

**Kyiv National University of Trade and Economics**

**Department of Economics and Business Finance**

# **FINAL QUALIFYING PAPER**

on the topic:

## **Development of a program to overcome the enterprise financial crisis**

based on the data of LLC Strategia BM, Kyiv

Student of the 2<sup>nd</sup> year, group 3am,  
specialty 051 Economics  
specialization Financial Management

Anastasiia  
Kampanchenko

Scientific adviser  
PhD, Associate Professor

Olena Matusova

Manager of the educational program  
PhD, Associate Professor

Olena Matusova

**Kyiv 2020**

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## INTRODUCTION

**Relevance of the study.** The threat of bankruptcy can occur in any company. First it appears financial crisis, then - bankruptcy. The financial crisis means a period of unbalanced activity of the enterprise, an unscheduled process of limited activity and limited opportunities to influence financial relations with an unpredictable result, which threatens the further development and functioning of the enterprise. That is why it is highly important for the enterprise management to be able to manage businesses if such situation appears. This research includes several methods and mechanisms that can be used by enterprises to control current financial stability of the enterprise and develop own crisis plan, restoration reserves that for possible future situations.

The following domestic and foreign scientists were engaged in problems of search of reserves of restoration of financial stability of the enterprise at threat of bankruptcy: E. Altman, G. Bazarov, V. Beaver, A. Gryaznova, N. Zaitseva, A. Gropeli, V. Kovalev, M. Sazhina, E. Utkina, Glen W. S. Dowell, Margaret B. Shackell, Nathan V. Stuart and others.

**The purpose of the paper.** The **purpose** of the research is the assessment of possible reserves for restoring the financial stability of an enterprise in the financial crisis condition.

The following **tasks** were set and solved in the final qualifying paper in order to achieve this goal:

- to investigate theoretical principles of corporate financial crisis management;
- to analyze the financial state of the enterprise;
- to assess the enterprise cash flow balance;
- to evaluate the enterprise bankruptcy situation;
- to develop the program to overcome the enterprise financial crisis.

**The object of the research** is the process of developing the program to overcome the enterprise financial crisis.

**The subject of the research** is theoretical aspects and methodological approaches of development a program to overcome the enterprise financial crisis.

The empirical basis of the study is the LLC Strategia BM. The company is a non-state entity. Organizational and legal form is Limited Liability Company. The company operates in the following industries: production and machining of cast iron, ferroalloy steel and other non-ferrous metals, casting of non-ferrous metals, production of building metal structures and their parts. LLC BM Strategia was founded on February 23, 2004 and is located in Kyiv. The founders are Kostenko Vasyl Ivanovych, Burnashov Oleksandr Romanovych, Dyakova Anna Yevhenivna, Smirnov Hennadiy Vasyliovych and Konyushok Anatoliy Vasyliovych. As of January 1, 2019, the amount of assets is 35,489.5 thousand UAH. The profit makes 6473,2 thousand UAH. The average number of employees in 2018 is 98 people. The main competitors of the company are LLC "Ferosplav", PE "Metsemprom", LLC "Pobuzhskaya Ferronickel Company", LLC "Rail Trust Ukraine".

**Methods of the research.** The methodological basis of the paper is the dialectical method of knowledge of economic phenomena and processes in their continuous development and interconnection Research methods were based on general scientific and empirical methodical techniques of economics. Research methods are also horizontal, vertical analysis, the method of coefficients and the method of generalization.

**The information base of the paper** is laws and regulatory documents, results of investigations of modern scientists, relevant official statistics, Internet resources and financial statements of the enterprise.

**Practical meaning.** The results of the conducted research and the suggested ways of overcoming the crisis situation can be taken into account and used by the enterprise in the further decision-making concerning management of the enterprise.



**Scientific novelty.** The scientific novelty of the paper is that as a result of the research improvement of the financial situation at the enterprise and program of overcoming critical financial situation in the modern conditions of the Ukrainian economy has been further developed.

**Approbation.** The results of the study were presented at the enterprise for their further application and published in the collection of master's articles "Economics and Finance of Enterprise" in an article on the topic: "Development of a program to overcome the enterprise financial crisis".

**The structure of the final qualifying paper** is determined by its purpose and tasks and includes introduction, three chapters, conclusions and proposals, references and appendices. Total amount of pages in the paper is 50 pages.

## **CHAPTER 1**

### **THEORETICAL PRINCIPLES OF CORPORATE FINANCIAL CRISIS MANAGEMENT**

Financial stability of the enterprise – one of the main goals for every business. Being stable in modern economic society – means to be independent, have enough resources for developing and growth. But, according to statistics, approximately 80% of enterprises at least one time were about to financial crisis situation. It may be caused by a lot of different factors. Main of them are unprofessional management decisions, inflation, natural disasters, crisis on the market. Financial crisis, its reasons and programs how to overcome it – important topic to talk about in all times.

The institution of bankruptcy is one of the effective tools of market transformation, which contributes to the formation of effective owners and increases the competitiveness of the economy in total. These factors stipulate state regulation of the bankruptcy process, which is happening according to the current legislation.

The Bankruptcy Code of Ukraine was adopted in 2019 [3]. According to the Codex, it is clear that only in the event that measures to restore solvency do not give a positive result, the bankruptcy procedure is used [14].

According to the Law of Ukraine, bankruptcy is the inability of a debtor recognized by a commercial court to restore its solvency through reorganization and amicable settlement procedures and to repay creditors' monetary claims established in accordance with the Law, except through liquidation proceedings.

Debtor - a legal business entity or an individual with obligations that have arisen in connection with the implementation of its business activities, unable to fulfill their monetary obligations within three months after the deadline for their implementation, which are confirmed by a court decision that has entered into force, and a decision to initiate enforcement proceedings, unless otherwise provided by law [16].

### Consequences of declaring the enterprise bankrupt:

1. From the date of the decision of the commercial court of the decision to declare the debtor bankrupt and the opening of liquidation proceedings:

- the economic activity of the bankrupt is completed by the end of the technological cycle of manufacturing products in case of possibility of its sale, except for concluding and executing agreements aimed at protecting the bankrupt's property or ensuring its preservation (maintenance), lease of property that is temporarily not used. the period before its sale in the liquidation procedure, etc .;

- the term of fulfillment of all monetary obligations of the bankrupt is considered to have come;

- the bankrupt does not have any additional obligations, including the payment of taxes and fees (mandatory payments), except for costs directly related to the liquidation procedure;

- the accrual of penalties (fines, penalties), interest and other economic sanctions on all types of debt of the bankrupt ceases;

- information about the financial situation of the bankrupt ceases to be confidential or a trade secret;

- the sale of the property of the bankrupt is allowed in the manner prescribed by this Code;

- the seizure imposed on the property of a debtor declared bankrupt and other restrictions on the disposal of the property of such a debtor shall be lifted. Imposition of new arrests or other restrictions on the disposal of the bankrupt's property is not allowed;

- the powers of the bankrupt's governing bodies to manage the bankrupt and dispose of his property are terminated, if this has not been done before, the members of the executive body (manager) of the bankrupt are dismissed due to bankruptcy, and the powers of the owner (the body authorized to manage property) are terminated bankrupt property.



2. Within 15 days from the date of appointment of the liquidator, the relevant officials of the bankrupt are obliged to transfer accounting and other documentation, seals and stamps, material and other valuables of the bankrupt to the liquidator. In the event of evasion of these duties, the relevant officials of the bankrupt shall be liable in accordance with the law. The liquidator has the right to order the production of duplicate seals and stamps in case of loss.

3. In order to identify creditors with claims on the obligations of the debtor declared bankrupt, which arose during the bankruptcy proceedings, the commercial court shall officially publish the notice of the debtor's bankruptcy and open liquidation proceedings on the official web portal of the judiciary of Ukraine.

4. The notice of the debtor's bankruptcy and the opening of liquidation proceedings must contain:

- name and other details of the debtor declared bankrupt;
- the name of the commercial court in which the bankruptcy case is pending;
- the date of adoption by the commercial court of the decision to declare the debtor bankrupt and the opening of liquidation proceedings;
- information about the liquidator. The funds received by the liquidation commission from the sale of the bankrupt's property are used to satisfy creditors' claims.

Order of settlement with different groups of creditors.

1. Costs related to the bankruptcy proceedings in the arbitral tribunal and the work of the liquidation commission must be covered, as well as the creditors' claims secured by the pledge must be satisfied.

2. Obligations to employees of the bankrupt enterprise are fulfilled (except for contributions of members of labor collective to the authorized capital of the enterprise or payments on shares of labor collective).

3. Requirements for state and local taxes and non-tax payments to the budget, requirements of state insurance and social security bodies are satisfied



4. Satisfied creditors' not secured claims.

5. The requirements of the members of the labor collective regarding the return of their contributions to the statutory fund of the enterprise are satisfied.

The requirements of each next turn are satisfied after full satisfaction of the requirements of the previous one. In case of insufficiency of property to fully satisfy all the requirements of one queue, the claims are satisfied in proportion to the amount due to each creditor. Claims not satisfied for lack of property are considered settled. The property that left after satisfaction of claims of creditors and members of labor collective is used according to the decision of its owner [14].

