional resources will be needed or, on the contrary, the planned costs will turn out to be higher than the real ones.

When conducting anti-crisis management, after receiving the results, the question arises about the effectiveness of its results.

It should be noted that there are different methods of assessing the effectiveness of anti-crisis management. However, despite the conducted research, there is currently no generally accepted method of determining the effectiveness of anti-crisis

management, as well as a system of criteria for determining the effectiveness of anti-crisis management.

Some scientists, including the above-mentioned Al-Janabi A. S. H., Mhaibes H. A., Hussein, S. A., write in their research that it is advisable to evaluate the effectiveness of anti-crisis management using multifactor models for predicting the probability of bankruptcy [36]. They also suggest the use of a comparative analysis of indicators of enterprise activity before the application of anti-crisis measures and after their application to determine the dynamics of indicators that occurred during the implementation of the anti-crisis program. However, in our opinion, the use of methods that predict the probability of bankruptcy of the enterprise, as well as methods that analyze the financial state of the enterprise in dynamics, to assess the effectiveness of anti-crisis management are ineffective due to the multifactorial nature of the crisis phenomenon.

In addition, the correlation between some areas of the crisis and the financial indicators of the business entity is sometimes quite indirect, and it is not always possible to give a quantitative assessment of the results of changes in these areas and to accurately isolate them in the general financial results of the enterprise. These methods can show a change in the company's financial results in the event of an assessment of the effectiveness of management of the financial, economic and production spheres of the company, but not others.

The authors E. V. Gamolko and O. A. Opalov proposed a general principle of assessing the effectiveness of anti-crisis management - a comparison of the effect, the result obtained after the application of anti-crisis management, and the costs of its implementation [14]:

$$\text{Efficiency} = \text{Sum of results} / \text{Sum of costs}, \quad (1.5)$$

At the same time, the author writes that the result of the implementation of anti-crisis methods can be both an economic effect and a scientific and technical, resource, social, ecological, etc., due to the already mentioned multifactorial nature of the crisis.

According to the author, the economic effect is evaluated according to the economic indicators of the enterprise:

- to determine the scientific and technical effect, the novelty, simplicity, and usefulness of the management technology are evaluated;
- for resource - the efficiency of the use of all types of resources of the enterprise; when calculating the social effect, social benefits are assessed, for example, the state of wages, employment, standard of living, etc.;
- the environmental effect is determined by the presence and size of the environmental benefit from the use of this management technology.

Conclusion to the part I

The theoretical part of the work is dedicated to the study of the theoretical and methodological basis of management of the anti-crisis strategy of the enterprise.

It was found that the anti-crisis strategy of the enterprise is a type of management that allows identifying the signs of crisis phenomena and creating the appropriate prerequisites for their timely prevention, mitigation, and overcoming in order to ensure the viability of the business entity and prevent bankruptcy.

Anti-crisis management of the enterprise is a special system that is complex and strategic in nature and allows to completely eliminate temporary difficulties recorded in the work of the enterprise.

Research allows us to state that an effective anti-crisis strategy of an enterprise is based on three elements: correctly defined goals, a full understanding of the competitive environment and a real assessment of one's own capabilities and resources.

The strategy of anti-crisis management of the enterprise is a set of actions and a sequence of management decisions taken to evaluate, analyze and develop a valuable system of influence on the recovery of the enterprise to prevent bankruptcy or minimize the consequences of a crisis.

The anti-crisis strategy should be based on the interconnection of four functional strategies: marketing, production, personnel and financial.

Implementation of the strategy takes place through the development and implementation of programs, budgets and procedures that provide for the availability of the necessary resources, management system, organizational structure and personnel.

Depending on the specific business conditions, the enterprise can choose one of three models of management in a crisis situation: active, reactive or planned management, as well as implement the appropriate instructions for getting out of the crisis.

There are various methods of assessing the effectiveness of anti-crisis management. However, despite the conducted research, there is currently no generally accepted method of determining the effectiveness of anti-crisis management, as well as a system of criteria for determining the effectiveness of anti-crisis management.

The result of the implementation of anti-crisis methods can be both an economic effect and a scientific and technical, resource, social, ecological, etc., due to the multifactorial nature of the crisis.

PART II

ANALYSIS OF THE ORGANIZATION OF OPERATIONAL ACTIVITIES OF “LIBYAN ENGINE” CO LTD IN MODERN CONDITIONS

2.1. Economic and legal basis of activity and general characteristics of “Libyan engine” Co Ltd on the auto parts trade market

One of the players in the auto parts market of Libya is the company “Libyan engine” Co Ltd, which started its activity back in 2002. The company specializes in the sale of spare parts and accessories for cars and trucks. We should note that the office, shops and warehouses of the company are located in the city of Tripoli, namely Al Kurnish Rd, Tripoli, Libyen, Tripoli. The office is located in a place with a convenient entrance and its own parking lot (fig. 2.1).



Fig. 2.1. Head office of "Libyan engine" Co Ltd

Source: generated by the author

Such a location physically allows the company to fulfill its main task - to make the purchase of spare parts as simple and convenient as possible for customers. A team of professionals is working on this task, which helps customers to select and quickly receive spare parts in all regions of Libya.

The authorized capital of "Libyan engine" Co Ltd is \$15,800. The company's main areas of activity are:

- wholesale sale of auto parts for cars and commercial vehicles;
- wholesale of car tires, oils, batteries, car cosmetics, accessories;
- sale of garage and diagnostic equipment for car service stations;
- car repair and diagnostics.

Official representative in the region of the following companies: "BOSCH", "CASTROL", "Hart", "Febi", "Total", "BILSTEIN", "AUTOFREN", "WAHLER", "FISHER AVTOMOTIVE", "COFLE", "ELRING", "EPS", "Bugatti", "SKF", "COMPLEX", "BP", "CIFAM", "Dafmi", "DAYCO", "Liqui Moly" (Figure 2.2).

As mentioned above, the main activity of the company is wholesale and retail sales of auto parts and auto accessories. Accordingly, one of the leading divisions of the company is its wholesale department. Managers of the wholesale department serve more than 100 customers every day. Representatives of the wholesale department of "Libyan engine" Co Ltd periodically travel to the regions assigned to them, communicate with the company's representatives on the ground, monitor the market, identify problems, and find new customers.

It is worth noting that the company has a developed system of warehouses, the total area of which is about 15,000 m², where there are more than 95,000 brand names of well-known global manufacturers, which have proven themselves best on the market (Fig. 2.3).

"Libyan engine" Co Ltd is constantly increasing the range of auto parts, concluding contracts directly with manufacturers, which guarantees the end user the receipt of the highest quality product at an affordable price.

The sale of spare parts for cars is carried out both directly in Tripoli and in other regions of Libya.



Fig. 2.2. Brands with which "Libyan engine" Co Ltd cooperates

Source: generated by the author



Fig. 2.3. Modern warehouse "Libyan engine" Co Ltd

Source: generated by the author

The store offers optimal terms of delivery of the purchased goods. The sale and delivery to any settlement of the country is carried out in a timely manner, which is confirmed by customer reviews. In addition, clients always have qualified managers-consultants who are ready to help. Clients can contact them both by phone and through other communication channels. Managers help customers choose auto parts for their car, advise on placing an order, its cost, methods and terms of delivery.

The company includes a specialized division of the dealer center. The "North Africa" dealership in the car showroom offers the entire model range of cars from the German manufacturer.

At the car dealership, qualified managers help customers choose a car that fully meets their needs and requests. In its structure, the dealership also has a service center for servicing BMW cars with a production area of 500 m², which is equipped with modern NUSSBAUM lifts. Maintenance is carried out using a special BMW tool and includes more than 200 items, which allows you to service cars in full compliance with the manufacturer's technological requirements.

At the disposal of customers of the "North Africa" center:

- spacious service room;
- a special zone of active contact, where the client has the opportunity to inspect the car together with a service consultant, including with the help of a lift;
- recreation area with free WiFi;
- necessary consultations and support.

Another division in the structure of "Libyan engine" Co Ltd is the company "Leader-Service" (Bosch Service).

The Bosch Service diesel center is one of the main activities of the "Leader-Service" company. Over 10 years of work in this direction, the company has accumulated rich experience in the diagnosis and repair of diesel fuel equipment, and the technical base available today allows performing repair and diagnostic work of almost all types of diesel systems (Fig. 2.4).

It should also be noted that the "Leader-Service" company is an authorized service center for Bosch fuel equipment. Service specialists working at the Center have completed training courses on Bosch equipment and its use; diagnosis and

repair of cars; advanced training in Germany, receiving certification confirmation of successful completion of relevant programs.



Fig. 2.4. Bosch Car Service "Leader-Service" station

Source: generated by the author

The service center uses modern software and equipment to diagnose, check and adjust the relevant parts of diesel systems.

The Bosch Car Service station "Leader-Service" provides its customers with a wide range of services, namely:

- maintenance of car electrical equipment;
- diagnosis and undercarriage repair;
- servicing of air conditioning systems;
- performance of general mechanical works;
- checking the technical condition of the car;
- installation of additional equipment;
- implementation of dry cleaning, washing, tire fitting.

"Libyan engine" Co Ltd provides car maintenance and repair services. The service center is equipped with all necessary special tools and diagnostic equipment. The showroom also offers a wide range of accessories.

"Libyan engine" Co Ltd operates in the legislative sphere of Libya in accordance with the laws of Libya [1-8]. Economic activity is carried out on the basis of the

Charter. Relations are regulated both by the laws themselves, and by regulatory acts of other state and local self-government bodies and other regulatory acts. Activities are also regulated based on the decisions of the general meeting, the chairman of the board and the audit commission.

The main governing body of the company is the board of directors. Operations management is in the hands of the CEO.

The main purpose of business is to make a profit.

A collective agreement is a local legal act that regulates labor, socio-economic relations between the owner and employees of the enterprise.

Every year, the company "Libyan engine" Co Ltd serves 5 million customers, the company has more than 1000 regular corporate customers. The company has about a thousand employees.

For 20 years of successful work, "Libyan engine" Co Ltd has acquired an impeccable reputation as a responsible and reliable company, which has proved in words and deeds that it is a modern innovative business.

"Libyan engine" Co Ltd has the following management structure, which is presented in Fig. 2.5.

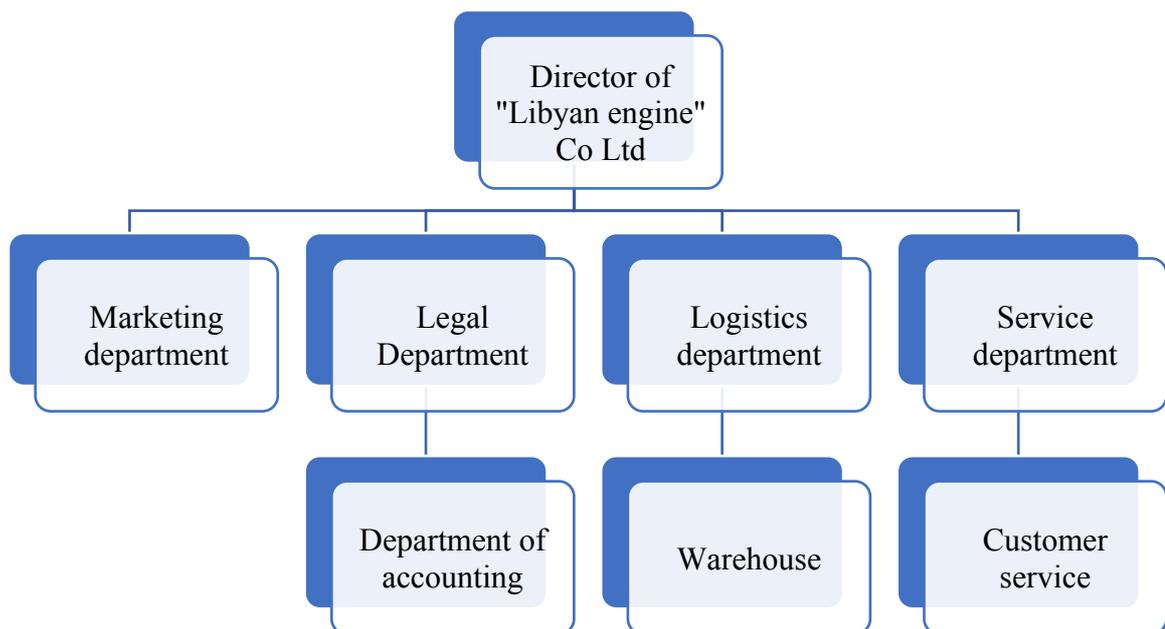


Fig. 2.5. Organizational structure of "Libyan engine" Co Ltd

Source: compiled by the author

The organizational structure of "Libyan engine" Co Ltd is linear. The main characteristics of this structure are the clarity of relations, lack of ambiguity of teams and reliable control in the company. But with such an organizational structure, there is a high level of centralization of management, so the head of "Libyan engine" Co Ltd solves strategic issues and operational issues of sub-departmental units

The director of "Libyan engine" Co Ltd performs the following functions:

- controls all activities in the company;
- makes decisions about the development of the company;
- develops recommendations for improving forecasting, analysis, planning, financial and economic activity;
- analyzes and evaluates the development of socio-economic processes and other branches of the economy;
- ensures the legality of actions and discipline;
- delegates tasks to subordinates.

The company's chief accountant ensures accounting, following the uniform methodological principles established by the law "On accounting and financial information", taking into account the company's peculiarities. Organizes the work of the accounting department, controls the display of all business transactions. It obliges departments, services and employees to ensure strict compliance with registration and submission of primary documents.

Thus, the company "Libyan engine" Co Ltd has established itself as the most reliable partner in the market for the sale of auto parts and service in the Libyan market. In addition to a wide range of products, "Libyan engine" Co Ltd offers its customers a wide range of services, including maintenance of the car's electrical equipment, diagnostics and repair of the running gear, service maintenance of air conditioning systems, general mechanical work, inspection of the technical condition of the car, installation of additional equipment, dry cleaning, washing, tire fitting.

2.2. Analysis of the financial and economic status of the business entity "Libyan engine" Co Ltd

The activity of "Libyan engine" Co Ltd is regulated by the following regulatory, methodical and informational documents: regulations on structural divisions, representative offices, branches and other separate divisions of the company, regulatory acts, collective agreement; administrative and accounting documents for personnel.

Let's determine the dynamics of personnel parameters in "Libyan engine" Co Ltd (Table 2.1 and fig. 2.6).

Table 2.1

Dynamics of personnel parameters of "Libyan engine" Co Ltd during 2020-2022

| Indicator | Year | | | Absolute deviation | | Relative deviation, % | |
|--|------|------|------|--------------------|-----------|-----------------------|-----------|
| | 2020 | 2021 | 2022 | 2021/2020 | 2022/2021 | 2021/2020 | 2022/2021 |
| The average registered number of employees, persons | 245 | 257 | 251 | 12 | 6 | 4,89 | 2,33 |
| Labor compensation fund, thousand dollars | 65 | 85 | 75 | 20 | 10 | 30,77 | 11,76 |
| Average monthly salary of one employee, thousands of dollars | 1,8 | 1,6 | 1,79 | 2 | 1,9 | 11,11 | 11,88 |

Source: compiled by the author

During the studied period, "Libyan engine" Co Ltd has seen a positive increase in the average number of employees. In 2020-2021, the average number of employees increased by 12 people, i.e. by 4.89%. However, in 2022 it decreased by 6 (2.33%). In addition, it should be noted that in 2021, compared to 2020, the average

monthly salary of employees decreased by 11.11%, and in 2022, there was an increase, in accordance with 2021, that is, by 11.88%.

Let's consider the performance indicators of "Libyan engine" Co Ltd (Table 2.2 and fig. 2.7).

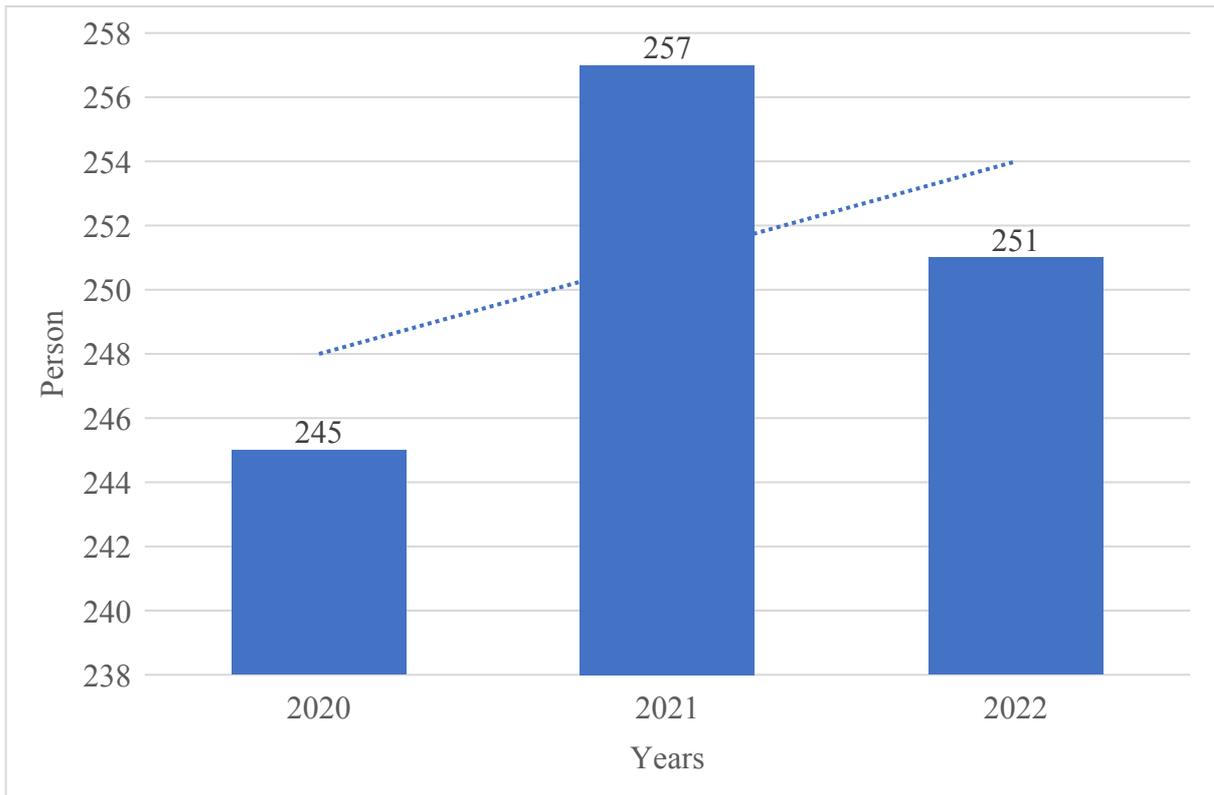


Fig. 2.6. The average registered number of employees of "Libyan engine" Co Ltd during 2020 – 2022

Source: compiled by the author

The results show that the average annual cost of fixed assets is gradually increasing: in 2021, compared to 2020, by 500%, in 2022, compared to 2021, by 30%. The turnover from 2020 to 2021 remained unchanged and increased in 2022 by \$500,000. Net income increased by 176.9% from 2020 to 2021, and increased by another 51.1% from 2021 to 2022. As for return on fixed assets, there was also an increase until 2021, and a decrease of 20% from 2021 to 2022.