In financial practice, there are four types of bankruptcy:

1. Real bankruptcy. It characterizes the complete inability of the enterprise to restore in the future its financial stability and solvency due to the real loss of capital used. The catastrophic level of capital losses does not allow such an enterprise to carry out effective economic activity in the future, as a result of which it becomes legally bankrupt.

2. Technical bankruptcy. This term characterizes the state of insolvency of the enterprise, caused by a significant delay in its receivables. In this case, the amount of receivables exceeds the amount of accounts payable of the enterprise, and the amount of its assets significantly exceeds the amount of its financial liabilities. Technical bankruptcy with effective anti-crisis management of the enterprise, including its reorganization, usually does not lead to its legal bankruptcy.

3. Intentional bankruptcy. Characterized by the deliberate creation (or increase) of the head or owner of the enterprise of its insolvency; causing economic damage to the company in the personal interests or in the interests of others; deliberately incompetent financial management. Detected facts of intentional bankruptcy are prosecuted.

4. Fictitious bankruptcy. It is characterized by a deliberately wrong announcement by the enterprise of its insolvency in order to mislead creditors to

obtain from them a deferral (installment) of their credit obligations or a discount on the amount of credit debt. Such actions are also prosecuted [12].

The causes of financial crisis, bankruptcy, insolvency of the enterprise can be divided into two types: internal and external. That is illustrated in the table 1.1 below.

*Table 1.1.*

**The main causes of the financial crisis of the company**

<u>Internal factors</u>	<u>External factors</u>
<u>Production</u> : inefficient marketing; inefficient current cost structure; low level of use of fixed assets; low level of staff qualification; insufficiently diversified product range, inefficient production management.	<u>Socio-economic</u> : decline in national income; rising inflation; slowing down of payment turnover; instability of the tax system; decrease in the level of real income of the population; rising unemployment.
<u>Investment</u> : inefficient stock portfolio; high duration of construction works; significant over-investment of investment resources; failure to reach planned profit margins on projects implemented; ineffective investment management.	<u>Market</u> : reduction of domestic market capacity; strengthening of market monopoly; a significant decrease in demand; recession in the economy as a whole; financial market instability; decrease in activity of the stock market; currency market instability
<u>Financial</u> : inefficient financial strategy; inefficient asset structure (low liquidity); excessive portion of borrowed capital; a high proportion of short-term sources of borrowing; increase in accounts receivable; high cost of capital; exceeding the permissible limits of financial risks; inefficient financial management.	<u>Others</u> : political instability; negative demographics; natural disasters; worsening of the criminogenic situation.

Financial crisis of the enterprise – that is the fact that characterizes the threat of the bankruptcy situation. It is manifested in the absence of "normal" sources for the formation of stocks, the presence of overdue debt [13, 19].

The financial stability of the enterprise is a state of its financial resources, their distribution and use, which ensures the preservation of the niche of the international

market, the development of the enterprise by increasing profits and capital while maintaining solvency and creditability in terms of acceptable risk of foreign economic activity.

Classification of types of financial stability of the enterprise:

- Absolute sustainability - Net working capital fully covers inventories and costs;
- Normal sustainability - Inventories and costs are fully covered by "normal" sources of funding, but are dominated by net working capital;
- Unstable financial condition - stocks and costs exceed the amount of "normal" sources of funding;
- Critical financial condition - inventories and expenses exceed normal sources of financing, there are overdue receivables and / or accounts payable. The company is threatened with bankruptcy [1, 18].

If the determination of the financial condition of the enterprise reveals its unstable or critical position, which may lead to the threat of bankruptcy, crisis in the enterprise, then corporate crisis financial management is used.

Corporate crisis management is a system of principles and methods of development and implementation of a set of special management decisions aimed at preventing and overcoming financial crises of the enterprise, as well as minimizing their negative financial consequences [17].

The purpose of crisis management is to restore the financial balance of the enterprise and minimize the size of the reduction of its market value due to financial crises [10].

Corporate crisis management of the enterprise should be carried out in stages and provide a sequence of actions.

The first stage is the diagnosis of crisis phenomena and the threat of bankruptcy of the enterprise. At this stage of the work, using specific research methods and techniques, it is necessary to:



- carry out a comprehensive analysis of the results of financial activity and financial position of the enterprise, to study the dynamics of the most important quantitative (volume of turnover, income, expenses, profit of assets and capital) and qualitative indicators of activity (profitability, liquidity, turnover, financial stability of the enterprise);
- evaluate the rhythm and synchronicity of cash flows;
- determine the size and frequency of cash flow shortfalls;
- determine the amount, structure and time of maturity of external financial liabilities;
- identify the main causes of the emergence and of the crisis of enterprise development;
- assess the scale and possible consequences of further deepening of the crisis; the likelihood and timing of the bankruptcy situation;
- analyze and forecast the development of the market situation to determine the external environment's ability to overcome the crisis;
- evaluate the internal capabilities of the enterprise in localization and overcoming of crisis phenomena.

It is possible to carry out a comprehensive analysis of financial performance and financial sustainability using 4 blocks of indicators: financial sustainability, business activity, liquidity and profitability.

Financial stability is the state of the enterprise's property, which guarantees its solvency. The financial stability of the enterprise implies that the resources invested in entrepreneurial activities must be recouped through cash receipts, and the profits must ensure self-financing and independence of the enterprise from external sources of asset formation [11].

Profitability indicators characterizing the relative profitability of the enterprise from different positions and grouped according to the interests of participants in the economic process. Possible comparisons of profit with the factors that affect it, form a



set of profitability indicators. They differ in content and purpose of calculation.

Solvency and liquidity characterize the financial condition of the business entity, its existing and potential opportunities for effective operation. This indicates the ability of the company to fulfill successfully its monetary obligations to other market participants.

All formulas and characteristics of indicators presented in appendix A.

The second stage is to determine the purpose and objectives of crisis management. The results of the diagnosis make it possible to determine the depth of the crisis that appeared at the company, and therefore allows to determine the purpose and objectives of crisis management. Depending on the depth of the crisis, such tasks may be: bringing the company out of legal bankruptcy; prevention of bankruptcy; localization of crisis phenomena; financial stabilization; preventing a recurrence of the crisis.

The third stage is to determine the subject of crisis management activities. At this stage, it is necessary to identify the entity that takes responsibility for the development and implementation of crisis management procedures, to establish its authority to develop and implement crisis management programs.

It is problematic to develop measures to bring the company out of the crisis by the same person (or team of managers), who's activity or inaction caused its emergence. Therefore, as a rule, successful normalization of activity is possible under the condition of change of the top management or, at least, by involvement in development of the anti-crisis program of young shots of middle management. New ideas can be a strong support to senior management, ensuring the development of an effective plan to overcome the crisis.

In countries with developed market economies, freelance professionals or insolvency managers often used to perform this work. Since the effectiveness of this work largely determined by the experience and professionalism of the invited professionals, their search and involvement in cooperation is a necessary step in the

process of crisis management.

The fourth stage is the assessment of the time constraints of the crisis management process, which are determined by the time available to the company before the bankruptcy case and administrative restrictions of the existing management. Time constraints of crisis procedures determine the intensity of the spread of crisis phenomena. Understanding this prevents further deepening of the crisis, as overcoming a deeper crisis is more costly and difficult.

The fifth stage is the assessment of the resource potential of crisis management. In the modern economic literature, the enterprise is considered as the system of the resources interacting among themselves and providing achievement of certain results, the purpose of activity. The main types of resources used: technical; technological; personnel; spatial; resources of the organizational structure of the management system; information; financial.

Each of these types of resources is a set of opportunities for the operation of the enterprise to achieve the strategic goals of its activities. The existing potential of the enterprise with the most efficient use of available resources is the resource potential of the enterprise.

Assessing the resource potential in crisis management should pay attention to:

- sufficiency of resources to solve the tasks; complexity of resource potential, i.e. the availability of all types of necessary resources;
- flexibility and adaptability of resource potential, which determines the ability of the enterprise to innovate;
- prospects of resource potential or the presence of a viable core.

The sixth stage is the development of an crisis program, which is a detailed plan of measures to be taken, the sequence of use of resources and responsibility for their implementation. Its content is determined by the result of the diagnosis, the purpose of crisis management, its time and resource constraints.

The seventh stage is the implementation of the crisis program and control over

its implementation. The most important management function at the stage of direct implementation of planned activities is the organization of control over the implementation of the developed crisis program for timely measures to modernize or adjust previously developed plans due to unforeseen changes in internal and external environment, behavior of individual creditors.

The control system should provide, firstly, tracking the dynamics of external factors of the crisis, integrated indicators of the crisis, and secondly, assess the results of measures taken (by their nature, timing, consequences of implementation).

The eighth stage is the development and implementation of preventive measures to prevent future crises. The purpose of this stage of the crisis management process is to create or modernize the main elements of the anti-bankruptcy system at the enterprise level, development and implementation of preventive measures to prevent recurrence of crises in the future [6].

That is the purpose with which appropriate changes should be made to the main functional strategies and policies of the enterprise: cash flow and inventory management; economic risk; formation and use of profits; procurement of resources; receivables management; attracting credit resources, investments and more. The changes made must take into account advanced technologies, tools and instruments for managing economic processes, to ensure highly efficient and sustainable operation of the enterprise in the future.

One of the methods of "reviving" of the enterprise is reorganization.

Reorganization is a system of economic and organizational measures aimed at improving the financial condition of the debtor company.

Reorganization carried out in two cases: for bankrupt enterprises, and for enterprises that have stopped the decline of key indicators of their economic activity and need specific measures to overcome the crisis. The reorganization period can be from 12 to 18 months, depending on the financial condition of the enterprise.

Reorganization as an economic category displays a set of consistent,



interconnected measures of financial and economic, production and technical, organizational, social nature, aimed at bringing the business entity out of crisis and restoring or achieving its profitability and competitiveness.

Thus, the main criteria for assessing the effectiveness of rehabilitation: liquidity and solvency; profitability; additional cost created because of reorganization; competitive advantages.

If we take as a basis the criterion of arrival, then the efficiency of sanitation (E) have to be based on the formula:

$$E = \frac{\Delta P}{I} \quad (1.1)$$

Where  $\Delta P$  - projected amount of additional profit;

I - the amount of investment for reorganization.

The results of reorganization in some cases can be estimated based on additional profit of the enterprise, which is the difference between the amount of profit after reorganization and its size (or the amount of losses) before the reorganization.

For a more objective assessment of efficiency, the projected amount of profit brought to present value. Investments for reorganization are considered as an investment of the sanatorium in the enterprise for making a profit.

The economic situation of the enterprise allows using such ways of reorganization as:

- enterprise restructuring;
- re-profiling of production;
- closure of unprofitable productions;
- postponement, installment or repayment of a part or their gift, on which an amicable agreement is concluded;
- liquidation of receivables;
- sale of part of the debtor's property;



- the investor's obligation to repay the debtor's debt by transferring the debt to him and his responsibility for non-fulfillment of obligations;
- sale of the debtor's property as a whole property complex;
- improving the organization of labor;
- other attempts to restore the debtor's solvency.

For the company, the threat of bankruptcy is a serious obstacle to further operation and operational activities. The possibility of restoring financial stability is an opportunity to change the downward trend of its market value to improve and establish a steady increase in net profit of the enterprise.

## **CHAPTER 2**

### **INVESTIGATION OF LLC STRATEGIA BM ACTIVITY IN TERMS OF FINANCIAL CRISIS SITUATION**

#### **2.1. Analysis of enterprise financial state**

In order to understand the effectiveness of the management's decisions on the enterprise and their further proper effect, it is necessary to analyze assets structure in the dynamics of the last 3 years and the dynamics of performance indicators of LLC Strategia BM, that is illustrated in table G.1 in appendix G.

According to it we see a negative trend of assets to decrease. Thus, the total assets decreased by 17884,3 thousand UAH from 2017 to 2019 years. The decline occurs in the same time with the decline in net sales revenue, which indicates inefficient operating activities of the enterprise. The decline in total assets was due to both non-current and current assets.

Non-current assets for 3 years fell by 2377,1 thousand UAH, which indicates a decline in long-term assets at the enterprise. This dynamics is due to a significant decline in fixed assets. This is due to the high depreciation of fixed assets and the slow, compared to this, the rate of renewal of fixed assets. This indicates their moral and physical deterioration, which can significantly affect the production volumes that we follow during this period.

We see that the company has no intangible assets for the entire period. This was due to the write-off of their value in previous years, ie they are morally and physically obsolete for quite some time. Since the company is engaged in industrial activities, it must have scientific achievements to increase productivity, facilitate production and processing. Therefore, we can talk about the need to quickly purchase intangible assets, calculating in advance their economic benefits.

In 2017-2019, the volume of unfinished capital investments also decreased

significantly. Its decline is 220,7 thousand UAH. The reduction of the level of unfinished construction in this case indicates the introduction of new fixed assets in the enterprise, ie is a positive phenomenon, because the wear of the old - too much.

The volume of current assets during this period also decreased significantly. Their amount fell by 15507,2 thousand UAH. This has led to a decrease in production and operating activities in general, which reduces both net sales revenue and net profit.

The decrease in current assets is mainly accompanied by a significant decline in inventories, which for 3 years is a decline 5755,8 thousand UAH. The decrease occurred immediately in both finished products and raw materials, so the volume of sales fell.

At the same time, receivables for goods, works and services decreased. Its decline is 6120.2 thousand UAH. The reduction of receivables for goods, works, services relatively more than the reduction of inventories, is positive for the company, because it diverts much less of its own funds, which could be used more efficiently.

Accounts receivable from the budget also fell, but not at such a rapid pace, by only 3738,7 th. UAH. Its reduction is also positive for the company, but given this situation with the efficiency of operating activities, it is necessary to accelerate it.

The company's cash has increased by 322,4 thousand UAH. At once it is difficult to tell about efficiency of such considerable growth, it will be necessary to investigate efficiency of their use.

Other current assets participating in the operating activities of the enterprise decreased by 4.7 thousand UAH in accordance with the same reasons as the decrease in inventories.

In the structure of assets of the enterprise LLC Strategia BM the largest share is occupied by current assets of 79.2%, the dynamics of which fell over 3 years by 2,5 percent from 2017. Already at this stage of the analysis, we see a negative trend in the financial condition, as a decrease in the share of current assets indicates an increase in



the risk of compensation of advanced capital and reduces its return due to a slowdown in working capital. In general, the share of current assets fluctuated due to the change in the share of non-current assets. The very structure of current assets has ambiguous dynamics.

Despite the decrease in inventories (in th. UAH) during this period, their structure does not change a lot, minus 2,4% for 3 years.. This was generally due to reduction in the structure of receivables for goods, works and services. Thus, its value fell by 39% to 41.4% on the last date. This change in the structure is positive, as it indicates a decrease in receivables for goods, works and services at a faster rate than the decrease in inventories.

However, on the last date, the excess of the share of receivables over the share of stocks is not twice positive for the company. These indicators show that despite the decline in operating activities, the state of the enterprise does not change critically for the enterprise.

The share of other current receivables in the structure of assets due to its growth increased by 0.2% over the last 3 years. Along with the change in the share of other current assets in the structure of assets of the enterprise, we can talk about a rather negative trend of change in other current assets, as the increase in the share of diversion of own funds is not supported by increased sales.

The share of cash increased by 2,1% due to a significant increase in volumes and is 4.5% as of the last date. This share in the structure of assets is quite normal, but it is necessary to investigate the solvency of the enterprise to analyze more reasonably.

The share of non-current assets fluctuated significantly in 2017-2019 and increased overall by 2.5%, which is not positive as noted above, and generally stands at 20.8% as of the last date. Intangible assets, as already mentioned, are not currently used at the enterprise, ie their share is 0%. This is quite negative for the company, so in the structure of assets it is necessary to increase. The share of fixed assets is 20.5%,



and its growth is 2.8%. The growth of the share of fixed assets is quite positive, but it is too high compared to the share of stocks, which indicates their inefficiency and inefficiency of their use.

The share of incomplete capital investments, as well as their volume, tends to decline and as of the last date is only 0.3%. Its decline occurred in parallel with the growth of fixed assets, due to their transition to operation at the enterprise.

As we see, the dynamics of the volume and structure of assets in the enterprise indicates in general the inefficient formation and use.

Financial state of the enterprise largely depends on how optimally correlates borrowed capital and own equity. So now we need to explore the composition and structure of LLC Strategia BM liabilities (capital), which is illustrated in appendix H.

In the structure of liabilities of the company under the condition of negative equity, the largest share is occupied by long-term liabilities, the amount of which decreased by 14% in 2017-2018 and decreased by 51% in 2018-2019 and amounts to 17271,2 thousand UAH on 01.01.2019, which in total for 3 years has a positive downward trend. This indicates the repayment of its own long-term liabilities by the company, which indicates some improvement in its financial position, taking into account the profit, rather than losses, in recent years.

Despite the positive trend of declining long-term liabilities, in the long run, their complete non-payment of such a small amount of profit can pose a significant threat to the company with liability for non-payment, undermine confidence in the company and pose a significant threat to its financial stability.

Current liabilities and collateral decreased by 20% in 2017-2018 and by 8% in 2018-2019 years and equals 31798,8 thousand UAH on 01.01.2020 compared to 43293,3 thousand UAH at the beginning of the study period. Significant current liabilities at the level of negative equity may indicate a possible crisis of insolvency of the company and an increase in the possibility of bankruptcy.

Profit growth rates are quite slow compared to the decrease in current

liabilities, which should be subject to prompt analysis of the threat of bankruptcy by financial managers and the elimination of significant financial risks.

Current accounts payable for goods, works and services increased by 12.5% and amounted to 30596,4 thousand UAH. The growth of accounts payable for goods, works and services is not negative for the company, as it primarily provides the opportunity to use its financial resources until the date of repayment of the debt. Because receivables are less than accounts payable, which means more diversion of own funds in favor of debtors less than savings due to the use of funds not yet paid for accounts payable, which is why the growth of accounts payable for goods, works and services is positive, it is only necessary to reduce the growth rate.

Current accounts payable according to budget calculations increased by 65%. The growth rate of accounts payable needs to be reduced and repaid, as the company is not flexible enough to change external and internal factors and their financing.

The negative value of the amount of equity indicates the receipt of significant losses at the enterprise, which are not covered by the authorized capital and have exhausted the entire amount of reserve capital.