We believe that in order to increase the efficiency of the use of the fixed assets of the "Libyan engine" enterprise, it is necessary to increase the load on the fixed assets and increase the intensity of their use.

Table 2.2

**Analysis of performance indicators of "Libyan engine" Co Ltd
during 2020-2022**

| Indicators | Yars | | | Absolute deviation | | Relative deviation, % | |
|---|-------|-------|-------|--------------------|---------------|-----------------------|---------------|
| | 2020 | 2021 | 2022 | 2021/ 2020 | 2022/ 2021 | 2021/ 2020 | 2022/ 2021 |
| Average annual cost of fixed assets, thousands of dollars. | 20 | 100 | 130 | 80 | 30 | 500 | 30 |
| Return on fixed assets, % | 0,016 | 0,235 | 0,188 | 0,219 | 0,47 | 1368% | -20 |
| Revenue from the sale of products thousand dollars. | 2500 | 2500 | 3000 | 0 | 500 | 1 | 20 |
| Net income from the sale of products, thousands of dollars. | 2083 | 2083 | 2500 | 0 | 417 | - | 20,019 |
| Cost of goods sold thousand dollars. | 1732 | 1817 | 2450 | 85 | 633 | 4,91 | 34,84 |
| Sales costs, thousands of dollars | 35 | 40 | 55 | 5 | 15 | 41,29 | 37,5 |
| Net profit, thousands of dollars | 65 | 180 | 272 | 115 | 92 | 176,9 | 51,1 |

Source: compiled by the author

To characterize the economic activity of the enterprise, we will analyze the sales volume and cost price of "Libyan engine" products during 2020-2022 (Table 2.2).

Indicators of the volume of production are commodity products at comparative prices of enterprises, the volume of sales of products at current prices of enterprises. Indicators of the volumes of marketable and sold products are closely interdependent. Along with value indicators, natural ones are also widely used.

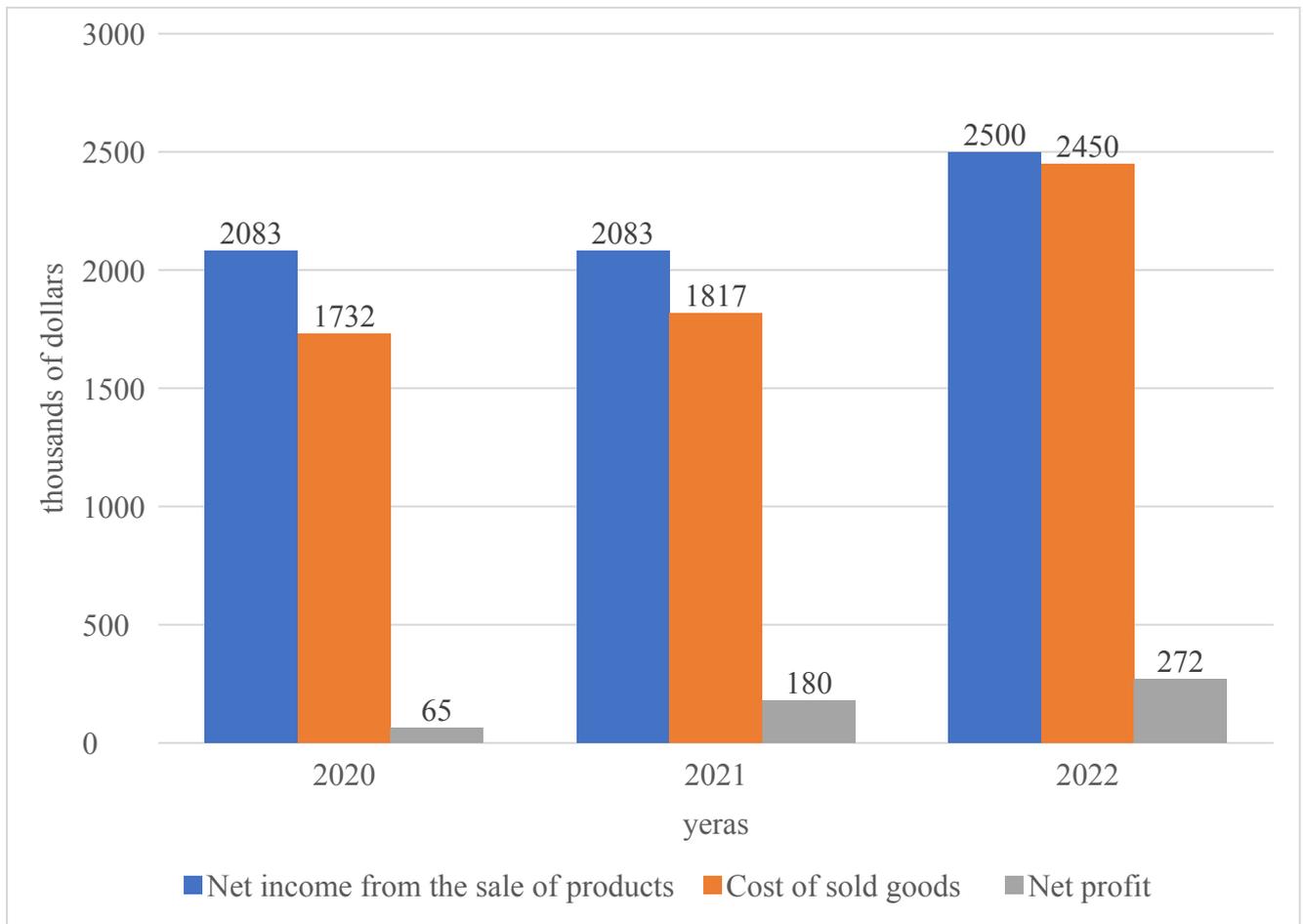


Fig. 2.7. Financial performance indicators of "Libyan engine" Co Ltd during 2020 – 2022

Source: compiled by the author

After analyzing the data in the table 2.3, it can be said that the sales of "Libyan engine" during the studied period are growing, and this is due to the expansion of the assortment and changes in the approach of the sales system.

The cost of goods sold is also gradually increasing: in 2021, compared to 2010, by \$100,000, or 4.2%, and in 2022, compared to 2021, by \$500,000, or 18.52%. This is due to the increase in the volume of sold products.

The financial and economic condition is one of the most important characteristics of the company's activity. The purpose of the analysis of the financial and economic condition of the enterprise is to strengthen the economic situation as a basis for the stable operation of the enterprise.

Analysis of the financial and economic condition of the company includes the following stages: analysis of the dynamics of the composition and structure of assets,

analysis of liquidity, profitability, analysis of business activities, analysis of financial results and others.

Based on the financial statements of "Libyan engine" Co Ltd, we will analyze the financial and economic status of the enterprise (table 2.3).

Table 2.3

Analysis of assets and liabilities of "Libyan engine" Co Ltd during the period 2020-2022

| Indicators | Years | | | | | | Deviation | | | |
|--------------------------------------|-------------|-----|-------------|-----|-------------|-----|-----------------|--------|-------------|---------|
| | 2020 | | 2021 | | 2022 | | 2021 / 2020 pp. | | 2022/2021 | |
| | ths.US D | % | ths.US D | % | ths.US D | % | ths.US D | % | ths.US D | % |
| Assets | | | | | | | | | | |
| Total non-current assets | 580 | 38 | 1100 | 50 | 690 | 19 | 520 | 89,66 | 410 | 37,27 |
| Total current assets: | 940 | 62 | 1100 | 50 | 1100 | 30 | 160 | 17,02 | 0 | 0 |
| stocks | 530 | 35 | 120 | 5 | 1400 | 38 | 410 | 77,36 | 1280 | 1066,67 |
| receivable debt | 190 | 13 | 150 | 7 | 210 | 6 | 40 | 21,05 | 60 | 40 |
| monetary funds | 75 | 5 | 45 | 2 | 35 | 1 | 30 | 40 | 10 | 22,22 |
| Other current assets | 200 | 13 | 150 | 7 | 220 | 6 | 50 | 25 | 70 | 46,67 |
| Other assets | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Total assets | 1520 | 100 | 2200 | 100 | 3655 | 100 | 680 | 44,74 | 1455 | 66,14 |
| Passives | | | | | | | | | | |
| Statutory capital | 230 | 10 | 230 | 9 | 230 | 13 | 0 | 0 | 0 | 0 |
| Long-term liabilities and collateral | 1600 | 69 | 1600 | 63 | 910 | 51 | 0 | 0 | 690 | 43,13 |
| Current liabilities | 340 | 15 | 370 | 15 | 580 | 32 | 30 | 8,82 | 210 | 56,76 |
| Short-term bank credits | 35 | 2 | 0 | 0 | 0 | 0 | 35 | 100 | 0 | 0 |
| accounts payable | 110 | 5 | 320 | 13 | 420 | 23 | 210 | 190,91 | 100 | 31,25 |
| Total passives | 2 315 | 100 | 2 520 | 100 | 1800 | 100 | 205 | 8,86 | 720 | 28,57 |

Source: compiled by the author

The given dynamics of the indicators of "Libyan engine" Co Ltd for 2020-2021 indicate a positive trend in the currency of the balance sheet, which demonstrates a significant increase in the scale of business. At the same time, non-current assets of "Libyan engine" Co Ltd for 2020-2022 increased by \$52,000 (89.66%), and current assets increased by \$160,000. (17.02%). Such trends indicate the improvement of the company's potential during the study period.

During the evaluation period, we observe an increase in the share of non-current assets. In 2020-2022, there are certain fluctuations in the total assets of "Libyan engine" Co Ltd. Thus, in 2021, compared to 2020, the total amount of assets increased by 680 thousand dollars (44.74%), and in 2022, compared to 2021, it again increased by 1455 thousand dollars (66.14 %). It should also be noted that the growth of current assets of "Libyan engine" Co Ltd occurred due to an increase in the company's reserves by 8,911 thousand dollars. (0.41%), while accounts receivable increased by \$410,000. (77.36%), and the share of cash increased by USD 30,000, or 40%. The structure of current assets of "Libyan engine" Co Ltd for 2022 is shown in fig. 2.8.

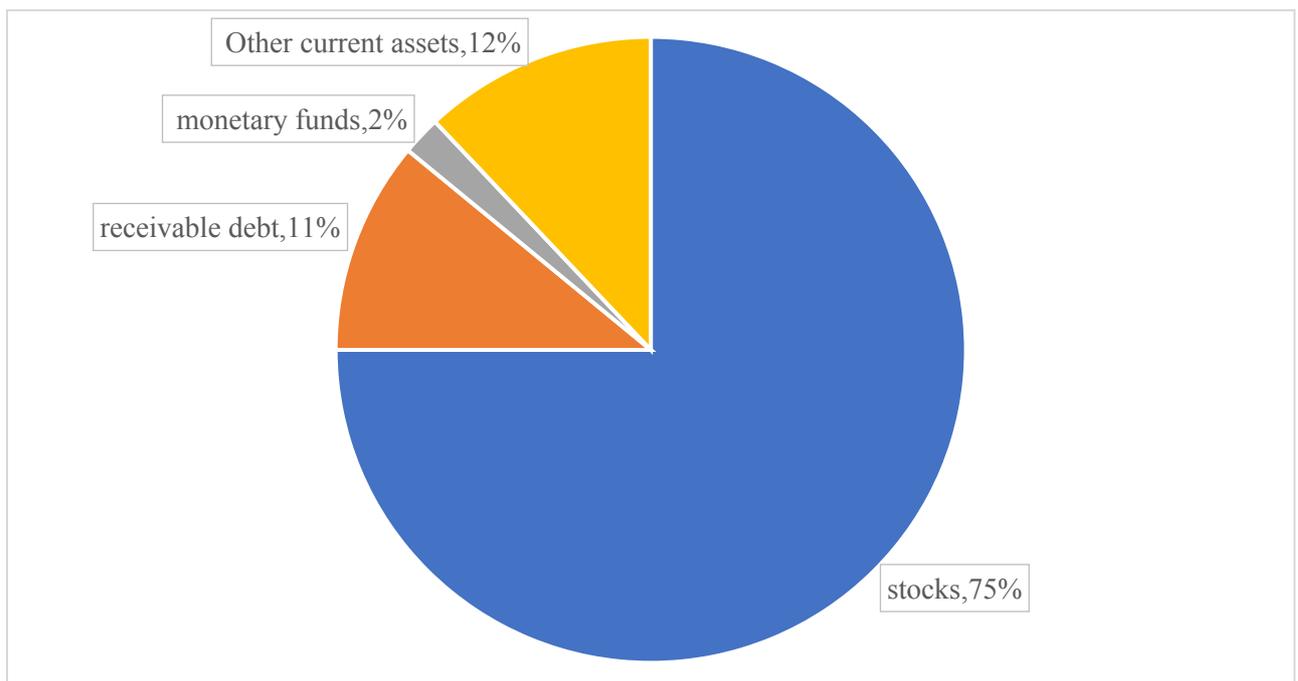


Fig. 2.8. Asset structure of "Libyan engine" Co Ltd for 2022

Source: compiled by the author

Thus, in 2022, the most important part of the structure of current assets of "Libyan engine" Co Ltd was product stocks – 75%, followed by other current assets – 12% and accounts receivable – 11%. The growth of the percentage of receivables indicates an increase in turnover.

The company's passives include both equity and loan capital. In particular, the dynamics of equity, as well as other elements of the liabilities of the indicators of "Libyan engine" Co Ltd for 2020-2022, increased: it increased by 1,160 thousand dollars, or by (17.02%), which shows the growth of the enterprise, at the same time, long-term debts decreased by USD 69,000. and current debts increased by USD 21,000. , i.e. by 41.13% and 56.76%, respectively, which indicates a complex imbalance in the composition and structure of sources of financing for the "Libyan engine" Co Ltd business. The structure of passives of "Libyan engine" Co Ltd for 2022 is shown in fig. 2.9.

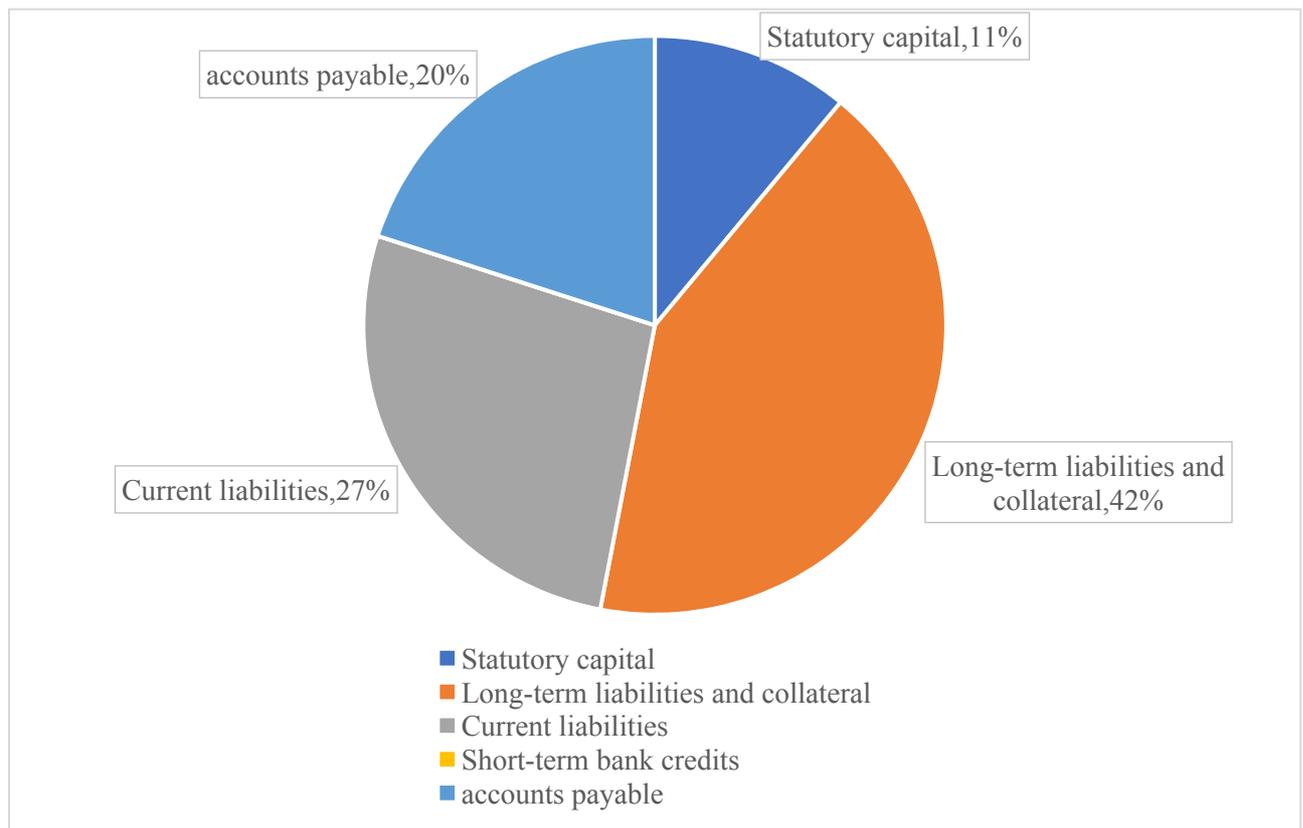


Fig. 2.9. Liabilities structure of "Libyan engine" Co Ltd for 2022

Source: compiled by the author

The assessment of the liability structure of "Libyan engine" Co Ltd for 2020-2022 indicates a predominance of long-term liabilities (42%) and current liabilities (27%), while the share of equity is the smallest and is 11%.