The volume of retained earnings in general tends to decrease by 23% during the study period, but the rate of its decline is not high enough and retained earnings on 01.01.2020 is 23680,5 thousand UAH, which is quite a significant figure. This characterizes the company as quite unstable with a high risk of bankruptcy.

In general, the dynamics of liabilities at the enterprise is unsatisfactory, but has some tendencies to improve that need to be improved. Significant growth of current and long-term accounts payable needs to be optimized in terms of all balance sheet items.

The next step that needs to be done in the analysis of LLC Strategia BM is calculation of solvency ratios. Such action will allow us to do first conclusions about the enterprise financial state and stability.

Result of calculations is in the table 2.1.

Table 2.1

**Solvency ratios of LLC STRATEGIA BM in 2017-2019 years**

Indicators	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
1. The current solvency ratio	0,03	0,234	0,052	0,204	-0,182
2. The quick solvency ratio	0,699	0,933	0,645	0,234	-0,288
3. Absolute solvency ratio	1,016	1,177	0,895	0,161	-0,282
4. Ratio of current accounts receivable and payable of commercial agreements	0,668	0,698	0,593	0,03	-0,105

The absolute solvency ratio has not stable indicators for 3 years. Thus, due to the growth of cash, absolute liquidity increased rapidly in 2018 to the normative value (0.234), but a significant increase in current debt again reduced the value to 0.052. In general, the indicator does not reach the normative and shows a slight increase over 3 years and indicates a low absolute solvency of the enterprise.

The quick solvency ratio is in the normative zone as of the last date - 0.645. This indicates a high ability to cover current liabilities with highly liquid assets.

Similarly, the absolute solvency ratio shows us a positive excess of current liabilities until 01.01.2020. So current assets can cover all current liabilities. However, at the last date, due to a significant increase in current liabilities, the figure is only 0.895, which is lower than the norm for the company.

According to the financial statement we see that current receivables exceed current accounts payable, which means that it is possible to repay its accounts payable quickly through receivables and this will not have a significant impact on its operating



activities.

In general, we see that the high growth of cash has increased the solvency of the enterprise to the regulatory level.

Let's calculate the next set of indicators in the table 2.2.

*Table 2.2*

**Financial stability ratios of LLC STRATEGIA BM for 2017-2019 years**

Indicator	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
The financial autonomy ratio	-0,39	-0,40	-0,38	-0,01	0,02
The ratio of financing	0,81	0,70	0,90	-0,11	0,2
The debt ratio	-2,09	-1,73	-2,34	0,36	-0,61
Debt coverage ratio	-0,48	-0,58	-0,43	-0,1	0,15

Due to significant losses of the enterprise, the balance sheet of the enterprise shows significant amounts of uncovered loss, which increases during this period. This has led to a negative value of equity, which has a negative tendency to decrease during the period. This indicates that the company exists only through borrowed capital and the studied indicators indicate a critical state of financial stability of the company.

In order to analyze the efficiency of asset use, it is necessary to examine the indicators of business activity of the enterprise in the table 2.3.

From table 2.7 we see that the assets turnover ratio, ie the number of turnovers in 2017-2019 years, assets and current assets in total is growing, which indicates a greater return on assets of the enterprise. Each unit of assets brought 1,3 UAH of income in 2019 year.



Table 2.3

**Business activity indicators of LLC Strategia BM for 2017-2019 years,  
thousands UAH**

Indicators	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
Asset Turnover	1,3	1,0	1,3	-0,35	0,32
Inventory Turnover	3,9	3,9	5,6	0,01	1,66
Accounts Receivable Turnover	3,0	2,5	3,3	-0,50	0,78
Accounts Payable Turnover	2,0	1,5	1,5	-0,48	0,01
Days Inventory Outstanding (Days Sales of Inventory)	18,0	34,4	30,4	16,41	-4,02
Cash Conversion Cycle	144,3	201,1	197,7	-56,8	-3,4

Inventory turnover is growing it demonstrates that the company started to use inventories more efficiently in the course of business.

Accounts Receivable Turnover shows the number of turnovers of receivables, ie how many times debtors have repaid their obligations to the company. This ratio is growing in dynamics – that is positive.

Accounts Payable Turnover is decreasing, it indicates that a company is taking longer to pay off its suppliers than in previous periods.

Days Inventory Outstanding – usually it takes about 30 days to sell the inventories, that is not bad but better to reduce it in dynamics.

Cash Conversion Cycle is too big one, company needs to make more strict policy to her clients. In table 2.4 will check the profitability ratios.

In 2019 ROE=-0,38, ROI=-2,19, dynamics of this ratios are negative. That means that does not produce profit from infestations and has negative equity.

Table 2.4

**Profitability indicators of LLC Strategia BM for 2017-2019 years,  
thousands UAH**

Indicators	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
ROE (Return on Equity)	0,94	-0,03	-0,38	-0,98	-0,35
ROA (Return on Assets)	-0,24	0,01	0,15	0,25	0,14
ROI (Return on Investment)	-2,45	-2,14	-2,19	0,31	-0,05
ROD (Return on Debt)	-	0,02	0,25	-	0,23
ROR (Net Profit Margin)	-0,18	0,01	0,12	0,20	0,11

Return on assets is also very low (0,15). The low level of the indicator means the low efficiency of the entire management process, because the rate of return on assets is formed under the influence of all activities of the company.

ROD is increasing in dynamics, it means that step by step our debtors started to pay. Now we can calculate the type of financial stability of the enterprise in the table 2.5 bellow.

The company is in critical financial condition (type 4 sustainability). Normal sources of funding do not cover stocks and expenses at all. It has a high level of liquidity shortage and critical solvency. “Strategia BM” is on the verge of bankruptcy the entire study period.

Working capital is negative, it means that company is using the money of creditor to finance current assets as well as a part of fixed assets. Buying fixed assets with this money can pose financial trouble anytime. When the payment of accounts payable will be due, the company may fall short of cash and bankruptcy risk will appear.

Table 2.5

**Type of financial stability of the LLC STRATEGIA BM for 2017-2019  
years, thousands UAH**

Indicator	1.01.2017	1.01.2018	1.01.2019	31.12.2019
Inventories	13 723,1	8 470,9	7 967,3	8836,5
Own working capital	-62 662,5	-73 891,4	-64 183,3	-52 895,6
“Normal” financial sources	-39 884,4	-46 706,1	-33 740,5	-22 299,2
Short-term bank loans	0,0	0,0	0,0	0,0
Payables for goods and services	27 185,3	30 442,8	30 596,4	11090,2
Loans and borrowings that are not repaid on time	0,0	0,0	0,0	0,0
Overdue accounts payables	0,0	0,0	0,0	0,0
Overdue receivables	0,0	0,0	0,0	0,0
Type of financial stability	Critical financial condition	Critical financial condition	Critical financial condition	Critical financial condition

After all analysis done we can make the conclusion about not rational financial management at the enterprise. LLC Strategia BM appeared in critical financial condition because of high amount of overdue debts, not strict enough mechanism of work with debtors, low profitability and liquidity.



## 2.2. Assessment of enterprise cash flow balance

In the face of the bankruptcy threat for the company LLC Strategia BM it is the need to clarify and form a generalized approach to conduct a superficial and at the same time detailed analysis of cash flows of the enterprise on the basis of mathematical coefficients.

An enterprise's cash flows are a system of time-distributed cash inflows and outflows generated by its business activities.

The analysis of cash flows of LLC Strategia BM for 2017-2019 years is given in the table 2.6.

Table 2.6

### Net cash flow analysis of LLC Strategia BM for 2017-2019 years, thousands

UAH

Indicators	2017 year		2018 year		2019 year	
	Inflow	Outflow	Inflow	Outflow	Inflow	Outflow
Net operational income (revenue)		13040,9		14438,1	3171,6	
Amortization	4,66		5,48		10,49	
Adjustments for changes in balance sheet items						
Inventories	1706,2		403,1		1974	
Accounts receivable for products, goods, works, services	5065,1		3413,7		2706,5	
Accounts receivable with a budget		3441,7	873		2865,7	
Other current receivables		283,4	450,8			240,6
Prepaid expenses	283,4					
Current accounts payable for products, goods, works, services	4407,2		3257,5		153,6	
Current accounts payable with a budget	99,1		38,9		25,8	
Current accounts payable for insurance payments	22,9		131,1		32,6	
Current accounts payable for payments of wages	638			124,1	93,4	
SUM	12221,9	3725,1	8568,1	124,1	7842,6	240,6
Net operating cash flow	-4359,4		-5988,6		10784,1	

The growth of net operating cash flow and the achievement of a positive mark indicate the receipt of sufficient revenues to cover expenses. That affected net income.

However, fluctuations are ambiguous and unstable, which indicates inefficient management of the financial condition of the enterprise.

Analyzing the balance of cash flows, it is advisable to assess them not only at a certain point in time but also their trend, which will find mistakes in their management.

One more important step is to calculate the cash flow balance.

We will start from the dynamic ratio of quality of net cash flow in the table 2.7.

*Table 2.7*

**Dynamic of net cash flow quality ratio at the LLC Strategia BM for 2017-2019 years, thousands UAH**

Indicator	2017 year	2018 year	2019 year	Basic absolute deviation
Net profit	-13 040,90	-14 438,10	3 171,60	16 212,50
Amortization	4,66	5,48	10,49	5,83
Net cash flow	-4 359,40	-5 988,60	10 784,10	15 143,50
Net cash flow quality ratio	2,99	2,41	0,30	-2,70

In 2017-2018, the cash flow quality ratio was more than 1, but this indicator is the result of negative net cash flow and net profit.

This indicates an unhealthy financial condition of the enterprise. But in 2019, the value of the indicator decreased to 0.3, which indicates some improvement, but it is still quite low quality of the formation of net cash flow, due to high current accounts payable and it generates risks for the company.

Next ratio that needs to be calculated is presented in table 2.8 below.

The net cash flow sufficiency ratio characterizes the ratio of net cash flow to the amount of current expenditures.

In 2017-2019, this indicator underwent significant changes. Thus, for the first year of the study period, it showed the excess of current expenditures over net cash flow.

*Table 2.8*

**Net cash flow sufficiency ratio of LLC Strategia BM for 2017-2019 years**

Indicators	2017 year	2018 year	2019 year	Basic absolute deviation
The amount of principal payments on the loan	0,00	0,00	0,00	0,00
The amount of stock growth	1 998,60	0,00	503,60	-1495,0
Dividends	0,00	0,00	0,00	0,00
Net cash flow	-13 040,90	-14 438,10	3 171,60	16 212,50
Net cash flow sufficiency ratio	-6,53	-	6,30	12,82

In 2018, due to the decrease in inventories at the enterprise (which is generally a positive phenomenon), we equate the rate of change in inventories to 0. Thus, the calculation of the sufficiency ratio of net cash flow for this year is impossible.

In 2019, the value of the ratio improved due to positive cash flow, which indicates a cash surplus. We can use these funds to cover the costs.

During the 2017-2020 years period, the balance sheet of the company does not reflect any overdue liabilities, so the calculation of this indicator is not possible.

Visualization of the Net cash flow dynamics presented on the figure 2.1 below.

The amount of net cash flow during the study period has significant fluctuations. Given the loss of the company in 2017, we can note the logic of the negative value of net cash flow, ie the predominance of income over expenses.

The result of 2018 indicates an improvement in financial management at the enterprise, but in 2019 the value of the indicator again declines. Such fluctuations indicate ineffectively developed strategic goals and their implementation. The net cash flow sufficiency ratio indicates the ability to cover principal payments, inventory



storage and dividend payments. Its insufficiency and significant fluctuations are clearly observed at the enterprise, which indicates inefficient operational and tactical financial management.

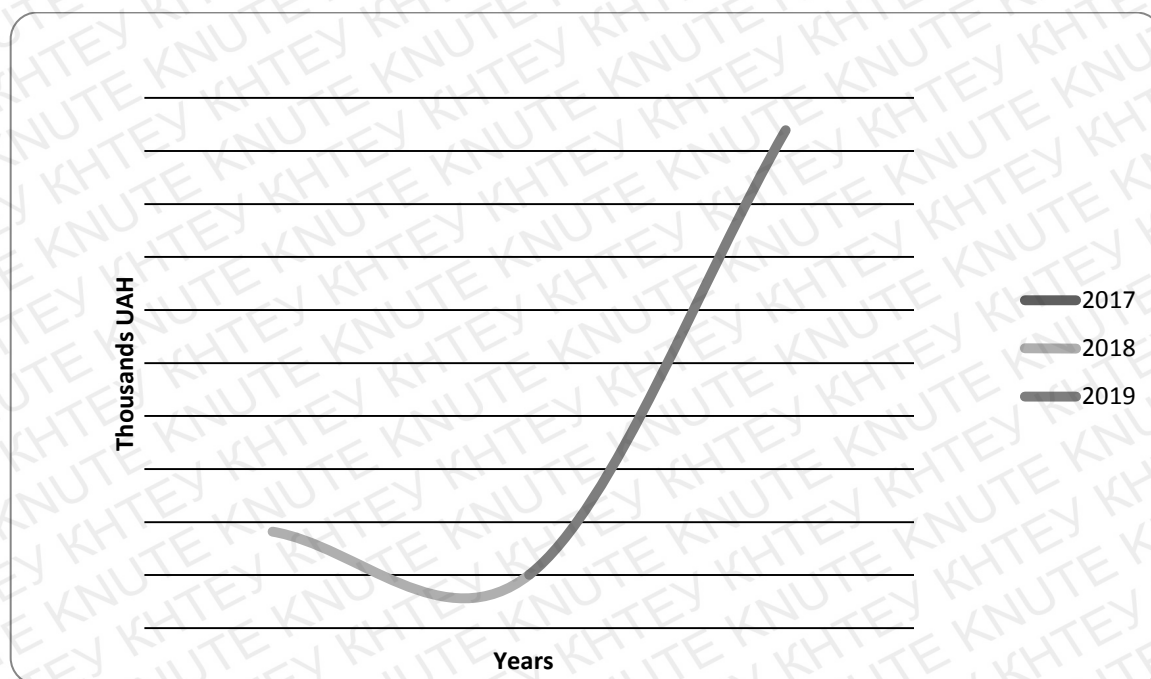


Fig 2.1 Net cash flow dynamics of LLC Strategia BM in 2017-2019 years

Again, the level of coverage of overdue liabilities fluctuates significantly and generally indicates the inability to pay all debts at the expense of net cash flow. All values of cash flow balance indicators indicate the ineffectiveness of operational, tactical and strategic decisions.

In general, the assessment of the level of cash flow balance indicates a significantly higher possibility of bankruptcy and unstable financial condition of the enterprise. At this stage of research we see unstable situation with cash flows, that affects a lot on financial stability of the enterprise, it's position on the market.

Last years the net cash flow was not stable at the enterprise, but it has not bad dynamics, from -4359.4 th. UAH in 2017 to 10784,1 in 2019, but still businesses needed some external help to overcome such crisis situation.

### 2.3. Evaluation of enterprise bankruptcy situation

After all the calculations that were done the last step left is evaluation of bankruptcy situation at the LLC Strategia BM in accordance to different models in table 2.9.

Table 2.9

#### Integral assessment of the financial condition of the enterprise LLC Strategia BM, 2017-2019 years

Indicator	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2018/2019
Beaver ratio	-0,18	0,1	0,13	0,28	0,03
Return on assets	-0,25	0,1	0,18	0,35	0,08
Financial leverage	-3,58	-3,48	-3,61	0,1	-0,13
The agile equity ratio	3,57	3,62	3,89	0,05	0,27
Current solvency ratio	1,00	1,16	0,88	0,16	-0,28
Financial state	Instable	Instable	Instable		

The company has an unsatisfactory balance sheet structure, because during the period under study, the Beaver ratio did not exceed 0.2, which reflects the undesirable reduction in the share of profits, which is directed to the development of production. This trend has led to the fact that the company is in debt.

Diagnostic of probability of bankruptcy at LLC Strategia BM based on the Altman model for emerging markets, the Tereshchenko model, and the Altman-Sabato model.

First one - Altman model for emerging markets, table 2.10. The accuracy of this

model is 90.9% in forecasting the bankruptcy of the enterprise for the year.

$$Z^{**} = 3.25 + 6.56 * X1 + 3.26 * X2 + 6.72 * X3 + 1.05 * X4 \quad (2.1),$$

Where  $x_1, x_2, x_3, x_4$  - coefficients calculated on the basis of balance sheet items.

$X_1$  - working capital / assets;

$X_2$  - retained earnings / assets;

$X_3$  - operating profit / assets;

$X_4$  - equity / liabilities.

*Table 2.10*

**Altman's model for developing markets**

Coefficient	2017 year	2018 year	2019 year
$X_1$	0,02	-0,73	0,11
$X_2$	-0,31	-0,58	-0,61
$X_3$	-0,37	-0,24	-0,29
$X_4$	-0,12	-0,28	-0,29
$Z^{**}$	-0,24	-5,13	-0,27

According to the calculations, we see that the value of  $Z^{**}$  during the study period has a vague trend, but is constantly less than 0. According to Altman's model, a negative value of  $Z^{**}$  means that the company is in the "red zone" - the zone of financial risk.

Next one is the Altman-Sabato model. This model (among foreign) shows the most accurate result of forecasting the bankruptcy of enterprises, because it takes into account the most current data.

The calculation formula is as follows:



$$P = \frac{1}{(1+e^{-y})} \quad (2.2),$$

Where

$$Y = 4.28 + 0.18 * X1 - 0.01 * X2 + 0.08 * X3 + 0.02 * X4 + 0.19 * X5 \quad (2.3),$$

$e = 2.7180$ ;

X1 - profit before taxes and interest / assets;

X2 - short-term liabilities / capital;

X3 - net profit / assets;

X4 - cash / assets;

X5 - income before taxes and interest / interest payable.

The calculations should result in a value from 0 to 1 (probability of bankruptcy). Accordingly, at a value of 0.2 - the probability of bankruptcy of the enterprise - 20%, at 0.5 - 50% and so on.

Calculations of this model for LLC Strategia BM presented in table 2.11.

*Table 2.11*

### **The Altman-Sabato model**

Coefficient	2017 year	2018 year	2019 year
X1	-0,3732	-0,2443	-0,2901
X2	-5,8714	-2,0910	-1,7273
X3	-0,3761	-0,2487	0,0131
X4	0,0036	0,0246	0,1630
X5	0,0000	0,0000	0,0000
Y	4,2415	4,2375	4,2494
e	2,7180	2,7180	2,7180
$e^{-y}$	0,0144	0,0145	0,0143
P	0,9858	0,9858	0,9859

After the calculation of the Altman-Sabato model for the LL Strategia BM complete, we see that the potential for bankruptcy is extremely high. 98.5% annually.