Thus, the above indicates the general dependence of the enterprise "Libyan engine" Co Ltd on external sources of financing.

In the table 2.4 we will analyze the dynamics of the components of equity and borrowed capital of "Libyan engine" Co Ltd during 2020-2021.

Table 2.4

**Dynamics of components of own and borrowed capital of "Libyan engine"
Co Ltd, thousands usd**

| Indicators | Years | | | Absolute deviation | | Relative deviation, % | |
|---|-------|-------|-------|--------------------|---------------|-----------------------|---------------|
| | 2020 | 2021 | 2022 | 2021/ 2020 | 2022/ 2021 | 2021/ 2020 | 2022/ 2021 |
| Own capital | | | | | | | |
| Registered (share) capital | 230 | 230 | 230 | 0 | 0 | 0 | 0 |
| Additional capital | 15 | 15 | 15 | 0 | 0 | 0 | 0 |
| Undivided profit | -740 | -1200 | 120 | -460 | 1320 | 62% | -110% |
| Total equity capital | -495 | -955 | 365 | 146,2 | 590 | -30% | 62% |
| Involved capital | | | | | | | |
| Long-term liabilities | 1 600 | 1600 | 910 | 0 | -690 | 0 | -43% |
| Current liabilities | | | | | | | |
| Accounts payable for goods, works, services | 110 | 320 | 420 | 210 | 100 | 191% | 31% |
| Current obligations according to calculations with the budget | 110 | 320 | 420 | 210 | 100 | 191% | 31% |
| Other current commitments | 190 | 45 | 150 | -145 | 105 | -76% | 233% |
| Total current liabilities | 340 | 370 | 580 | 30 | 210 | 9% | 57% |
| Total capital | 750 | 1 055 | 1 570 | 305 | 515 | 41% | 49% |

Source: compiled by the author based on the company's financial statements

During 2020-2022, certain fluctuations were observed in the capital of "Libyan engine" Co Ltd. In 2021, compared to 2020, the capital decreased by 30%, which occurred due to the purchase of new car parts. In 2022, compared to 2021, there is an increase in capital by 590 thousand dollars (62%) due to the sale of products purchased in the previous year. A positive moment in the activity of "Libyan engine" Co Ltd was the reduction of long-term liabilities, which decreased by \$100,000, which is associated with a corresponding decrease in accounts payable (Fig. 2.10).

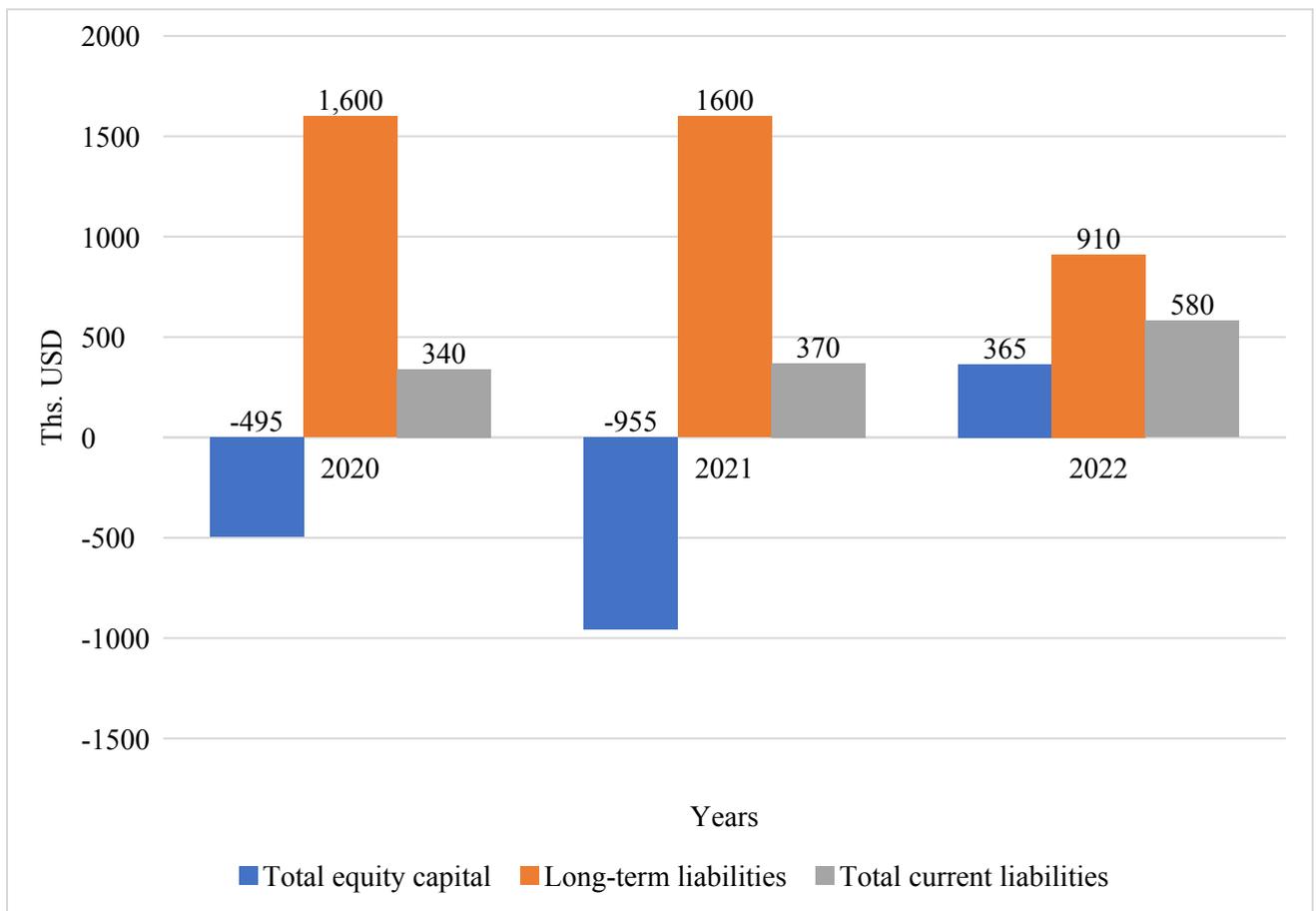


Fig. 2.10. Dynamics of capital changes of "Libyan engine" Co Ltd in 2020-2022 (thousands of dollars)

Source: compiled by the author.

The increase in current liabilities indicates the inability of "Libyan engine" Co Ltd. repay its obligations to creditors on time, but the reduction of long-term liabilities and a significant increase in equity (from -955 thousand USD to 365

thousand USD) speaks of the growth of the scale of the company "Libyan engine" Co Ltd and indicates a positive trend in realizing its own potential by the company.

The next step in the study of the financial and economic condition of "Libyan engine" Co Ltd. there is an analysis of the coefficients of the financial condition.

With the help of financial reporting data for 2020-2022, we will analyze the liquidity indicators of "Libyan engine" Co Ltd in Table 2.5 It is they who demonstrate the company's ability to settle its obligations thanks to its own assets.

Table 2.5

Liquidity analysis of "Libyan engine" Co Ltd during 2020-2022

| Liquidity indicators | Formulas for calculation | Years | | | Absolute deviation | | Relative deviation, % | |
|---------------------------------------|--|---------|----------|---------|--------------------|-------------|-----------------------|-------------|
| | | 2020 | 2021 | 2022 | 2021 / 2020 | 2022 / 2021 | 2021 / 2020 | 2022 / 2021 |
| Absolute liquidity ratio | Cash / Current liabilities | 0,00003 | 0,000037 | 0,00005 | 0,0000007 | 0,000013 | 23,33 | 35,14 |
| Own working capital | Equity - Fixed assets | 0,914 | 1,09 | 2,03 | 0,176 | 0,94 | 19,25 | 86,24 |
| Total liquidity ratio (coverage) | Current assets / Current liabilities | 2,76 | 4,07 | 5,00 | 1,31 | 0,93 | 47,46 | 22,85 |
| Quick liquidity ratio | (Current assets - Inventories)/Current liabilities | 1,21 | 0,02 | -1,50 | -1,19 | -1,52 | 98,35 | 98,67 |
| The ratio of payables and receivables | Current liabilities/ Receivables | 1,79 | 2,47 | 2,90 | 0,68 | 0,43 | 37,99 | 17,41 |

Source: compiled by the author

Having analyzed some indicators of liquidity during 2020-2022, we can say that fluctuations are characteristic of the "Libyan engine" Co Ltd enterprise. For example, the ratio of absolute liquidity in 2021 compared to 2020 increased by 0.000007, and in 2022 compared to 2021 by 0.00013, i.e. by 23.33% and 35.14, respectively. Own working capital increased by 0.176 (19.25%) between 2020 and 2021 and by 0.94 (86.24%) between 2021 and 2022. The ratio of total liquidity in 2022 compared to 2021 there is an increase of 0.93 (47.46%), and in 2021, compared to 2020, an increase of 1.31 (22.85%). At the same time, the value of the quick liquidity ratio decreased by 1.19 (98.35%) in 2020-2021, and this trend continues in 2021-2022,

decreasing by another 1.52, that is, by 98.67%. The accounts payable to accounts receivable ratio increased by 0.68 (37.99%) and 0.43 (17.41) in 2020-2021 and 2021-2022, respectively. Such results of the company's liquidity indicators demonstrate the impossibility of "Libyan engine" Co Ltd to secure its short-term obligations from the most easily realizable part of assets - cash.

After that, we will conduct an analysis of indicators of financial stability, thanks to which we will learn the dependence of the company on external sources of financing (Table 2.6).

Table 2.6

**Analysis of indicators of financial stability of "Libyan engine" Co Ltd
during 2020-2022**

| Indicators of financial stability | Formulas for calculation | Years | | | Absolute deviation | | Relative deviation, % | |
|--|--------------------------------|-------|------|--------|--------------------|-------------|-----------------------|-------------|
| | | 2020 | 2021 | 2022 | 2021 / 2020 | 2022 / 2021 | 2021 / 2020 | 2022 / 2021 |
| Coefficient of financial independence (autonomy) | Equity/ Amount of liabilities | 0,47 | 0,14 | 0,13 | -0,33 | -0,02 | -70,21 | -7,14 |
| Coefficient of financial dependence | Amount of liabilities / Equity | 6,52 | 10 | 7,83 | 3,48 | -2,17 | 53,37 | -21,7 |
| Debt ratio | Loan funds / Assets | 0,037 | 0,48 | 0,0083 | 0,443 | -0,472 | 1197 | -98,27 |

Source: compiled by the author

During the studied period, a gradual decrease in the coefficient of financial independence was observed - by 0.02 - 70.21% in 2022, compared to 2021, and by 0.33 - 7.14% in 2021, compared to 2020, due to an increase the amount of the company's liabilities. Fluctuations in the company's current liabilities affected the company's financial dependence ratio and debt ratio. Thus, the ratio of financial dependence in 2021 compared to 2020 increased by 3.48 (55.37%), and in 2021, compared to 2021, it decreased by 2.17 - (21.7%). The debt ratio is also constantly

changing, for example, in 2021 it increased by 0.443 - 1197%, and in 2022 it decreased by 0.472 - 98.27%.

Next, it is necessary to analyze the efficiency of the use of the involved resources, for this we will create a table of profitability indicators of "Libyan engine" Co Ltd (table 2.7).

Table 2.7

**Analysis of profitability indicators of "Libyan engine" Co Ltd
during 2020-2022**

| Profitability indicators | Formulas for calculation | Years | | | Absolute deviation | | Relative deviation, % | |
|-----------------------------|--|-------|-------|------|--------------------|-------------|-----------------------|-------------|
| | | 2020 | 2021 | 2022 | 2021 / 2020 | 2022 / 2021 | 2021 / 2020 | 2022 / 2021 |
| Return on assets, % | Net income / Average annual value of assets *100% | 12,67 | 13,0 | 21,1 | 0,33 | 8,1 | 2,6 | 62,31 |
| Return on equity, % | Net profit / Average annual cost of equity *100% | 82,6 | 130,4 | 12,7 | 47,8 | -117,7 | 57,87 | -90,26 |
| Return on current assets, % | Net profit / Average annual value of current assets*100% | 20,2 | 27,3 | 34,5 | 7,1 | 7,2 | 35,15 | 26,37 |

Source: compiled by the author

During the studied period of 2020-2021, fluctuations in profitability indicators of "Libyan engine" Co Ltd are observed. For example, in 2021, compared to 2020, the return on assets increased by 0.33%, and in 2022, compared to 2021, by 8.87%. Return on equity increased by 47.8% in 2021 compared to 2020 and decreased by 117.7% in 2022 compared to 2021. Return on current assets in 2021 compared to 2020 increased by 7.1% and continued its growth in 2022, compared to 2021, by 7.2%.

Having analyzed the financial and economic condition of "Libyan engine" Co Ltd, it can be concluded that the company is financially unstable and needs changes in the management of affairs. Despite the fact that the company is expanding its sales

market, nevertheless, as the analysis of financial stability indicators showed, the company needs to implement complex changes in its operational activities, which will significantly increase its development potential.

2.3. Evaluation of the organization of effective operational activity and the anti-crisis strategy of "Libyan engine" Co Ltd

To assess the characteristics of the company regarding the organization of effective activities, it is necessary to analyze the report on the financial results of "Libyan engine" Co Ltd for 2020-2022. The main indicators of the report are presented in the table 2.8.

Table 2.8

Main indicators of the report on financial results of "Libyan engine" Co Ltd

| Indexes | Years | | | Deviation | | | |
|--|-------------|-------------|-------------|-------------|--------|-------------|--------|
| | 2020 | 2021 | 2022 | 2021 / 2020 | | 2022 / 2021 | |
| | ths.US D | ths.US D | ths.US D | ths.US D | % | ths.US D | % |
| Income (revenue) from the sale of products | 2500 | 2500 | 3000 | 0 | 0 | 500 | 20 |
| Net income from product sales | 2083 | 2083 | 2500 | 0 | 0 | 417 | 20,02 |
| Cost of goods sold | 1732 | 1817 | 2450 | 85 | 4,91 | 633 | 34,84 |
| Gross profit | 351 | 266 | 50 | -85 | -24,22 | -216 | -81,2 |
| Other operating income | 35 | 35 | 40 | 0 | 0 | 5 | 14,29 |
| Administrative expenses | 65 | 85 | 75 | 20 | 30,77 | -10 | -11,76 |
| Selling expenses | 35 | 40 | 55 | 5 | 14,29 | 15 | 37,5 |
| Other operating expenses | 60 | 15 | 20 | -45 | -75 | 5 | 33,33 |
| Other financial income | 4 | 129 | 202 | 125 | 3125 | 73 | 56,59 |
| Other income | 75 | 150 | 260 | 75 | 100 | 110 | 73,33 |
| Financial expenses | 120 | 130 | 65 | 10 | 8,33 | -65 | -50 |
| Other expenses | 120 | 130 | 65 | 10 | 8,33 | -65 | -50 |
| Financial results before taxation | 65 | 180 | 272 | 115 | 176,92 | 92 | 51,11 |
| Business income tax | 0 | 0 | 0 | - | - | - | - |
| Net profit (loss) | 65 | 180 | 272 | 115 | 176,92 | 92 | 51,11 |
| Elements of operating costs | | | | | | | |
| Labor costs | 65 | 85 | 75 | 20 | 30,77 | -10 | -11,76 |
| Other operating expenses | 60 | 15 | 20 | -45 | -75 | 5 | 33,33 |
| Total operating costs | 125 | 100 | 95 | -25 | -20 | -5 | -5 |

Source: compiled by the author

Having analyzed the report on the financial results of "Libyan engine" Co Ltd for 2020-2022. The main indicators of the report are presented in table 2.8, we established that at the beginning of the studied period, there is a stable revenue from the sale of products: in 2020-2021, it remains unchanged - 2,500 thousand USD, and in 2022, compared to 2021, it increased by 500 thousand USD or 20%. In addition, net income from sold goods increased by \$417,000. i.e. 20.02% in 2022 compared to 2021. Net profit in 2021 compared to 2020 increased by \$115,000. (176.92%), and in 2022 compared to 2021 by 92 thousand USD (51.11%).

The next step in assessing the efficiency of the enterprise's operational activity is the analysis of indicators. The operational efficiency of "Libyan engine" Co Ltd, which operates on the market of auto parts and auto accessories, can be assessed using the following ratios: turnover ratio of current assets, turnover ratio of accounts payable, duration of turnover of payables, turnover ratio of receivables, duration of turnover of receivables, activity profitability ratio, product profitability ratio and sales profitability ratio (Table 2.9).

The turnover ratio of current assets in 2020-2022 illustrates a decrease in turnover of assets: in 2021 it decreased by 0.5 (30.49%), and in 2022 by 0.32 or by 28.07%.