Among the domestic models of bankruptcy forecasting, the model of Tereshchenko O.O. is distinguished. [21]. For the metallurgical industry, the model is as follows:

$$Z = 0.213X_1 + 2.208X_2 + 0.67X_3 + 1.13X_4 + 1.48X_5 + 0.515X_6 + 0.467X_7 - 2.599 \quad (2.4),$$

Where  $X_1$  is current assets / current liabilities;

$X_2$  - equity / balance;

$X_3$  - net sales revenue / balance;

$X_4$  - the amount of net profit and depreciation / the amount of net revenue and other operating income;

$X_5$  - the amount of net profit and depreciation / balance sheet currency;

$X_6$  - pre-tax profit / net sales revenue;

$X_7$  - net sales revenue / average balances of working capital.

This model with LLC Strategia BM's data is calculated in table 2.12.

*Table 2.12*

### **Tereshchenko's model**

Coefficient	2017 year	2018 year	2019 year
$X_1$	1,03	1,00	1,16
$X_2$	-0,13	-0,39	-0,40
$X_3$	1,41	1,35	0,99
$X_4$	-0,19	-0,12	0,05
$X_5$	-0,32	-0,20	0,06
$X_6$	-0,17	0,01	0,13
$X_7$	0,00	0,00	0,00
$Z$	-2,50	-2,76	-2,37

According to the model of Tereshchenko O.O. when the value of  $Z$  is less than -0.8 - the company is diagnosed with a financial crisis. The value of  $Z$  for LLC

Strategia BM ranges from -2,37 to -2,76 during the study period, but still remains less than the norm, which indicates the difficult financial situation of the company.

Also it exists the financial and economic stability estimation after M.S. Abryutina. In own capital estimation part of this method said that if amount of own capital is less than non-financial assets, like that as in LLC Strategia BM, so the enterprise is in instable area of financial stability.

One more type of crisis diagnostics methods is expert method, the main point is in using not quantitative but qualitative indexes (for making a diagnostic conclusion) which describe an enterprise activity, its resources support, management quality, etc.

We will use A-score method (method of scored estimation), it presented in table 2.17 in appendix I.

Maximum possible A-score result – 100 points. Satisfactory estimation – 25 points. A company which has over 25 points can be considered as a future bankrupt. The more points, the more probable is bankruptcy in the nearest future.

As we see the final result of LLC Strategia BM is 54 that confirms al previous analysis and checks that the company has high probability to bankrupt in next years.

Finished studying the probability of bankruptcy of the company LLC Strategia BM on different models, we can make a conclusion about its crisis financial condition, and the need to introduce anti-crisis policy in the management of the enterprise, using all possible reserves to restore financial stability.



### **CHAPTER 3**

## **PROPOSALS OF DEVELOPMENT A PROGRAM TO OVERCOME THE FINANCIAL CRISIS STATE**

The main role in the system of crisis management of the enterprise is given to wide use of internal mechanisms of financial stabilization. This is related to the fact that the successful implementation of these mechanisms allows not only to relieve the financial stress of the threat of bankruptcy, but also significantly relieve the company from dependence on the use of borrowed capital, to accelerate the pace of its economic development.

Financial stabilization of the enterprise in a crisis situation is consistently carried out in three stages:

1. Elimination of insolvency;
2. Restoration of financial stability (financial balance);
3. Ensuring financial balance in the long run.

Each stage of financial stabilization of the enterprise corresponds to certain internal mechanisms, which in the practice of financial management are divided into operational, tactical and strategic [4, 5].

The operational mechanism of financial stabilization is a system of measures aimed, on the one hand, to reduce the size of current external and internal financial liabilities of the enterprise in the short term, and on the other hand - to increase the amount of monetary assets that provide urgent repayment of these liabilities. According to these mechanisms, the following measures must be taken:

- Exclude the following non-liquid (in the short term) part of current assets: bad receivables and illiquid inventories;
- Short-term financial liabilities also exclude their internal part, which can be carried over to the period of completion of financial stabilization: settlements on accrued dividends and dividends payable and settlements with subsidiaries.

Taking into account the changes, the net current solvency ratio is determined by the formula:

$$R_{NCS} = \frac{CA - CA_{NL}}{STD - CAP_p} \quad (3.1)$$

CA –current assets;

CA<sub>NL</sub> – non liquid current assets;

STD – short-term debts;

CAP<sub>p</sub> – current account payables, postponed.

Net current solvency ratio for the enterprise calculated in table 3.1.

*Table 3.1*

**Net current solvency ratio**

Indicators	2019 year
Current assets (sum)	27 973,20
Non liquid current assets	6 105,86
Short-term debts	31 798,80
Current account payables	6119,28
Receivables	2 797,50
Inventories (non liquid)	3 308,36
Net current solvency ratio	0,85

The amount of current assets is taken from the balance sheet of the enterprise, their illiquid part consists of unreliable debts and illiquid part of inventories.

We also take short-term current financial liabilities off the balance sheet.

The amount of current liabilities is 20% of current accounts payable for goods, works and services and is equal to 6,119.28 thousand UAH.

Taking into account the value of the net current solvency ratio of the enterprise <1 the main directions of the operational mechanism of its financial stabilization are to ensure the acceleration of partial disinvestment of non-current assets and accelerated reduction of short-term financial liabilities. The first direction, which ensures the growth of positive cash flow in the short term, will be achieved through

the following main measures:

- Accelerate the sale of unused equipment at demand prices in the relevant market;
- Leases of equipment previously planned for acquisition in the process of restoration of fixed assets.

In the second direction, which reduces the amount of negative cash flow in the short term, will be achieved through the following main measures:

- increasing the period of commodity (commercial) credit provided by suppliers;
- deferral of payments for certain forms of accounts payable of the enterprise.

Taking into account these measures, the current solvency of the enterprise will be eliminated, which will eliminate the threat of bankruptcy in the current period, but it is urgent.

The threat of bankruptcy, eliminated by operational mechanisms of financial stabilization, will quickly gain momentum. To eliminate the more important factors of the financial crisis at the enterprise it is necessary to use tactical mechanisms of financial stabilization.

Due to the operational mechanisms of financial stabilization for the next year, the following measures can be proposed (Table 3.2).

According to the provided recommendations, and using different planning methods for each article, we will separately form a plan of revenues and expenditures of LLC Strategia BM for 2020.

Revenues and expenses of the enterprise are planned for each item separately. It is necessary to begin with the net income from realization. According to the declining pace of net income over the period under review, it will be appropriate to plan this indicator in accordance with the planned growth (decline) of the market as a whole. In 2020, the planned growth of the metallurgy market is 10%, so the net sales revenue is planned to be 54329.33 thousand UAH (Table 3.3).



Table 3.2

**Proposals for reserves to restore financial stability of LLC Strategia BM**

Action	Calculations	Amount, th. UAH	Notes
Sale of not used equipment for market prices	Obtaining additional funds cause of sale of useless equipment	2 357,00	Received funds will be used to repay accounts payable for goods, works and services
Rent equipment instead of purchase	Additional amount of free money to use	1 429,80	Received funds will be used to repay accounts payable for goods, works and services
Postpone settlements for certain forms of accounts payable	Agreement about postponing of 27% of debt payables with creditors	6 088,56	Received funds will be used to cover losses in recent years
More strict debt policy. Acceleration of payment for provided goods, works, services.	Reducing the receivables repayment period	3 643,00	Received funds will be used to repay long-term liabilities
Operating cost savings policy	Reduction of other operating costs throughout the enterprise	4 258,10	Received funds will be used to cover losses in recent years

The calculation of the planned cost of goods sold is based on the level of cost to net sales revenue. According to calculations, the cost level is 87% of net income, is too high. To improve the financial condition of the enterprise, it is recommended to reduce the cost to at least to 80%. The change in the level is due to the introduction of

cost-saving policies throughout the enterprise. While maintaining the dynamics to reduce this indicator in the long run, the company will be able to achieve optimal production costs.

*Table 3.3*

**Income and expenditure plan of LLC Strategia BM for 2020 year**

Item	Amount, th. UAH
Net income (revenue) from sales of products (goods and services)	54 329,33
Cost of sales of products (goods and services)	43 463,46
Gross	10 865,87
Other operating income	15 436,30
Administrative expenses	0,00
Selling expenses	0,00
Other operating expenses	27 277,19
Financial results of operations: Profit or loss	-975,02
Other income	17 288,81
Financial expenses	273,60
Financial results before tax:	16 040,19
Expenses (income) income tax	2 887,23
Net financial result: Profit or loss	13 152,95

With such changes in the articles of the net income and cost of sales, the company LLC Strategia BM in the planned 2020 will receive twice as much gross profit than in 2019 - 10865.87 thousand UAH.

Other operating income has an ambiguous trend in recent years, it was decided to leave the reporting value in the planning year.

Since the company did not have any administrative costs during the analyzed period, we do not plan them.

The planned indicator of other operating expenses is calculated based on the

dynamics of the indicator for previous years and the recommendations provided above.