The accounts payable turnover ratio in 2020 shows that the funds provided by creditors reached 19 times, in 2021 - 6.9 times, decreased by 63.98%, in 2022 - 6.49 times - increased by 6.49%. The payables repayment period in 2020 is characterized by low efficiency in the management of payables. For example, in 2021, the company settles with its creditors in 53 days (the indicator increased by 178%), but in 2022, the term of payables falls to 56 days, that is, by 6.93%. Such dynamics of payments pose a threat to the company, for example, deterioration of relations with suppliers, increase in the cost of supplied goods and, therefore, services.

The value of the turnover ratio of receivables in 2020 shows that the funds invested in the calculations turned over approximately 5 times. Then, in 2021, the indicator increases to 5.8 - by 25.27%, and in 2022 it increases to 7.06 (by 21.72%).

The term of repayment of receivables is the period during which the receivables are converted into cash. It is acceptable during the studied period. So, for example, in 2020, debtors repay their obligations in 79 days, in 2021 - in 62 days, in 2022 - in 51 days. This indicates the good efficiency of the company's receivables management.

Table 2.9

**Analysis of operational efficiency indicators of "Libyan engine" Co Ltd
during 2020-2022**

| Indicators of financial stability | Formulas for calculation | Years | | | Absolute deviation | | Relative deviation, % | |
|--|--|-------|-------|-------|--------------------|-------------|-----------------------|-------------|
| | | 2020 | 2021 | 2022 | 2021 / 2020 | 2022 / 2021 | 2021 / 2020 | 2022 / 2021 |
| Turnover ratio of current assets | Net income / Current assets | 1,64 | 1,14 | 0,82 | -0,5 | -0,32 | -30,49 | -28,07 |
| Payables turnover ratio | Net income / Amount of credit debt | 19,09 | 6,876 | 6,43 | -12,214 | 0,446 | -63,98 | 6,49 |
| Duration of accounts payable | 365 / Turnover ratio of credit debt | 19,11 | 53,08 | 56,76 | 33,97 | 3,68 | 177,76 | 6,93 |
| Accounts receivable turnover ratio | Net revenue / Amount of receivables | 4,63 | 5,8 | 7,06 | 1,17 | 1,26 | 25,27 | 21,72 |
| Duration of receivables | 365 / Accounts receivable turnover ratio | 78,83 | 62,93 | 51,7 | -15,9 | -11,23 | -20,17 | -17,85 |
| The coefficient of profitability of the activity | Net profit / Net sales revenue | 13,16 | 8,33 | 7,89 | -4,83 | -0,44 | -36,7 | -5,28 |

Source: compiled by the author

In fig. 2.11 shows the dynamics of changes in the turnover ratios of current assets, payables and receivables.

The profitability ratio of products in 2020-2022 was: in 2020 - 1.19, in 2021 - 1.14 1.11 and in 2022 - 1.11. Which indicates high profitability of products. But, it should be noted that it decreases by 4.2% in 2021 and by 2.63% in 2022, respectively, compared to previous years.

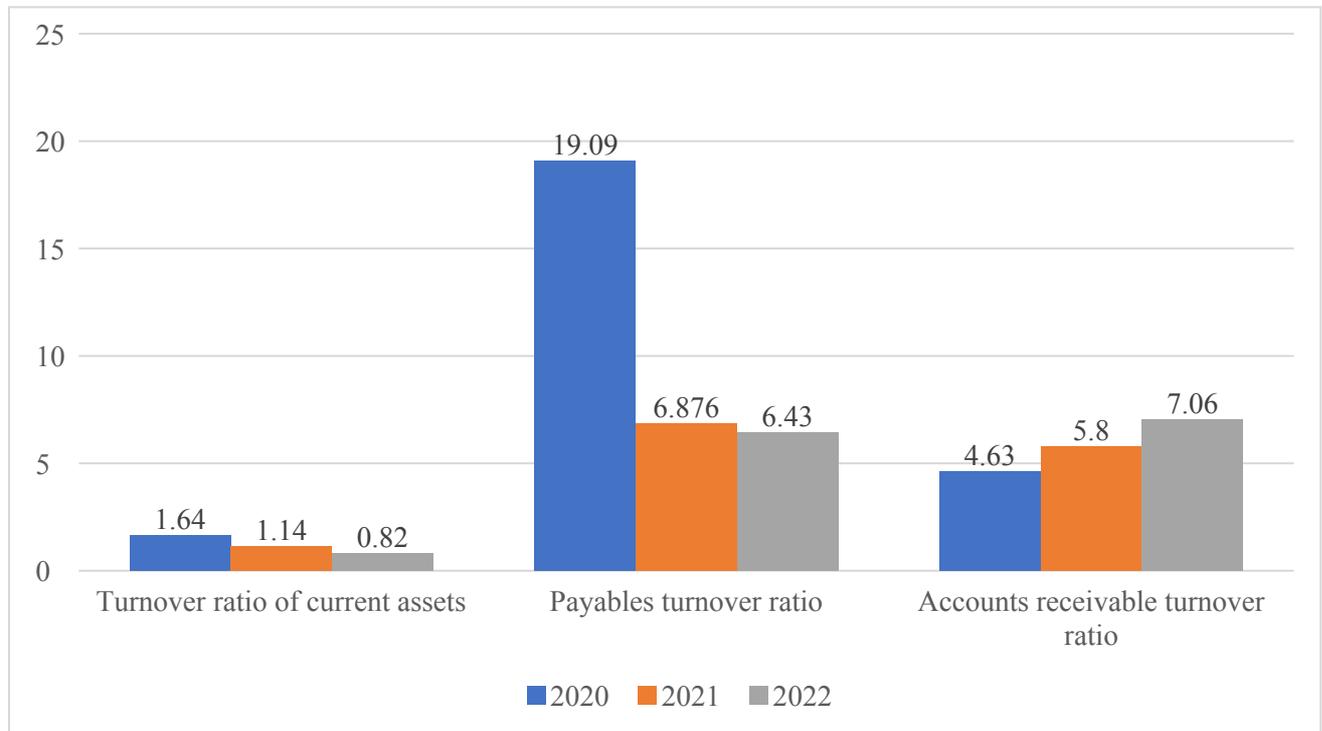


Fig. 2.11. Dynamics of turnover indicators at "Libyan engine" Co Ltd for 2020-2022.

Source: compiled by the author

Next, we will analyze the indicators of sales profitability (Table 2.10).

Table 2.10

Analysis of profitability indicators of sales of "Libyan engine" Co Ltd during 2020-2022

| Indicators | Formulas for calculation | Years | | | Absolute deviation | | Relative deviation, % | |
|---------------------------------------|--|-------|-------|-------|--------------------|-------------|-----------------------|-------------|
| | | 2020 | 2021 | 2022 | 2021 / 2020 | 2022 / 2021 | 2021 / 2020 | 2022 / 2021 |
| Product profitability ratio | Net profit / Cost of products (services). | 1,19 | 1,14 | 1,11 | -0,05 | -0,03 | -4,20 | -2,63 |
| Coefficient of profitability of sales | Net profit / Volume of products (services) | 0,233 | 0,727 | 0,667 | 0,494 | -0,06 | 2,1202 | -0,0825 |

Source: compiled by the author

The rate of return on sales has a different dynamics: in 2021, it increases by 2.12%, but decreases by 0.08% in 2022.

In fig. 2.12 shows the dynamics of changes in the coefficients of profitability of production and sales.

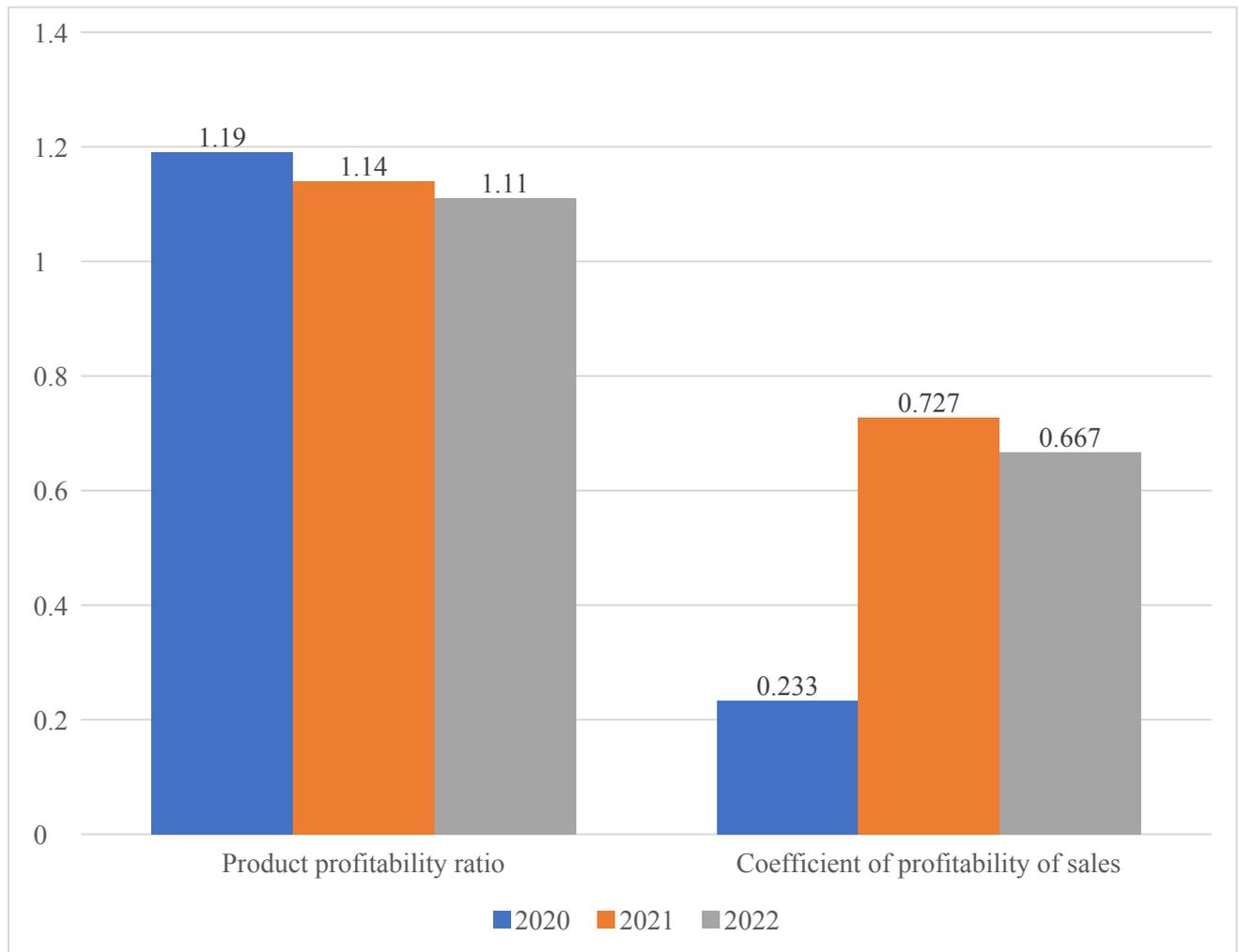


Fig. 2.12. Dynamics of changes in profitability ratios at "Libyan engine" Co Ltd during 2020-2022

Source: compiled by the author

Thus, the analysis of the organization of the effective operational activity of the enterprise demonstrates that the performance indicators of the enterprise are generally variable and unstable. This is evidenced by constant fluctuations in various areas of the company's activity and weak return on product sales.

Next, we will conduct a correlation-regression analysis of the operational activity of the enterprise "Libyan engine" Co Ltd. The application of correlation-regression analysis of the operational activity of "Libyan engine" Co Ltd is a systematic and comprehensive study that measures the level of influence of various factors on the company's performance, in order to determine the means of increasing its efficiency, which can be applied in practice.

1. Let's form a regression line:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_0, \quad (2.1)$$

where X_1 – cost of sold products;

X_2 – administrative costs;

Y – net income from sales of products, goods and services.

Table 2.11

Data for econometric modeling of "Libyan engine" Co Ltd during 2019-2022

| Indicators | 2019 | 2020 | 2021 | 2022 |
|---|-------|-------|-------|-------|
| Cost of sold products, thousands of dollars | 1 300 | 2 100 | 2 200 | 2 700 |
| Administrative expenses, thousands of dollars | 55 | 65 | 85 | 75 |
| Net income, thousands of dollars | 30 | 190 | 300 | 380 |

Source: created by the author based on the company's financial indicators

Verification of the obtained model for the phenomenon of multicollinearity is of great importance in the technology of correlation-regression analysis. The input data were reduced to a correlation matrix, which allows you to measure the strength of the relationship between the selected factors and the performance indicator using calculations in MS Excel. The calculations are presented in the table 2.12 and 2.13.

Table 2.12

Correlation matrix

| Indicators | Cost of sold products, thousands of dollars | Administrative expenses, thousands of dollars | Net income, thousands of dollars |
|---|---|---|----------------------------------|
| Cost of sold products, thousands of dollars | 1 | 0,735150767 | 0,973543208 |
| Administrative expenses, thousands of dollars | 0,735150767 | 1 | 0,851874055 |
| Net income, thousands of dollars | 0,973543208 | 0,851874055 | 1 |

Source: created by the author based on the company's financial indicators

After calculating the correlation matrix, we can conclude that the indicator of administrative costs has a strong relationship with the indicator of net income and the indicator of the cost of production. The indicator of net income has a very strong relationship with the indicator of the cost of production.

Table 2.13

The value of the correlation coefficient and the tightness of the connection according to the “Chaddock Table”

| Correlation coefficient | Tightness of connection |
|-------------------------|-----------------------------|
| 1,00 | Communication is functional |
| 0,90-0,99 | Very strong |
| 0,70-0,89 | Strong |
| 0,50-0,69 | Considerable |
| 0,30-0,49 | Moderate |
| 0,10-0,29 | Weak |
| 0,00 | There is no connection |

Source: [48]

From the table of initial data, we will calculate a multidimensional linear regression model using MS Excel, the results of the calculations are shown in Tables 2.14-2.16.

From the regression analysis results, the normalized R-squared coefficient is 0.94. Since there are 3 factors in the analysis, we evaluate by this measure rather than the R-squared coefficient of determination. This indicates a very high density of communication and a direct relationship between the selected indicators.

Table 2.14

Regression statistics

| Regression statistics | |
|------------------------|-------------|
| R-squared | 0,980125251 |
| Multiple R | 0,990012753 |
| Normalized R-squared | 0,940375753 |
| Standard error | 141505,5106 |
| Number of observations | 4 |

Source: calculated by the author

Table 2.15

Output data of variance analysis

| | df | SS | MS | F | Significance F |
|-------------|----|-------------|-------------|---------|----------------|
| Regression | 1 | 68082613391 | 34041306695 | 41,6465 | 0,1089 |
| The balance | 3 | 817386609 | 817386609 | - | - |
| In total | 2 | 68900000000 | - | - | - |

Source: calculated by the author

The results of the variance analysis indicate the reliability of the obtained model: according to Fisher's test $f^*=41.6465 > f_{tab.}=0.1089$, where $F(1-0.95; m; n-m-1)$, that is, the regression equation (its coefficients) significant (by 95%), the influence of random factors is absent.

After regression analysis, based on the results obtained in the table 2.17, let's make the linear regression equation:

$$= 0,1976 \cdot X_1 + 3,4784 \cdot X_2 - 428558,3 \quad (2.2)$$

Table 2.16

Results of regression analysis

| | Coefficients | Standard error | t- statistics | P- value |
|-------------------------|--------------|----------------|---------------|----------|
| Y- crossing | -428558,3 | 91171,43 | -4,701 | 0,1334 |
| variable X ₁ | 0,1976 | 0,042 | 4,703 | 0,1333 |
| variable X ₂ | 3,4784 | 1,886 | 1,844 | 0,3163 |

Source: calculated by the author

As mentioned above, multiple regression coefficients show the average degree of change in operational characteristics when the corresponding factor characteristic changes by one unit. Thus, from the obtained multivariate linear regression equation, it follows that an increase in the cost price by 1 USD will increase the net profit from the sale of goods by 0.1976 USD, and an increase in administrative expenses will increase by 3.4784 USD.

Data for calculating elasticity is presented in table 2.17.

Table 2.17

Data for calculating elasticity

| Years | Y | X ₁ | X ₂ |
|-------|---------|----------------|----------------|
| 2016 | 30 000 | 1 300 000 | 55 000 |
| 2017 | 190 000 | 2 100 000 | 65 000 |
| 2018 | 300 000 | 2 200 000 | 85 000 |
| 2019 | 380 000 | 2 700 000 | 75 000 |
| Sum | 900 000 | 8 300 000 | 280 000 |

Source: calculated by the author

To analyze the effect of a change in the specific weight of a factor characteristic on the resulting one, assuming that there is no influence of other factor characteristics, we determine the elasticity coefficients:

$$, \quad (2.3)$$

The elasticity is: $\epsilon_1 = 1,8223$, $\epsilon_2 = 1,0822$.

From the elasticity coefficient calculations, we can see by what percentage (relative to the mean) Y will change when only X1 and X2 change by 1%. So, under the condition that the cost of sales (X1) will increase by 1%, then the net income from the sale of products, goods and services will increase by 1.8223%, and with an increase in administrative costs (X2) by 1%, the income will increase by 1,0822%.

Thus, from the displayed calculations, we conclude that there is a direct relationship between the cost of production and the net income from the sale of products, goods and services. In other words, the higher the net income from the sale of products, goods and services, the higher the rate of product purchases due to the increase in sales volumes, which entails an increase in administrative costs. Thus, an increase in administrative costs leads to an increase in net income.

An assessment of the internal business environment, its strengths and weaknesses, as well as external opportunities and threats is usually called a SWOT analysis.

SWOT analysis consists of identifying the strengths and weaknesses of your business, as well as opportunities and threats arising from the immediate environment (external environment).

Let's summarize the results in the general table of the SWOT analysis (table 2.18) "Libyan engine" Co Ltd, using the main points from the lists of weaknesses, strengths of the company, threats and opportunities.