Thus, if these recommendations are followed, LLC Strategia BM will significantly reduce its operating losses (from -14438.1 thousand UAH in 2019 to 975.02 thousand UAH in 2020). Provided that such dynamics is maintained in the long run, the company will begin to make a profit in the coming years.

Over the years under study, other revenues had a steady growth trend, taking into account new investments that began to generate income. The growth rate of other incomes by 10% is planned for the next years.

In 2017-2019, there was a significant increase in other expenses. However, these costs are due to financial investments, which in the planned year brought additional financial income under the item "other income". According to the planned calculations, other costs in 2020 will be low due to the lack of significant investments.

According to these revenues and expenditures, the planned pre-tax profit will be 16040.19 thousand UAH, which indicates the effectiveness of the selected anti-crisis measures and recommendations.

After deducting income tax, the net profit of LLC Strategia BM will be 13152.95 thousand UAH.

Based on the income and expenditure plan and the recommendations provided, we create a balance plan in table 3.4.

The volume of fixed assets was calculated on its main items. The company has not used intangible assets throughout its existence because it does not need them. Accordingly, we do not plan this article. As the project, which requires unfinished capital investments, is coming to an end, no new amounts of funding are expected. We remain at the 2019 level.

The amount of fixed assets was planned taking into account the capitalization of its initial cost and recommendations for the sale of unused equipment, which led to the renewal of fixed assets, which began to bring more revenue from sales.



Table 3.4

**Balance plan (assets) for LLC Strategia BM, 2020 year, thousands UAH**

Assets	Amount
<b>I. Fixed assets</b>	
Intangible assets	0
Incomplete capital investments	93,8
Fixed assets	9736,54
<b>Total for Section I</b>	<b>9830,34</b>
<b>II. Current assets</b>	
Inventories	11 753,37
Accounts receivable for products, goods, works, services	14 327,87
Accounts receivable with budget	5 426,65
Other current receivables	536,58
Money and cash equivalents	7 497,50
Other current assets	225,56
<b>Total for Section II</b>	<b>39 767,52</b>
<b>Balance</b>	<b>49 597,85</b>

All items of current assets are planned on the basis of the period of their turnover and taking into account the recommendations for improving the liquidity and solvency of the enterprise. Their growth rate, compared with the growth rate of non-current assets indicates an effective structure of enterprise resources in table 3.5.

Retained earnings (uncovered loss) were calculated based on the capitalization of the entire planned state of emergency and the use of released funds by deferring accounts payable and reducing operating costs. Despite the company's desire, there are currently no reserves to fully cover the uncovered loss. However, while maintaining this trend and following the recommendations, the company will be able to get a positive value next year under the item "retained earnings", which will be used for crisis management of the enterprise.

The reduction of long-term liabilities is planned at the expense of released funds from repaid receivables.

Section 3 of the liabilities of the balance sheet was planned on the basis of the period of turnover of items and taking into account the released funds due to the implemented recommendations.

*Table 3.5*

**Balance plan (liability) for LLC Strategia BM, 2020 year, thousands UAH**

Liability	Amount
<b>I. Equity</b>	
The registered capital	10100
Retained earnings (uncovered loss)	-6 654,09
Total for Section I	3 445,91
<b>II. Long-term liabilities and ensuring</b>	
Other long-term liabilities	20 589,00
Total for Section II	20 589,00
<b>III. Current liabilities and ensuring</b>	
Current accounts payable for goods and services	23 863,79
Current accounts payable:	
for payments to budget	151,50
for insurance payments	170,30
for payments of wages	371,00
others	1 006,35
Total for Section III	25 562,94
Balance	49 597,85

The balance plan of LLC Strategia BM for 2020 is formed on the basis of the provided recommendations, the plan of income and expenses and various planning methods. The resulting plan has a significantly improved asset structure, which has increased the company's liquidity and productivity of non-current assets. The provided recommendations made positive the value of equity, which will be able to bring the company to a stable financial plan. This will bring the company out of the threat of bankruptcy.

In order for the company to reach a point of financial equilibrium in the future,

we will use a tactical stabilization mechanism.

The model of financial equilibrium of the enterprise has the following form:

$$\begin{aligned}
 & \text{Net profit}_0 + \text{Amortization} + \Delta \text{Staceholders Capital} + \Delta \text{Financial resources} \\
 & = \\
 & \quad = \Delta \text{Investitions from own s.} + \text{Dividend fund} + \\
 & \quad + \text{hired workers participation in profit gain} + \\
 & \quad + \text{Social programs} + \Delta \text{Reserve fund}
 \end{aligned} \tag{3.2}$$

Most of the formula consists of all sources of formation of own financial resources of the enterprise, and the right - all directions of use of these resources. Therefore, in a simplified form, the model of financial equilibrium of the enterprise, to achieve which the company seeks in a crisis situation, can be represented as equality of possible amount of generated funds of the enterprise and the amount of generated funds that are needed.

For LLC Strategia BM, the model looks like this:

$$87054.44 > 73901.49$$

As we can see, in real practice, in the conditions of crisis development, the possibility of increasing the volume of generating one's own financial resources is rather limited. Therefore, the main direction of ensuring the achievement of the point of financial equilibrium of the enterprise in a crisis is to reduce the consumption of its own financial resources (the right side of inequality). This reduction is associated with a decrease in both operating and investment activities of the enterprise and therefore is characterized by the term "compression of the enterprise".

"Compression of the enterprise" in the process of ensuring the above inequality should be accompanied by measures to ensure the growth of its own financial resources. The more the company is able to ensure a positive gap in the corresponding cash flows of this inequality, the faster it will reach a point of financial equilibrium in the process of overcoming the crisis.

The increase in the generation of own financial resources is achieved through



the following main measures:

- optimization of the pricing policy of the enterprise, which provides an additional amount of operating income;
- reduction of the amount of fixed costs (including reduction of management staff, maintenance costs, etc.);
- reduction of variable costs (including reduction of production staff of the main and auxiliary units; increase of labor productivity and the like);
- implementation of an effective tax policy that ensures the minimization of tax payments in relation to the amount of income and profit of the enterprise (aimed at increasing the amount of net profit of the enterprise);
- carrying out accelerated depreciation of the active part of fixed assets in order to increase the amount of depreciation flow;
- timely sale of property that has high depreciation or is not used.

Reduction of the required amount of consumption of own financial resources is achieved through the following main measures:

- reduction of investment activity of the enterprise in all its main forms;
- ensuring the renewal of operating non-current assets mainly through their lease (leasing);
- reduction of the volume of the program of participation of hired workers in the profit (during the crisis development the amounts of bonus payments at the expense of this source should be significantly reduced);
- waiver of external social and other programs of the enterprise, financed by its profits;
- reduction of contributions to the reserve and other insurance funds made at the expense of profits, and others.

These measures should allow the company to achieve optimization of capital structure and achieve its financial stability. This will lead to the emergence of financial equilibrium, which will support the strategic mechanism of financial

stabilization.

The strategic mechanism of financial stabilization is a system of measures aimed at maintaining the achieved financial balance of the enterprise in the long run. This mechanism is based on the use of a model of sustainable economic growth of the enterprise, which is provided by the main parameters of its financial strategy.

The model of sustainable economic growth has different mathematical options depending on the basic indicators of the financial strategy of the enterprise. However, given that all these basic indicators are quantitatively and functionally interconnected, the results of the calculation of the main required indicator - possible for a given enterprise growth rate of sales (ie the volume of its operating activities) - remain stable.

Consider the simplest version of the model of sustainable economic growth of the enterprise, which has the following form:

$$\Delta GRS = \frac{NP \times R_{cap} \times NP \times A \times TR_A}{SV \times OWC} \quad (3.3)$$

Where GRS - the possible growth rate of sales, which does not violate the financial balance of the enterprise, expressed as a decimal fraction;

NP - the amount of net profit of the enterprise;

RcapNP- capitalization ratio of net profit, expressed as a decimal fraction;

A - the value of the assets of the enterprise;

TRa — asset turnover ratio in times;

SV - sales volume;

OWC – ownership working capital.

The possible growth rate of sales, which does not violate the financial balance of the enterprise, is the product of the following four coefficients achieved during its equilibrium stay at the previous stage of crisis management: 1) the coefficient of profitability of sales; 2) net profit capitalization ratio; 3) asset leverage ratio (it characterizes the "financial leverage" with which the company's equity forms the

assets used in its business); 4) asset turnover ratio.

For the enterprise the increase in sales is 7.62%

For the company, the growth rate of sales is optimal, so additional involvement of financial resources, violating the financial balance, is not required. The model of sustainable economic growth is a regulator of the optimal rate of development of operating volume (increase in sales) or vice versa - a regulator of the main parameters of financial development of the enterprise (reflected by the system of considered coefficients). It allows consolidating the financial balance achieved at the previous stage of anti-crisis management of the enterprise in the long run of its economic development.

To check if all calculations were right let's calculate the Altman model for emerging markets for LLC Strategia BM to be sure that financial situation on the enterprise got better.

$$Z^{**} = 3.25 + 6.56 * X1 + 3.26 * X2 + 6.72 * X3 + 1.05 * X4 \quad (3.4),$$

$$Z^{**} = 4,72$$

As we see the dynamics of Z-score is positive. After implementing the program to overcome the bankruptcy situation at the LLC Strategia BM enterprise no more in the "red" zone. According to the Altman's model the financial situation at the enterprise after such managerial decisions will become better.