After the analysis, the most rational for the company is to reduce prices, improve the anti-crisis business strategy, establish cooperation with distributors in other regions and increase the demand for products.

Having analyzed the threats, it was determined that in the event of a critical situation in the auto parts market, this will be a prerequisite for the entry of a large number of competitors offering similar products to the market, or due to the violation of contracts for the supply of goods. In this regard, the developed strategy should aim to maximize the offered opportunities and protect against threats as much as possible.

Table 2.18

SWOT analysis of "Libyan engine" Co Ltd during 2020-2022

| Strengths (S) | Weak sides (W) |
|---|--|
| <ol style="list-style-type: none"> 1. Relatively small staff of the organization. 2. A young and promising team. 3. Flexible management policy. 4. Good reputation among customers. | <ol style="list-style-type: none"> 1. Low prices of competitors 2. Failures in the supply of goods to the market |
| Opportunities (O) | Threats (T) |
| <ol style="list-style-type: none"> 1. Access to new markets. 2. Establishing work with distributors in other regions. | <ol style="list-style-type: none"> 1. Lack of a production base. 2. Growing competitive pressure. 3. There is no website 4. Relatively high prices for the offered products 5. Dependence on suppliers 6. Unstable political situation in Libya and in the world |

Source: compiled by the author

Summarizing the above characteristics of the economic activity of "Libyan engine" Co Ltd, we can say that the company works at a sufficient level. In addition, the sales of "Libyan engine" Co Ltd during the studied period are growing, and this is due to the increase in the volume of products sold, the increase in the number of customers and the expansion of the assortment. The cost of sold goods is also gradually increasing. After conducting a SWOT analysis for "Libyan engine" Co Ltd, we found that the best strategy would be to use their own competitive advantages and ensure deeper market penetration by expanding their customer base.

Conclusions to part II

In this part of the research, an analytical study of the economic efficiency of "Libyan engine" Co Ltd was conducted, the legal status of the company, the form of ownership, the type of regulation of labor and socio-economic relations within the enterprise were characterized, and the organizational chart of product sales and management structures were also investigated. In addition, within the framework of

the section, the results of the production and economic activity of "Libyan engine" Co Ltd were analyzed. The analysis showed that during 2020-2021, the average annual value of fixed assets increased significantly, amounting to 500%, while the turnover in this time frame remained unchanged; along with this, net profit increased significantly in 2020-2021. In the period 2021-2022, a less rapid increase in the average annual cost of fixed assets (by 30%), an increase in turnover (by 500 thousand USD) with an unchanged level of net profit and a noticeable decrease in the profitability of assets was observed.

The analysis of the characteristics of the enterprise's economic activity allows us to conclude that during the 2020-2022 time period, sales of "Libyan engine" Co Ltd, as well as the cost of goods sold, are increasing. At the same time, the application of SWOT analysis - the identification and assessment of both the company's strengths and weaknesses - showed that the most rational opportunity for the company would be to reduce prices, improve logistics strategies, establish work with distributors in other regions and increase demand on products.

Analysis of the financial and economic status of "Libyan engine" Co Ltd, in particular, an analytical review of the company's assets and liabilities for 2020-2022, demonstrated a significant increase in the scale of business and improvement of the company's potential. As an example, during this time period, non-current assets increased by USD 100,000, while current assets increased by USD 460,000.

The total amount of the company's assets gradually increased in the period 2019-2022, therefore it is relevant to note that the growth of circulating archives occurred, to a greater extent, due to the rapid growth of receivables in 2021 by 410 thousand USD, which amounted to 77.36% , compared to 2020. In 2022, receivables accounted for 11% of all turnover archives, while in this year the largest share of turnover archives became product stocks (about 75%).

The growth of equity capital for the period 2020-2022 (by 1160 thousand USD), which went in parallel with the growth of the company's current debts (by 90 thousand USD), indicates a complex imbalance in the composition and structure of sources of financing for the business "Libyan engine" Co Ltd . At the same time, the analysis of the liability structure showed positive dynamics regarding the share of

equity: it increased almost 6 times for 2020-2022. Despite the fact that as of 2022, the structure of liabilities of "Libyan engine" Co Ltd was dominated by long-term liabilities (42%) and current liabilities (27%), the share of equity amounted to a maximum of 11% (compared to previous years). It follows from this that during the studied years "Libyan engine" Co Ltd increased the level of financial autonomy.

The analysis of capital dynamics showed certain fluctuations during the studied time period: if in 2020-2021 the capital decreased by 30% - which is explained by the process of purchasing new auto parts - then in 2021-2022 there was an increase in capital by 62% due to the sale of products, which was purchased earlier. It is also important to note that in the period 2020-2022, a reduction in long-term liabilities was recorded, while in 2022, current liabilities increased by 1.7 times compared to 2020.

Calculation of liquidity indicators allows to characterize the potential of the enterprise to settle its obligations thanks to its own assets. While the coefficients of absolute and total liquidity, as well as own working capital gradually increased during 2020-2022, the ratio of quick liquidity only decreased during these years. In addition, the ratio of payables and receivables continued to grow, which makes it possible to summarize the impossibility of "Libyan engine" Co Ltd to secure its short-term obligations from the most easily realizable part of assets - cash.

The analyzed indicators of financial stability make it possible to conclude that the company was not particularly independent from external sources of financing. So, for example, the financial independence ratio gradually decreased during 2020-2022, while the debt-to-equity ratio and the debt ratio were unstable during this time period. Moreover, the analysis of profitability indicators revealed fluctuations in the values of these indicators, which, in sum, makes it possible to declare the financial instability of the enterprise in 2020-2022 and the need to introduce changes in the company's operational activities.

In order to measure the influence of various factors affecting the company's activity, and to characterize potential ways and means of increasing its efficiency, a correlation-regression analysis was applied. The built model (which turned out to be quite reliable, according to Fisher's test $f^*=41.6465 > f_{tab.}=0.1089$, where $F(1-0.95;$

m; $n-m-1$), and free from the influence of random factors) revealed the following : the administrative expense ratio has a strong relationship (0.85) with the net income ratio and the production cost ratio (0.74), while the net income ratio has a very strong relationship (0.97) with the production cost ratio. From the constructed multivariate linear regression equation, it follows that a decrease in cost per 1 USD will increase net profit from the sale of goods by 0.1976 USD, and a decrease in administrative expenses by 1 USD will lead to an increase in net profit by 3.4784 USD.

The calculated elasticity coefficient showed that with a 1% change in the cost of sales, the net income from the sale of products, goods and services will change by 1.8223%, while with a 1% change in administrative costs, the net income will change by 1.0822%.

Thus, the obtained results, based on the analytical study of the economic efficiency of "Libyan engine" Co Ltd, showed that the financial and economic condition of the enterprise is at an average level, and the organization of operational activities is satisfactory.

PART III

**DEVELOPMENT OF PROJECT PROPOSALS OF THE ANTI-CRISIS
MANAGEMENT STRATEGY FOR “LIBYAN ENGINE” Co Ltd IN MODERN
CONDITION**

3.1. Development of a crisis management model for "Libyan engine" Co Ltd

The consequences of the economic crisis in the automotive service markets especially raise the question of the need to improve the enterprise development strategy and prepare for the next phase of growth. So, general recommendations for improving enterprise strategy cover improvement of the entire strategic set, that is, corporate, business and functional strategies of enterprises. The process of bringing an enterprise out of a crisis state should not occur chaotically and unsystematically but should be properly organized and coordinated. Understanding these reasons makes it advisable to determine the main documents developed in the process of anti-crisis management of an enterprise.

In general, crisis management can be characterized as a type of management that adheres to the principles of purposefulness, complexity, usefulness, continuity, efficiency, flexibility, efficiency, and rationality. The given characteristics are those properties that ensure the possibility of developing and implementing a relevant and effective anti-crisis program.

The exit of the enterprise from the crisis state is possible only if anti-crisis management is applied. At the same time, anti-crisis should be understood as management in which the danger of a crisis is predicted in a certain way, the analysis of its symptoms, the development of measures to reduce the negative consequences of the crisis and the use of its factors for further development. From this point of view, any enterprise management should be anti-crisis to some extent. That is, for the effective functioning of the enterprise in the general management system, the anti-

crisis management system must constantly function. Only under this condition is it possible to predict and prevent the development of a crisis at the enterprise in a timely manner, which will avoid bankruptcy.

Thus, the main task of anti-crisis management is the development and priority implementation of measures aimed at neutralizing the most dangerous factors that intensively affect the final phenomenon that leads to a crisis state.

The complexity of the problem of strategy and tactics of anti-crisis management lies in the fact that, on the one hand, strategic decisions aimed at preventing a crisis must be made and implemented at the early stages of management, when the process of moving towards a crisis has not yet acquired a cumulative character and therefore has not yet become irreversible. On the other hand, the decisions taken at the early stages are based on very weak and therefore not always reliable signals about the emergence of unfavorable trends. Unlike strategic decisions, tactical decisions are made on the basis of more complete and accurate information that reflects the current state of the system. However, there is very little or no time for a fundamental restructuring of the system in order to prevent a crisis.

The anti-crisis management mechanism is traditionally presented as a sequential set of stages:

1. Diagnosis of the current state of the enterprise, which needs anti-crisis intervention.
2. Justification of the purpose and tasks of anti-crisis management aimed at overcoming the current unstable situation or preventing its deterioration in the future.
3. Definition of the object and subject of anti-crisis interventions, as well as the time factor in solving socio-economic problems.
4. Diagnostics of resource capabilities of the object of anti-crisis management in order to form the desired level of efficiency of economic decisions.
5. Development and implementation of the company's anti-crisis program aimed at overcoming problems in terms of resource and time constraints.
6. Formation of proposals for the prevention of crisis phenomena in the future.

Under these conditions, the enterprise's anti-crisis program is the central link of anti-crisis management, which connects its goal and system of goals, ways of

achieving them with the task of exiting from an unstable situation and ensuring further dynamic development of the business entity.

This is confirmed by a number of requirements for this document, the most important of which should be:

- subordination to the strategic priorities of the enterprise;
- timeliness and flexibility of response to new external and internal factors affecting the results of the enterprise's activities;
- quantitative and qualitative measurability of the results and parameters of anti-crisis measures;
- specificity of content for performers.

The implementation of these requirements, which create the prerequisites for the organizational support of the anti-crisis program, should contribute to the further development of the enterprise, mainly on an innovative basis. This fact is due to the fact that the enterprise, being in a state of crisis regardless of its further dynamics, has exhausted its traditional possibilities of stabilizing and improving the situation, that is, there were a number of contradictions in the implementation of business processes of an economic, social, technological, organizational nature. To overcome the contradictions of ensuring further dynamic growth and functioning of the enterprise, it is advisable to use mainly innovative anti-crisis measures - a system of innovative strategies aimed at strengthening the current position of the enterprise and forming the basis for long-term sustainability.

At the same time, the practical application of the anti-crisis program involves the systematic use of such additional tools as investment and marketing policies that provide innovation activities with focus, which confirms the relevance and importance of this area of overcoming crisis phenomena. However, in the individual elements of the anti-crisis program there are no references to the use of innovation strategy tools.

Thus, the assessment of the degree of crisis of the state of the enterprise is traditionally carried out through a series of analyses with the use of important financial and economic indicators of activity, giving a clear result for the identification of the state of the enterprise under consideration.

The practical use of these methodological approaches, apart from the mentioned aspect, is not without its drawbacks:

- the assessment is primarily based on financial indicators that do not fully characterize the economic state of the enterprise - this contradicts the basic principles of economic diagnostics of using all available information, including information related to innovative ways of overcoming the crisis;

- the results obtained during the application of the methodical approach largely depend on the analyzed period and the sample of enterprises, which complicates the formation of general criteria for assessing the degree of crisis for other enterprises;

- for the purpose of further elimination of the consequences or preventive measures, the obtained results are of low usefulness, as they characterize only the current moment, and do not indicate promising directions of strategic anti-crisis management, including innovative ones capable of providing economic stability to the economic entity in the long term.

The elimination of the mentioned shortcomings must be carried out by introducing indicators capable of assessing the innovative potential of the enterprise, that is, its ability to provide further stabilization of the situation using non-traditional directions for the business entity. In addition, scientists see the activation of the innovative direction of the formation of the anti-crisis program in the need to differentiate tools by highlighting primarily the economic components of state mechanisms, as well as the capabilities of the enterprise itself.

To the last group, it is advisable to include such methods as management, marketing, organizational capabilities, financing, which fully correspond to the above-mentioned tools of the anti-crisis program. Since the management tools provide focus to the entire complex of anti-crisis management, they require priority application - for this, it is necessary to justify the further mission and system of goals of the enterprise, which needs intervention to overcome the crisis or its non-occurrence, which will ensure the focus of the anti-crisis program of the economic entity.

Detailed substantiation of the mentioned aspects will ensure the selection and formation of strategic directions for the development of market innovative

capabilities of the enterprise, which are able to ensure obtaining appropriate financial and economic results for stabilizing the position of the business entity. This, in turn, requires the formation of an appropriate financial basis under the condition of the uncertainty of the innovation environment by applying a scenario approach to strategic planning capable of formalizing the most likely directions of innovative development of the enterprise in the conditions of each competitive market for the sale of innovative products.

The main documents to be developed at the enterprise within the framework of anti-crisis management are the anti-crisis program and the plan of anti-crisis measures.

The anti-crisis program is a specially prepared internal document in which the list of main measures planned to be carried out within the enterprise, its structural subdivisions and functional services is systematically outlined in order to achieve the set goal - to bring the enterprise out of a crisis state.

The formation of an anti-crisis program is one of the most responsible and weighty issues, since it is the justified choice of anti-crisis measures that ensures the exit of the enterprise from the state of crisis with the least losses in the shortest possible time.

The anti-crisis program is developed on the basis of the monitoring of the internal and external environment of the production enterprise, which provides for:

- carrying out a comprehensive diagnosis of the results of the economic and financial activity of the production enterprise, studying the dynamics of the most important indicators of activity (volume of production, income, expenses, profit, assets and capital, as well as profitability, liquidity, turnover, financial stability of the enterprise);

- determination of the volume, structure and repayment period of external financial obligations;

- determination of the main reasons for the emergence and deepening of the enterprise development crisis;

- assessment of the scope and possible consequences of the further deepening of the crisis phenomena and the term of the bankruptcy situation;

- assessment of the company's internal capabilities for localization and overcoming crisis phenomena.

Let's consider some approaches to the formation of anti-crisis management programs.

It is proposed to form an anti-crisis management program according to the company's areas of activity, such as marketing policy, personnel management, financial management, investment policy, organizational management and operational management.

It is also indicated that the implementation of the anti-crisis program requires agreement and coordination of the actions of all the above-mentioned directions. Effective and simultaneous implementation of measures within the framework of these directions will allow the enterprise to be brought out of the crisis and ensure its financial recovery.

It is worth considering the anti-crisis activity program as a process of making a management decision. We offer a structural diagram of a hypothetical system for the formation of an anti-crisis program, which is shown in fig. 3.1.

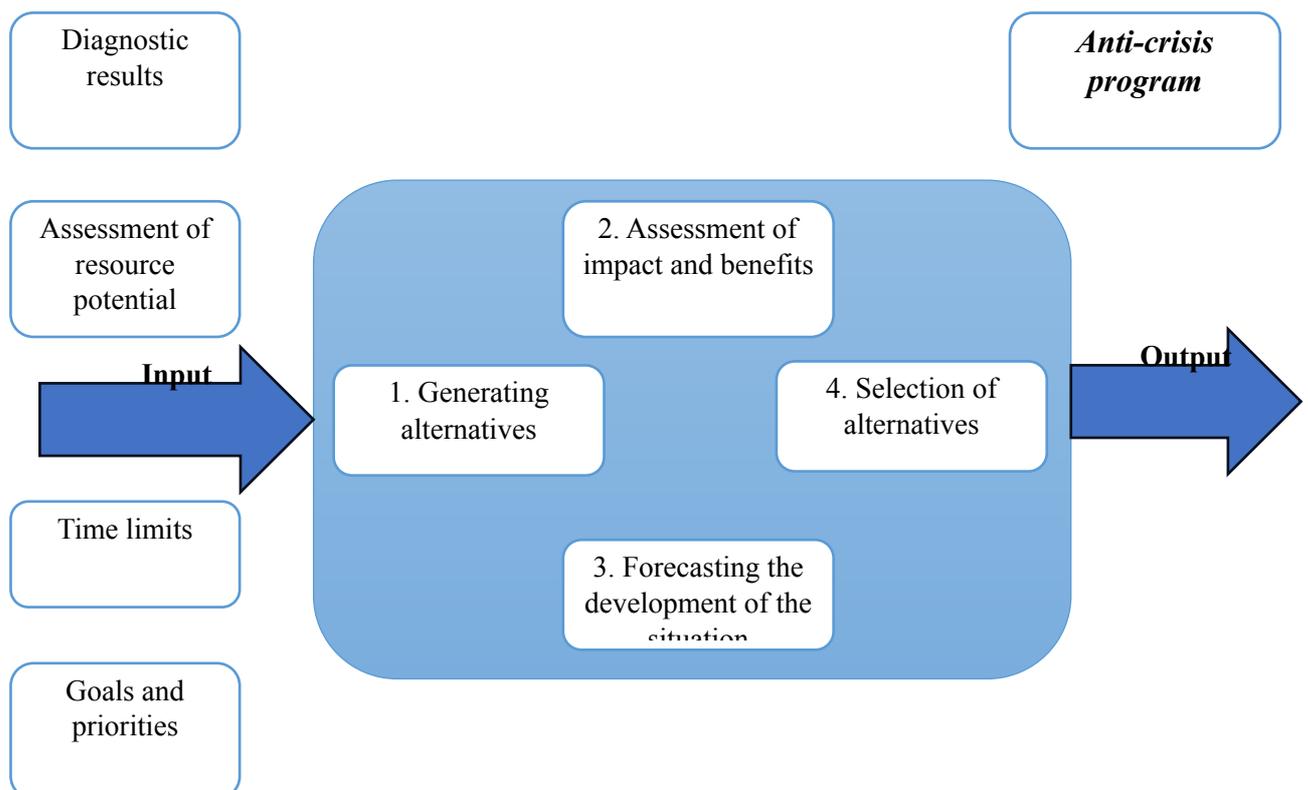


Fig. 3.1. Hypothetical decision-making scheme regarding the content of the anti-crisis program

Source: developed by author

In order to implement the concept of overcoming the crisis, organizational division of work into three stages is proposed (fig. 3.2):

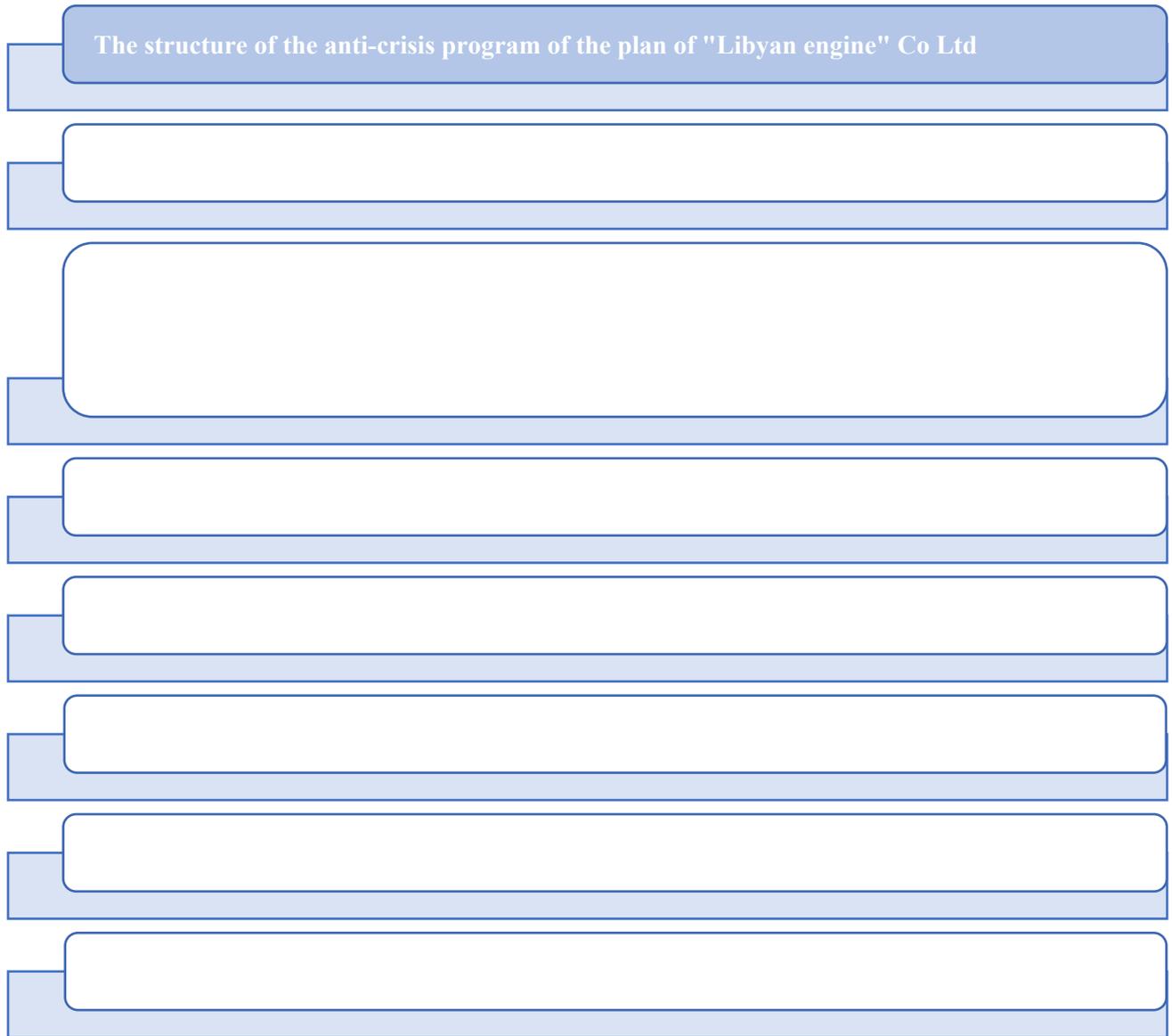


Fig. 3.2. The structure of the anti-crisis program of "Libyan engine" Co Ltd
Source: developed by author

1. Comprehensive analysis and assessment of the state of the enterprise; identification of the type of crisis phenomena and the mechanisms of their interconnection.

2. Development and implementation of priority measures aimed at overcoming the identified crisis phenomena.

3. Development of a strategy for final stabilization, overcoming the consequences of crises, transition to growth or liquidation of the enterprise.

Based on the established requirements, in fig. 3.2 shows the approximate format (structure) of the anti-crisis program.

Thus, the following interpretation of the content and composition of the company's anti-crisis program is offered, taking into account the features and place of the innovative component of its anti-crisis strategy. The anti-crisis program of the enterprise is a component of the mechanism of anti-crisis management of the economic entity in the form of a planning document that establishes goals and objectives, expedient to achieve in the planned period, as well as methods of their implementation (Table 3.1).

Table 3.1

**Content description of the anti-crisis program of the business entity
"Libyan engine" Co Ltd**

| Characteristics of the anti-crisis program | | Types of crisis management | |
|---|--|---|--|
| Preventive | Reactive | Post-crises | |
| 1. Purpose | | getting out of an unstable state and preventing further bankruptcy | |
| 2. Tasks | diagnosis of the risk of crisis unfolding and forecast of its consequences | assessment of the scale of the crisis and its phase | review of strengths and weaknesses under new economic conditions |
| 3. The main sections of the anti-crisis program | | products, resources, sales markets, organization of execution | |
| 4. Components of diagnostics of the state of the enterprise | | property status, financial stability, liquidity and solvency, profitability and business activity, innovative potential | |
| 5. Indicators of the | the specific weight | net discounted | the potential of an innovative |

| | | | |
|---|--|---|---------|
| innovative component of the selection of anti-crisis measures | of intellectual property in the total value of the company's property; | value; internal rate of return; payback period | product |
| 6. Methods of planning innovative activities | | scenario approach (optimistic, pessimistic, most expected scenarios); controlling | |

Source: developed by author

Taking into account the theoretical foundations of strategic management and the practice of manufacturing enterprises regarding the implementation of measures to exit the crisis, a model of the selection and development of the anti-crisis strategy of "Libyan engine" Co Ltd is proposed (Fig. 3.3)

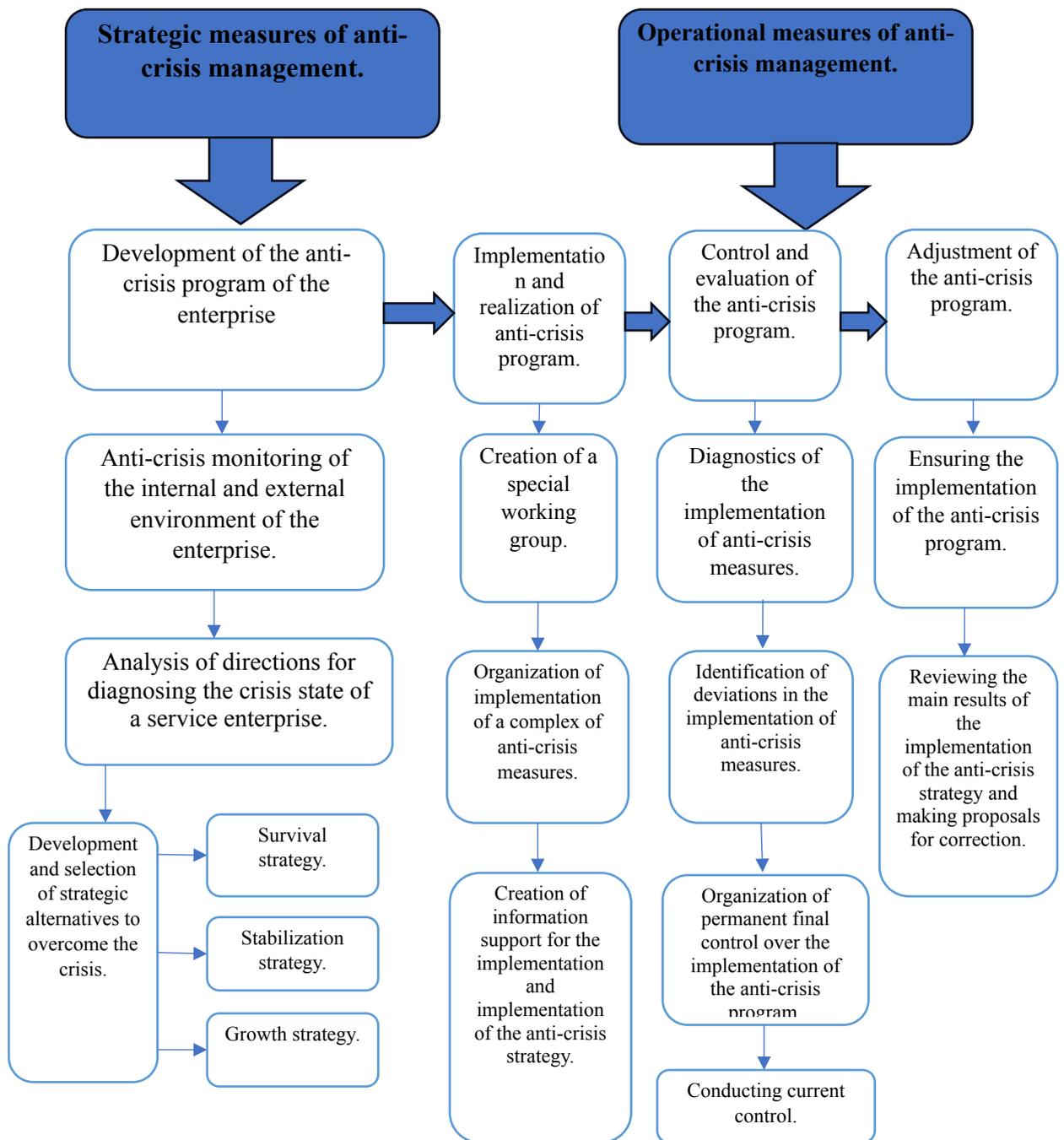


Fig. 3.3 Model of anti-crisis strategy development of "Libyan engine" Co Ltd

Source: developed by author

The proposed model reflects a complex interrelated complex of strategic and operational measures, each of which is subject to a single goal, goals and objectives related to the implementation of the enterprise's anti-crisis policy, and its elements can be both defensive and offensive in nature, the use of which will allow production denterprise in crisis conditions not only to solve the problem of survival, but also to realize the perspective of sustainable growth.

When analyzing the financial stability of an enterprise, the most common method is the ratio method, which calculates relative indicators that allow you to assess the relationship between certain components, as well as their dynamics.

But the normative values of these coefficients depend on many factors of both the internal and external environment.

Therefore, it is quite difficult to determine the optimal value of a certain coefficient for a separate enterprise. One of the disadvantages of applying the coefficient method of financial stability analysis is the difficulty of determining the final conclusions, since the overall result according to different groups of coefficients may be heterogeneous. So, if one coefficient corresponds to the norm, the opposite situation may be observed for others. This coefficient increases the subjectivity of the analyst and may lead him to conclude that a certain parameter is the main one or, conversely, not to take it into account.

The organization of the formation of the strategy of "Libyan engine" Co Ltd is a scheme of processes and interconnected stages for suppressing the crisis situation and ensuring further sustainable functioning. The block diagram of the organization of strategy formation is presented in fig. 3.4.

So, the process of forming the anti-crisis strategy of "Libyan engine" Co Ltd consists of the following stages:

1. Monitoring the state of the company and drawing up a financial forecast. Monitoring the state of the company consists of analysis of financial reporting forms using classical methods and techniques of financial analysis.

2. Formulation of the concept of company development. To formulate the company's development concept, the market is analyzed, and consumer preferences, its competitive advantages and core competencies are revealed.



Fig. 3.4. Flowchart of the organization of anti-crisis strategy development at "Libyan engine" Co Ltd

Source: developed by author

3. Formulation of strategic and tactical goals of the company's development. At the stage of concept formation, it is important to formulate the goal of favorable development for the company, one of which is to ensure the growth of annual profit.

4. Specification of the target installation. The target setting is the desired state of the system to achieve the given plan.

The strategic goal of "Libyan engine" Co Ltd is of a universal nature - it is to make a profit from the point of view of sustainable long-term development. Being general, this goal for the company is realized based on the monitoring of its current activities. It is thanks to such monitoring that those objects in the management system

that may represent a real or potential danger from the position of both profit and sustainable development are revealed. As a result, specific strategic tasks and decisions related to them are formed, aimed at the redistribution of the company's resources, its restructuring, the liquidation of some and the creation of new management structures.

In turn, the implementation of these decisions involves activities that can be classified as strategically managed. Similar strategic tasks of "Libyan engine" Co Ltd may consist of the following: use of own (attraction of external) resources or their distribution to solve certain strategic tasks; improving or expanding the quality of the company's resource base; reconstruction of individual links of the goods movement cycle; for "Libyan engine" Co Ltd, it is the search for consumers and the realization of products that meet their requirements; expanding or changing the geography of product sales markets.

Further, the development of strategic tasks is aimed at a specific period, the main directions of which are: structural restructuring of divisions to ensure their maximum compliance with corporate interests; dynamic development and growth of adapted companies in conditions of expected economic upswing.

They will differ in the tasks to be solved, the horizon of activity planning and the degree of uncertainty of a number of factors. These goals should be formulated in such a way that their achievement contributes to the effective functioning of all divisions of "Libyan engine" Co Ltd and does not contradict its strategic goals.

In the second direction, it is necessary to include in the plan the main starting conditions of the third vector in order to achieve their most complete combination.

Strategic goals include:

- obtaining the optimal amount of profit for making the necessary investments in one's activity;
- ensuring the stable operation of the company up to the given planning horizon, however, setting this goal does not reflect the features that each company in the industry has individually.

5. Selection of alternatives to the strategy of using internal resources: confirmation of the current strategy; review and clarification of individual indicators

of the current strategy, and determination of priority areas of development; carrying out a defense strategy; development of a completely new strategy.

6. Development of the consolidation program. In this phase, "Libyan engine" focuses on solving internal tasks, conducting a fundamental analysis of all its spheres of activity.

7. Implementation of measures to reduce current costs, investment resources, rationalization of assets with an indication of sources and amounts of financing, expected economic effect, terms of implementation of measures to overcome the crisis.

8. Development of a strategy for restoring the position in the industry, transformation programs and other strategic programs aimed at expanding the market share, processes and marketing channels.

9. Formation of a change management system. Transformations are carried out in the following sequence: organizational innovations; innovations that ensure the efficiency of business processes "Libyan engine" Co Ltd; technological, product and organizational and technical innovations.

10. Monitoring the implementation of strategic programs, business plans and evaluating their effectiveness.

Taking into account the presented organization of the formation of the anti-crisis management strategy, it is important for "Libyan engine" Co Ltd to first define the mission and goals, and for others it is important to monitor the state and environment. However, car service companies can apply these two levels in parallel and adjust their actions with the help of feedback. So, for example, the company's predetermined mission or goal during the environmental analysis can be tested due to the fact that the company's potential or the situation in the external environment do not allow it to be implemented.

3.2. Recommendations for the implementation of an anti-crisis procurement management strategy as an important component of the effective management of "Libyan engine" Co Ltd

Improving the management of the anti-crisis strategy should be based on the application of an integrated approach, covering all management objects. The key objects of management of the anti-crisis strategy of "Libyan engine" Co Ltd are accounting and finance, supply and sales.

1. Accounting and finance. In the company, accounting is carried out by the accounting department, forming, on the basis of its data, reporting and an annual report of key indicators in the size of the areas of activity. The data is transferred to the planning and economic department, which conducts an analysis of the state of the company and directions of its activity. After conducting the analysis, the department's economists develop plans for the company's future activities. Specialists of the department apply generally accepted and widely used methods and tools of analysis of financial and economic activity (horizontal and vertical analysis, analysis of indicators of liquidity, financial stability, profitability and business activity, etc.).

The main recommendation in terms of accounting and finance of "Libyan engine" Co Ltd is the application of an anti-crisis stabilization strategy, taking into account problematic aspects, such as absolute liquidity, negative trends in financial stability, use of own capital, profitability.

It is worth noting that the source of all financial resources in the conditions of a market economy is the company's profit.

Profit is an important indicator of the efficiency of production and economic activity of "Libyan engine" Co Ltd, as well as a source of formation of centralized and decentralized financial resources.

The profit of "Libyan engine" Co Ltd is a part of the net income and is calculated as the difference between the net income received from the sale of goods, works, services, after deducting value added tax and excise tax, and their cost price (expenses for production, sale, storage, etc.) and is considered as a reward to the

owner (owners) of the enterprise for the invested capital and the risk associated with the activity. It is a driver of economic development and a factor that indirectly ensures the maximum satisfaction of consumer needs.

Making a profit is the goal of creating any enterprise. Maximizing profit is one of the main tasks of a chicken coop, which for its solution requires optimal solutions in the field of capital investments, management of the structure and cost of capital, income and expenses, fixed and working capital.

Stable profit growth is the result of effective financial management of the business entity as a whole. The company's financial management strategy is closely related to determining the main goal of its operation. Most often, this main goal is formulated as achieving a certain level of profitability on invested capital and, accordingly, obtaining a certain amount of net profit. Achieving such a goal requires the application of a certain profit management model.

Under the profit management model, enterprises understand a set of interrelated functional and organizational blocks that are focused on solving specific tasks, as well as a set of financial and mathematical methods that form the methodological basis for the coordination of individual blocks of the model. In turn, methods of enterprise profit management are a set of specific methods, technologies, methods and methods of justifying managerial financial decisions regarding the formation of enterprise costs and revenues, as well as forms of their implementation to ensure a worthwhile level of profitability of financial and economic activities.

Usually, the main elements of the company's profit management model include the following, as shown in Fig. 3.5.

The target planning and profit forecasting of "Libyan engine" Co Ltd is based on a combination of financial and mathematical methods and methods of quantitative and qualitative assessment of the profitability and profitability of the company's operational activities.

It is worth noting that the practical implementation of such a combination is realized by budgeting the financial results (first of all, operating profit) of the company, which is based on the system of planned (forecast) budgets - a target

complex of operational planned tasks, formulated according to separate directions of financial and economic activity of the enterprise .

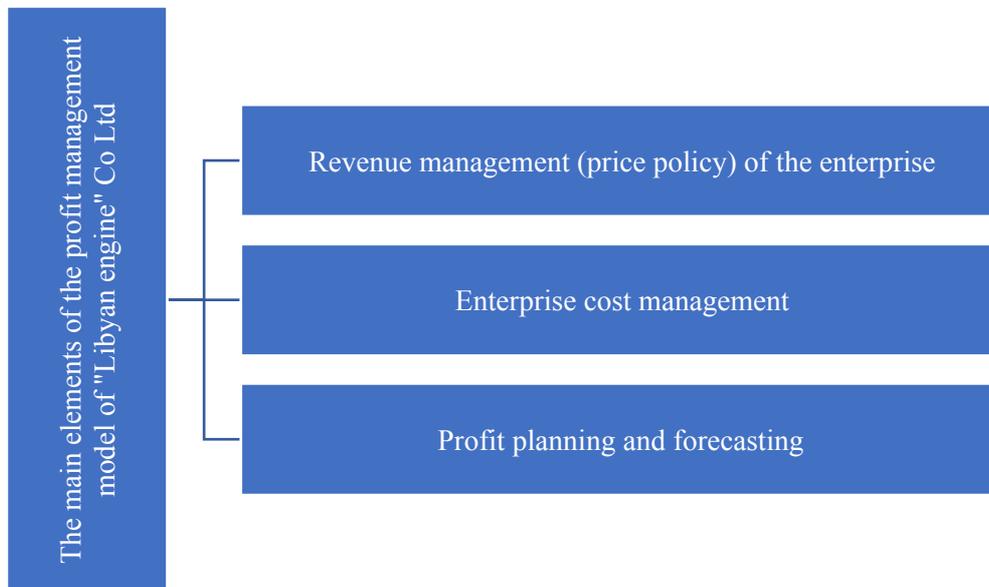


Fig. 3.5. Main elements of the profit management model of "Libyan engine" Co Ltd

Source: developed by author

At the same time, target planning and profit forecasting is a generalizing and summarizing stage in the structure of the profit management model of "Libyan engine" Co Ltd, as it involves the implementation of certain tasks (Fig. 3.6).

It should be noted that the budgeting of the financial results of the activity of "Libyan engine" Co Ltd in the structure of the company's profit management model must perform the following tasks:

- determination of the volume and composition of expenses related to separate areas of financial and economic activity of the enterprise (in terms of operational, investment and financial), or company expenses in terms of cost centers, first of all, structural subdivisions of the enterprise;

- ensuring the coverage of the mentioned expenses at the expense of a set of sources of formation of the company's financial resources, first of all, profit from operating activities.

2. Delivery. The logistics department of "Libyan engine" Co Ltd is not only engaged in delivery, analysis of activities and making plans for the future, but also

purchases of various equipment, tools, etc. We suggest considering the components for procurement depending on the supply management models.

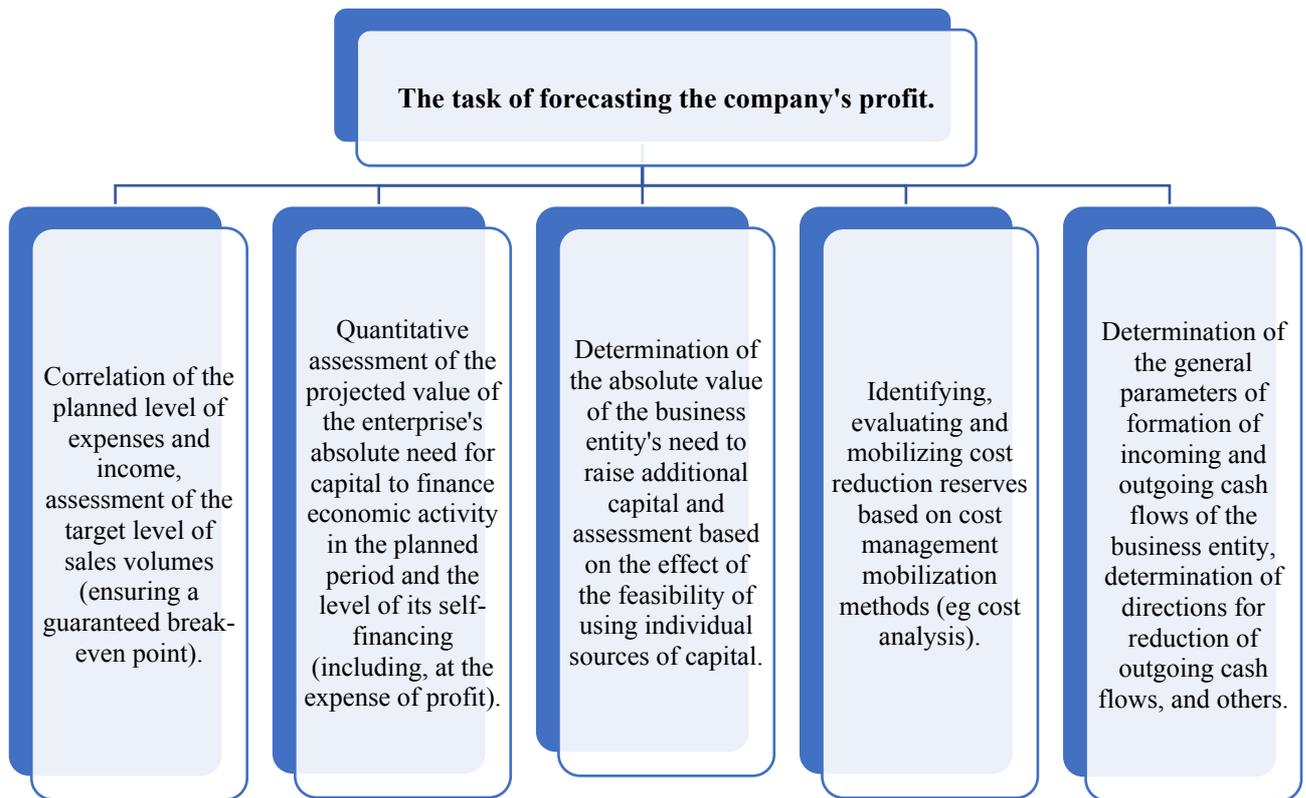


Fig. 3.6. The task of forecasting the profit of "Libyan engine" Co Ltd

Source: developed by author

Reducing costs during procurement will improve management efficiency due to:

- determining the need for the appropriate type of goods on the basis of the company's activity plans drawn up by the marketing department and analysis of market needs;
- determination of types and volumes of purchases;
- conducting an analysis of suppliers on terms, quality, reliability and price of supplies;
- concluding contracts with suppliers for the supply of goods. The recommended scheme of the process of organization of product purchases for "Libyan engine" Co Ltd is presented in Fig. 3.7.

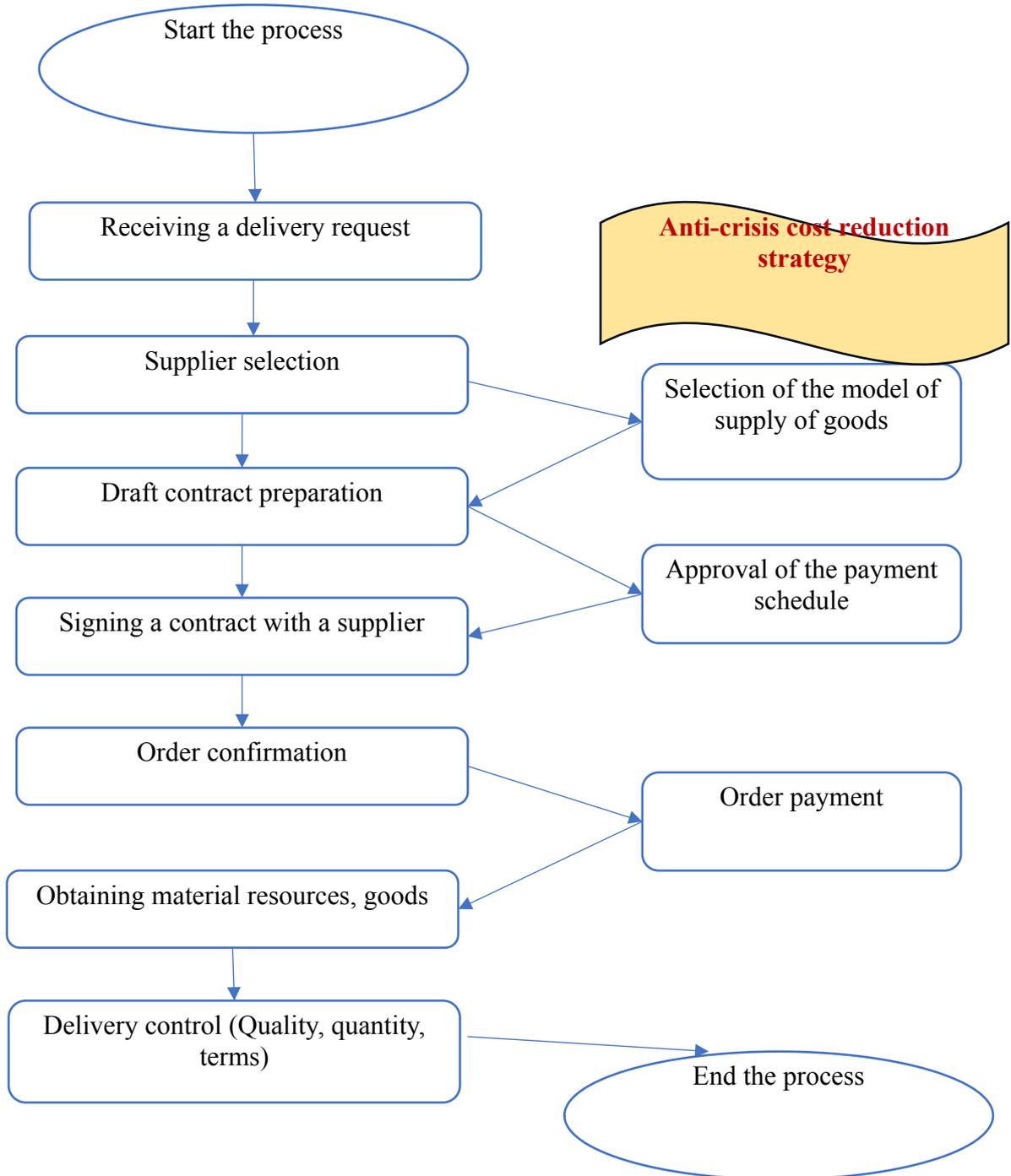


Fig. 3.7. Recommended scheme of the process of purchasing auto goods, spare parts at "Libyan engine" Co Ltd

Source: developed by author

The anti-crisis strategy of procurement management is an important component of effective enterprise management during crisis situations. It is aimed at ensuring the stability and optimization of procurement processes, reducing risks and ensuring the reliability of the supply of goods and services. The main goal of the anti-crisis strategy is to reduce costs, ensure productivity and preserve the financial stability of the enterprise during economic difficulties.

Here are some key components of an anti-crisis procurement management strategy:

1. Analysis and optimization of the procurement portfolio: Conducting an analysis of the procurement portfolio, identifying priority areas and focusing efforts on them. It is important to consider the possibility of reducing or moving some purchases, review the terms of contracts with suppliers and find ways to reduce costs.

2. Diversification of suppliers: Dependence on one or a few suppliers can create risk in crisis situations. It is important to consider opportunities to diversify suppliers by finding new suppliers or expanding cooperation with existing ones.

3. Active market monitoring: Constant monitoring of market conditions, price changes, trends and new opportunities is required. This will help to quickly respond to changes, look for alternative solutions and ensure the best procurement conditions.

4. Streamlining procurement processes: Optimizing internal procurement processes can help reduce costs and use resources more efficiently. Automation, the introduction of electronic document flow and the use of specialized software solutions can facilitate and speed up the procurement process.

5. Flexibility and negotiation strategy: In crisis conditions, contract terms and prices for goods and services may change. It is important to be flexible and willing to negotiate with suppliers, in particular regarding terms of supply, prices and payment. Active negotiation can help reduce costs and provide more favorable conditions for the enterprise.

6. Consideration of alternative solutions: In crisis situations, new approaches and alternative solutions may be needed. It is important to consider the possibilities

of replacing expensive goods or services with more affordable analogues, review the procurement strategy and choose the optimal solutions for the enterprise.

7. Ensuring transparency and control: It is important to ensure openness and transparency of procurement management during a crisis. This includes the establishment of an effective system of control, audit and reporting, which will allow to identify possible violations and risks.

8. Short-term and long-term planning: An anti-crisis procurement management strategy should include both immediate measures to overcome the current crisis and long-term planning to ensure stability and recovery after the crisis.

These components of the anti-crisis procurement management strategy can be adapted to the specific needs and conditions of the enterprise. It is important to consider that crisis situations can be of different nature and require an individual approach to management.

3.3. Effectiveness of the anti-crisis procurement management strategy project

The presence of an unstable political and economic situation in Libya, the quick adaptation of the activities of companies on the market of car service services becomes the decisive factor for their effective functioning on it. The quality of the supply of material resources to the enterprise has a huge impact on efficiency. That is why it is so important to receive complete, reliable and up-to-date information (availability, income and expenses, current status) on production stocks, and on its basis to build predictive plans for the future. All this will be facilitated by a properly selected and qualitatively built system of logistics support for the company's activities.

The results of scientific studies show that companies that have implemented a modern material flow management system can save up to 20% on transport costs, reduce warehouse stocks by various estimates from 25% to 60%, logistics costs by a quarter and shorten production cycles by up to 50 %.

Employees of the logistics department of the enterprise have to solve many important tasks in order to ensure the completeness of the provided car service services with the necessary stocks. This is control of the quantity and physical condition of stocks in the warehouse, and the selection of suppliers, and even accounting for the costs of stocks. And the fact that the number of inventory names can number in the hundreds or even thousands is added to the diversity of these tasks.

The analysis carried out by us in the analytical part of the qualification work revealed that "Libyan engine" Co Ltd is faced with the problem of choosing - to reduce the range and volume of stocks, risking its image and the volume of sales and services provided, or to increase the number of employees, but then it will bear additional expenses for their maintenance. To get out of this difficult situation, one of the methods can be proposed that allows you to manage supplies, stocks and personnel that will allow you to control it.

Generally speaking, these methods consist in dividing goods into groups and applying the same type of procedures or automated management systems to these groups.

Today, there are many different models of inventory management, but all or almost all of them are based on the operation of such inventory characteristics as order frequency and order volume. Other inventory characteristics, such as maximum inventory, threshold inventory, and others, are either fixed or calculated based on the results of decisions on the first two.

If the inventory management models are based on the volume and periodicity of the order, then there are several of their varieties. For example, there are systems where the order volume remains constant, and the frequency of these orders varies, depending on when the stock reaches a threshold level. Or the period of orders may be unchanged, and their volume will vary, then the intensity of inventory consumption comes to the fore. Also, these two models can be combined into one, and then the next order is made at regular intervals, or when the stock level of the threshold mark is reached, but in any case, the stock is replenished to the maximum level. There are other variations of these inventory management models, the use of

any particular one depends on the specifics of the enterprise, on the characteristics of the inventory and other conditions.

As can be seen from the presented classification of inventory management models, they emphasize the optimal order size. This term refers to the size of the batch of the order, which ensures the minimum costs for supplying the enterprise. The calculation of this key parameter can be carried out in several ways: tabular, graphical or mathematical. With the tabular method, a table is built where the costs of different options for the size of the order are calculated, and the option with the lowest costs is selected. The graphical method is essentially based on the data from this table, the graph is built on the axes "costs - order size", and it is clearly displayed at which point the minimum costs are.

The most famous and widely used mathematical method for calculating the optimal order size is Wilson's formula (3.1). Although it was proposed at the beginning of the 20th century and has a number of assumptions (constancy of demand, prices for products and their storage, unlimited storage capacity, etc.), it is still used today due to its relative simplicity and fairly good results of the first approximation.

Currently, there are many different modifications of this formula, due to which the assumptions that were established by Wilson are partially eliminated. These modifications allow you to take into account wholesale product discounts or possible stock shortages or other conditions.

The classic formula for determining the optimal order size is as follows:

$$q_{opt} = \sqrt{\frac{c_o \cdot N}{c_x \cdot p \cdot i}} \quad (3.1)$$

where q_{opt} is the optimal order size,

c_o - the cost of placing one order,

N - annual need for the product,

c_x - cost of storage of one unit of goods,

p - unit price of the product,

i - the share of the price attributable to the costs of inventory.

The minimum total costs for the period can be calculated as follows:

(3.2)

To determine the frequency of orders (t), you need to use the following formula:

, (months) or , (days), (3.3)

The number of orders for a certain period (K) can be calculated by dividing the need for the product for this period by the volume of supply:

(3.4)

Currently, it often happens that the same supplier can supply the company with several names of stocks at once, so it is advisable to order from him not one type of stocks, but several at once. This makes it necessary to calculate the parameters listed above for a multi-item order.

Costs associated with multi-item delivery from one supplier can be divided into fixed (C_0), which are determined by the cost of transportation, and variable (C_i), which depend on the volume of warehouse operations. Then, for the entire nomenclature in one supply, the costs for one supply will be determined:

$$C_{(n)}^* = C_0 + \sum_{i=1}^n C_i = \sum_{i=0}^n C_i \quad (3.5)$$

At the same time, the delivery period will differ in the case of multi-item delivery from the delivery of each i-th product:

$$T^* = D \sqrt{2 \sum_{i=0}^n C_i / \sum_{i=1}^n N_i c_{xi}}, \quad (3.6)$$

where D is the considered time period.

The number of multi-item deliveries is determined by the following formula:

$$K^* = \frac{1}{T^*} \quad (3.7)$$

The volume of the optimal quantity of the i-th product in a multi-nomenclature supply will be:

$$q^* = \frac{N_i * T^*}{365} \quad (3.8)$$

The minimum total costs of a multi-item order will be calculated according to the following formula:

$$(3.9)$$

Thus, using the methodology presented above, we will make calculations for "Libyan engine" Co Ltd, taking into account the following initial data for calculating models:

- the cost of delivery of one order is 300 usd;
- the cost of placing one order - 250 usd;
- the cost of stock storage is 0.25 of the purchase price.

We will present the data on the stocks of the car service company "Libyan engine" Co Ltd in the table. 3.2.

Table 3.2

Stock data of the car service company "Libyan engine" Co Ltd

| Indicators | Name of goods | | | | |
|---------------------------------|---------------|------------|--------------|--------------------------|------------------------|
| | Oil filter | Air filter | Cabin filter | Air conditioner radiator | Brake fluid, in liters |
| Average consumption, units/year | 180 | 155 | 124 | 180 | 70 |
| Purchase price, usd. | 450 | 550 | 350 | 40 | 400 |

Source: calculated by author

Using these raw data on the car service company "Libyan engine" Co Ltd, as well as formulas 3.1 - 3.9, it is possible to calculate the optimal order size and the associated costs for registration and storage of stock for single-item and multi-item ordering methods. The results of the calculations are presented in the table. 3.3 and 3.4, respectively.

Table 3.3

The results of calculations for the single-nomenclature method of ordering

| Indicators | Oil filter | Air filter | Cabin filter | Air conditioner radiator | Brake fluid, in liters | Total |
|--|------------|------------|--------------|--------------------------|------------------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| The cost of placing an order, C_o , usd. | 550 | | | | | - |
| Cost of storage C_x ($p \cdot i$) ($i=0.25$), usd. | 113 | 138 | 88 | 10 | 100 | - |
| Optimal order size q_{opt} , pcs. | 42 | 35 | 40 | 141 | 28 | 286 |
| Frequency of order t , days | 85 | 82 | 118 | 286 | 146 | - |
| Number of orders per year K , pcs. | 4 | 4 | 3 | 1 | 3 | 16 |
| Total costs of storage and ordering | 4730,14 | 4850,71 | 3465,00 | 1407,13 | 2775,00 | 17227,9 |

Source: calculated by author

In this table, the cost of storing goods was calculated as the cost of storage multiplied by the number of goods according to the types of stocks presented in the table. 3.2. So, for example, the calculation for the "Oil filter" stock is: 180 units. *113 usd. = 20340 usd.

Comparing the table 3.3 and 3.4 it can be seen that in the case of multi-item deliveries, the total number of goods in one delivery is reduced - 159 against 286, the number of orders per year has decreased - from 16 to 4-5. With independent supplies,

the cost of processing one order was equal to 550 usd. (it was calculated as the sum of the cost of delivery of one order (300 usd) and the cost of processing one order (250 usd)), and for multi-items it was 1550 usd. (the calculation was made according to formula 3.5: $= 300+(250*5)$) for one order. But, taking into account the fact that the number of orders per year has decreased, we will receive: 8800 usd per year for single orders and 6200 usd per year for multi-item orders, which is 29.5% less. The figure of the total minimum costs for independent deliveries was equal to 17227.36 usd, and for multi-items it became 13801.09 usd. That is, the benefit will be 19.89% or 3426.27 usd in real terms.

Table 3.4

The results of calculations for the multi-nomenclature method of ordering

| Indicators | Oil filter | Air filter | Cabin filter | Air conditioner radiator | Brake fluid, in liters | Total |
|---|------------|------------|--------------|--------------------------|------------------------|-------|
| Cost of transportation C_0 , usd | 300 | | | | | - |
| The cost of warehouse operations C_i , usd | 250 | 250 | 250 | 250 | 250 | |
| Cost of storage C_x ($p*i$)($i=0,25$), usd | 113 | 138 | 88 | 10 | 100 | |
| Cost of product storage $N*C_x$, usd * | 20340 | 21390 | 10912 | 1800 | 7000 | 61442 |
| Order fulfillment time T^* , days | 81,99 | | | | | |
| Order fulfillment time T^* , days | 4,45 | | | | | |
| Quantity of each item in the total batch q^* , pcs. | 40 | 35 | 28 | 40 | 16 | 159 |
| Total minimum costs , usd | 13801,09 | | | | | |

Source: calculated by author

As a result, it can be said that the inventory management process consists in establishing the moment of the order, its volume, the nomenclature and the further distribution of the batch that arrived among the divisions of the enterprise. And the set of principles by which these decisions are made is the anti-crisis strategy for ensuring the activities of "Libyan engine" Co Ltd. Thus, the optimal strategy will be that which will allow the enterprise to have sufficient stocks to provide car service services and sell goods, but at the same time will avoid their excess and reduce overall costs. That is, such a strategy should minimize the costs of creating and maintaining stocks or losses from their shortage.

Next, we will present the calculations of the possible profit with different methods of purchasing auto goods, which we will present in the table 3.5 and in fig. 3.8.

Table 3.5

Calculation of profit in various methods of purchasing auto goods

| Procurement method | Total supply costs, USD | Total costs including delivery costs, usd | Costs including mark-up on the price of goods (10%) | Profit, USD |
|-------------------------------------|-------------------------|---|---|--------------|
| single-nomenclature ordering method | 17227,9 | 262077,9 | 269335 | 7257,1 |
| multi-nomenclature ordering method | 13801,1 | 258651,09 | 269335 | 10683,9 1 |

Source: calculated by author

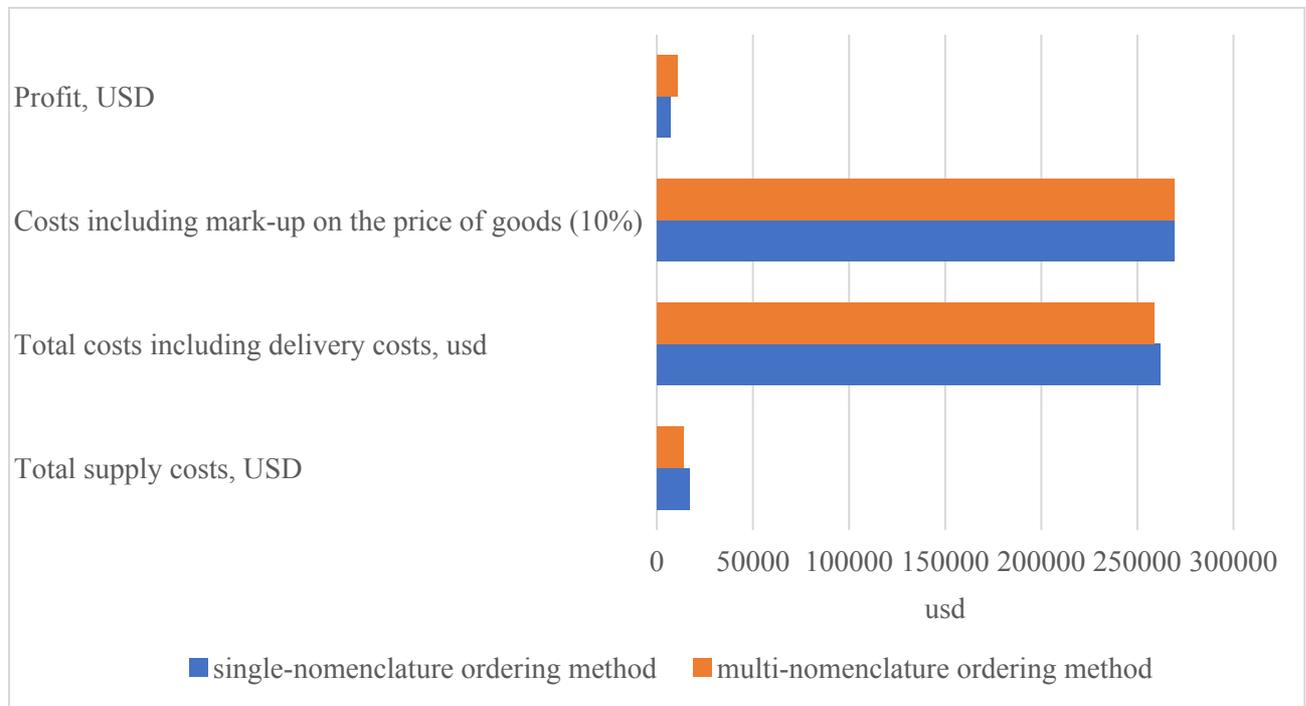


Fig. 3.8. Profit in various methods of purchasing auto goods of "Libyan engine" Co Ltd

Source: calculated by author

Thus, we can conclude that the anti-crisis procurement minimization strategy is an approach aimed at reducing the cost of purchasing goods or services within a business. This strategy can have a direct impact on a company's bottom line for several reasons:

1. Reducing costs: Minimizing purchases allows you to reduce the cost of production or provision of services. By searching for cheaper suppliers, regularly checking prices and delivery conditions, and optimizing purchasing processes, you can reduce the cost of acquiring the necessary resources. This can lead to higher margins and therefore higher profits.

2. Improving inventory management: Minimizing purchases allows you to more accurately control the level of inventory of goods or materials in the company. Excess inventory can become costly due to storage, obsolescence, or spoilage. Optimizing the purchasing process helps avoid excess inventory and reduce losses associated with inventory management. This also allows capital that has been frozen in inventory to be freed up and used for other purposes, which can impact the company's bottom line.

3. Improving process efficiency: An anti-crisis procurement minimization strategy can lead to optimization of the procurement process and increased operational efficiency. This reduces labor costs, reduces time spent on procurement, and reduces the likelihood of procurement errors or problems. A more efficient purchasing process can lead to reduced costs and increased profits.

Conclusions to part 3

The project part of the qualification work focuses on the formation of an anti-crisis strategy at the car service enterprise "Libyan engine" Co Ltd. The research and calculations made it possible to form the following conclusions on this part of the work:

The main criteria and methods for evaluating the effectiveness of anti-crisis measures are considered. Existing methods for assessing the effectiveness of rehabilitation use either quantitative or qualitative criteria. This necessitates the development of a model for assessing the effectiveness of anti-crisis measures. It should be noted that anti-crisis financial management is based on the results of the diagnostics, diagnostics is the defining function of anti-crisis financial management, therefore, in the process of choosing the methodological foundations of the mechanism of anti-crisis financial management, first of all, attention should be paid to the methods of diagnosing the financial condition of the enterprise.

The article justifies selection of the anti-crisis strategy of procurement management as an important component of efficient management of enterprise during crisis situations. It is aimed at ensuring the sustainability and optimisation of procurement processes, reducing risks and ensuring the reliability of supply of goods and services. The main goal of the anti-crisis strategy is to reduce costs, ensure productivity and maintain financial stability of the enterprise during economic difficulties.

Research justifies selection of the anti-crisis strategy of procurement management as an important component of efficient management of enterprise during

crisis situations. It is aimed at ensuring the sustainability and optimisation of procurement processes, reducing risks and ensuring the reliability of supply of goods and services. The main goal of the anti-crisis strategy is to reduce costs, ensure productivity and maintain financial stability of the enterprise during economic difficulties.

The presence of an unstable political and economic situation in Liviita, the quick adaptation of the activities of companies on the market of car service services becomes the decisive factor for their effective functioning on it. The quality of the supply of material resources to the enterprise has a huge impact on efficiency. That is why it is so important to receive complete, reliable and up-to-date information (availability, income and expenses, current status) on production stocks, and on its basis to build predictive plans for the future. All this will be facilitated by a properly selected and qualitatively built system of logistics support for the company's activities.

It was realised that the main problem for Libyan Engine Co Ltd today is the choice of the model of supplying goods with regard to the stocks kept in the company's warehouse. In the work were carried out calculations and made comparisons of single-nomenclature and large-nomenclature ordering of supply of auto goods from suppliers. The results have shown that in case of lump-sum deliveries the benefit becomes 19,89% or 3426,27 u.o. in natural value.

A procurement minimisation strategy is an approach aimed at reducing the cost of purchasing goods or services within a business. This strategy can have a direct impact on a company's profits for several reasons:

- Cost reduction: Minimising purchasing reduces the cost of production or service delivery. By sourcing cheaper suppliers, regularly checking prices and delivery terms, and by optimising purchasing processes, the cost of acquiring the necessary inputs can be reduced. This can lead to increased margins and therefore higher profits.

- Improved inventory management: Minimising purchasing allows you to more accurately control the stock levels of goods or materials in your company. Excess inventory can become costly due to storage, obsolescence or spoilage. Optimizing the

purchasing process helps to avoid surpluses and reduce losses associated with inventory management. It also allows capital that has been frozen in inventory to be freed and used for other purposes, which can affect the company's profits.

- Improving process efficiency: A strategy of minimizing purchasing can lead to streamlining the purchasing process and improving operational efficiency. This can reduce labor costs, reduce the time spent on purchasing, and reduce the likelihood of errors or problems associated with purchasing. A more efficient procurement process can lead to reduced costs and increased profits.

The calculations obtained in this way show the feasibility of implementing an anti-crisis management strategy of the enterprise, which will reduce the total costs of procurement and increase the profit from its activities.

CONCLUSION

The theoretical part of the work is dedicated to the study of the theoretical and methodological basis of management of the anti-crisis strategy of the enterprise.

It was found that the anti-crisis strategy of the enterprise is a type of management that allows identifying the signs of crisis phenomena and creating the appropriate prerequisites for their timely prevention, mitigation, and overcoming in order to ensure the viability of the business entity and prevent bankruptcy.

Anti-crisis management of the enterprise is a special system that is complex and strategic in nature and allows to completely eliminate temporary difficulties recorded in the work of the enterprise.

Research allows us to state that an effective anti-crisis strategy of an enterprise is based on three elements: correctly defined goals, a full understanding of the competitive environment and a real assessment of one's own capabilities and resources.

The strategy of anti-crisis management of the enterprise is a set of actions and a sequence of management decisions taken to evaluate, analyze and develop a valuable system of influence on the recovery of the enterprise to prevent bankruptcy or minimize the consequences of a crisis.

The anti-crisis strategy should be based on the interconnection of four functional strategies: marketing, production, personnel and financial.

Implementation of the strategy takes place through the development and implementation of programs, budgets and procedures that provide for the availability of the necessary resources, management system, organizational structure and personnel.

Depending on the specific business conditions, the enterprise can choose one of three models of management in a crisis situation: active, reactive or planned management, as well as implement the appropriate instructions for getting out of the crisis.

There are various methods of assessing the effectiveness of anti-crisis management. However, despite the conducted research, there is currently no

generally accepted method of determining the effectiveness of anti-crisis management, as well as a system of criteria for determining the effectiveness of anti-crisis management.

The result of the implementation of anti-crisis methods can be both an economic effect and a scientific and technical, resource, social, ecological, etc., due to the multifactorial nature of the crisis.

The organizational chart of product sales and management structures were also investigated. In addition, within the framework of the section, the results of the production and economic activity of "Libyan engine" Co Ltd were analyzed. The analysis showed that during 2020-2021, the average annual value of fixed assets increased significantly, amounting to 500%, while the turnover in this time frame remained unchanged; along with this, net profit increased significantly in 2020-2021. In the period 2021-2022, a less rapid increase in the average annual cost of fixed assets (by 30%), an increase in turnover (by 500 thousand USD) with an unchanged level of net profit and a noticeable decrease in the profitability of assets was observed.

The analysis of the characteristics of the enterprise's economic activity allows us to conclude that during the 2020-2022 time period, sales of "Libyan engine" Co Ltd, as well as the cost of goods sold, are increasing. At the same time, the application of SWOT analysis - the identification and assessment of both the company's strengths and weaknesses - showed that the most rational opportunity for the company would be to reduce prices, improve logistics strategies, establish work with distributors in other regions and increase demand on products.

The project part of the qualification work focuses on the formation of an anti-crisis strategy at the car service enterprise "Libyan engine" Co Ltd. The research and calculations made it possible to form the following conclusions on this part of the work:

The main criteria and methods for evaluating the effectiveness of anti-crisis measures are considered. Existing methods for assessing the effectiveness of rehabilitation use either quantitative or qualitative criteria. This necessitates the development of a model for assessing the effectiveness of anti-crisis measures. It

should be noted that anti-crisis financial management is based on the results of the diagnostics, diagnostics is the defining function of anti-crisis financial management, therefore, in the process of choosing the methodological foundations of the mechanism of anti-crisis financial management, first of all, attention should be paid to the methods of diagnosing the financial condition of the enterprise.

The article justifies selection of the anti-crisis strategy of procurement management as an important component of efficient management of enterprise during crisis situations. It is aimed at ensuring the sustainability and optimization of procurement processes, reducing risks and ensuring the reliability of supply of goods and services. The main goal of the anti-crisis strategy is to reduce costs, ensure productivity and maintain financial stability of the enterprise during economic difficulties.

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The calculations obtained in this way show the feasibility of implementing an anti-crisis management strategy of the enterprise, which will reduce the total costs of procurement and increase the profit from its activities.

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