## CONCLUSIONS AND PROPOSALS

The threat of bankruptcy in the enterprise is a consequence of irrational financial management of the enterprise and ultimately financial instability over a period of time. This makes it impossible for the company to meet its current liabilities and continue its operations. The main consequence of declaring an enterprise bankrupt is the termination of its existence and activity.

A company that is at risk of bankruptcy still has the opportunity to restore its own financial stability. The financial stability of the enterprise is a state of its financial resources, their distribution and use, which ensures the preservation of the niche of the international market, the development of the enterprise by increasing profits and capital while maintaining solvency and creditability in terms of acceptable risk of foreign economic activity.

To analyze the financial stability and the threat of bankruptcy, a number of blocks of indicators are used to determine the solvency of the enterprise, its financial stability and the risks of bankruptcy.

After some analysis it appeared that LLC Strategia BM has negative financial autonomy ratio (-0,38 in 2019), debt coverage and debt ratio are also negative (-0,43 and -2,34 in 2019 year). Financial stability ratios had bad dynamics, enterprise was defined as in crisis situation.

Analysis of the dynamics of the volume and structure of assets and liabilities revealed first factors threatening bankruptcy. Due to the receipt of net losses during 2017-2019, the company as a result achieved a negative equity ratio leads to high dependence on creditors and underpayment to cover costs. This leads to the use of the company only borrowed funds, which in turn gives a high risk of the need for their immediate repayment and loss of a large amount of capital. Also at this period rapidly decreased amount of assets (from 314,5 to 93,8 th. UAH).

Analysis of the dynamics of net cash indicates an excess of expenditures over

cash inflows, which exacerbates the situation of underfunding, taking into account unprofitable activities. This reduces even borrowed funds to finance current needs, which automatically reduces operating activities.

Indicators of cash flow balance indicate an unstable financial condition of the enterprise and a high degree of threat of bankruptcy. In 2017-2018, the cash flow quality ratio was more than 1, but this indicator is the result of negative net cash flow and net profit. This indicates an unhealthy financial condition of the enterprise. But in 2019, the value of the indicator decreased to 0.3, which indicates some improvement. The dynamics of their deterioration indicates a gradual approach of the enterprise to bankruptcy status.

The dynamics of liquidity indicators to deteriorate indicates a decrease in cash and the most liquid current assets with the growth of short-term liabilities, which reduces the solvency of the enterprise and the ability to cover liabilities. Current solvency ratio was changing from 0,03 to 0,23 and again to 0,05 during the period. Such instability indicates a decrease in the financial stability of the enterprise and the growing threat of bankruptcy in the dynamics.

Indicators of financial stability, with a coefficient of financial autonomy  $<0$ , indicate the threat of the need for urgent coverage of liabilities and rapid bankruptcy if necessary. The decrease in the dynamics indicates a deterioration of the already unstable financial situation at the enterprise. This led to a critical financial situation at the company.

Based on the analysis of the risks of bankruptcy, it is possible to draw conclusions about the need for fundamental changes in the enterprise.

If the determination of the financial condition of the enterprise reveals its unstable or critical position (according to different methods calculations such as Altman method, Z-score and so on, the enterprise was always appearing in the “red zone” with negative numbers as up to -5,13 in Altman model, 98.5% possibility of bankruptcy by Altman-Sabato model, up to -2,7 in Tereshchenko’s model and so on),

which may lead to the threat of bankruptcy, crisis in the enterprise, then anti-crisis financial management is introduced. Crisis management is achieved through the following mechanisms of financial stabilization: operational, tactical and strategic.

The main recommendations of the directions of stabilization of the financial condition on the basis of these mechanisms are:

- ensuring the growth of positive and reducing the amount of negative cash flow in the short term within the operational mechanism;
- increase in the volume of generation and reduction of the required volume of consumption of own financial resources within the tactical mechanism;
- ensuring the growth of sales within the strategic mechanism.

Providing these areas within the mechanisms of financial stabilization through these measures will stabilize the financial condition, reduce the rate of decline in financial stability and overcome the threat of bankruptcy.

After such changes sales grew up on 7,62%, uncovered loss reduced from 23680 th. UAH to 6654,09 th. UAH.

The second check of the enterprise with Altman's model using planned numbers showed us good results. Using recommendations from this research the enterprise may overcome the financial crisis situation.



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## APPENDICES

## Appendix A

Table A.1

Indicator	Formula	Legend	Characteristics of the indicator	Normative value
Ratio of assets turnover	$Rt_A = \frac{NR}{Aa}$	<i>NR</i> – Net Revenue <i>Aa</i> – the average amount of assets	indicates the number of turnovers made by assets during the year; indicates how many goods and services were sold during the analysis period for each hryvnia of assets used	increase in the dynamics
Ratio of current assets turnover	$Rt_{CA} = \frac{NR}{CAa}$	<i>CAa</i> – the average amount of current assets	indicates the number of turnovers made by current assets during the year; indicates how many goods and services were sold during the analysis period for each hryvnia of current assets used	increase in the dynamics
Ratio of inventory turnover	$Rt_I = \frac{PCSP}{I}$	<i>PCSP</i> – prime cost of product sold <i>I</i> – inventories	indicates the number of turnovers that made inventories during the year; indicates how many inventories account for the analysis period for each hryvnia of costs used	increase in the dynamics
Ratio of accounts receivable turnover	$Rt_R = \frac{NR}{Ra}$	<i>Ra</i> – the average amount of receivables	indicates the number of turnovers that made receivables during the year; indicates how many goods and services were sold during analysis period for each hryvnia of receivables used	increase in the dynamics
Turnover period of assets, days	$Tp_A = \frac{Aa}{NRo}$	<i>NRo</i> – one-day net revenue	demonstrates the period during which assets make one full turnover	decrease in the dynamics
Current assets turnover period, days	$Tp_{CA} = \frac{CAa}{NRo}$		demonstrates the period during which current assets make one full turnover	decrease in the dynamics
Turnover period of inventories, days	$Tp_I = \frac{I}{PCSPo}$	<i>PCSPo</i> – one-day prime cost of product sold	demonstrates the period during which inventories make one full turnover	decrease in the dynamics
Turnover period of accounts receivable, days	$Tp_R = \frac{Ra}{NRo}$		demonstrates the period during which receivables make one full turnover	decrease in the dynamics
The length of the operational cycle, days	$OC = Tp_I + Tp_R$		shows the time of transformation of the company's inventories into money	decrease in the dynamics



## Appendix B

### Retrospective balance sheets LLC Strategia BM, assets

Assets	Code	01.01. 2018	01.01. 2019	01.01. 2020
1	2	4	5	6
<b>I. Fixed assets</b>				
Intangible assets:	1000			
initial value	1001			
accumulated depreciation	1002			
Incomplete capital investments	1005	314,5	93,8	93,8
Fixed assets:	1010	9 578,9	9 396,5	7 422,5
initial value	1011	24 392,0	26 970,4	27 155,2
depreciation	1012	14 813,1	17 573,9	19 732,7
Investment Property	1015			
Long-term biological assets	1020			
Long-term financial investments:				
that records under the equity method other enterprises	1030			
other financial investments	1035			
Long-term receivables	1040			
Deferred tax assets	1045			
Other fixed assets	1090			
<b>Total for Section I</b>	<b>1095</b>	<b>9 893,4</b>	<b>9 490,3</b>	<b>7 516,3</b>
<b>II. Current assets</b>				
Inventories	1100	13 723,1	8 470,9	7 967,3
Current biological assets	1110			
Accounts receivable for products, goods, works, services	1125	21 104,1	17 690,4	14 983,9
Receivables accounts:				
for advances paid	1130			
with a budget	1135	6 308,5	5 435,5	2 569,8
including income tax	1136	696,3	696,3	696,3
Other current receivables	1155	818,3	367,5	608,1
Current financial investments	1160			
Money and cash equivalents	1165	1 315,5	8 112,1	1 637,9
Prepaid expenses	1170			
Other current assets	1190	210,9	203,9	206,2
<b>Total for Section II</b>	<b>1195</b>	<b>43 480,4</b>	<b>40 280,3</b>	<b>27 973,2</b>
<b>III. Non-current assets held for sale and disposal groups</b>	<b>1200</b>			
<b>Balance</b>	<b>1300</b>	<b>53 373,8</b>	<b>49 770,6</b>	<b>35 489,5</b>

## Appendix C

### Retrospective balance sheets LLC Strategia BM, liabilities

Liability	Code	01.01. 2018	01.01. 2019	01.01. 2020
1	2	4	5	6
<b>I. Equity</b>				
The registered capital	1400	10 100,0	10 100,0	10 100,0
Capital in revaluation	1405			
Additional capital	1410			
Reserve capital	1415			
Retained earnings (uncovered loss)	1420	-30 804,7	-30 153,7	-23 680,5
Unpaid capital	1425			
Withdrawn capital	1430			
<b>Total for Section I</b>	<b>1495</b>	<b>-20 704,7</b>	<b>-20 053,7</b>	<b>-13 580,5</b>
<b>II. Long-term liabilities and ensuring</b>				
Deferred tax liabilities	1500			
Long-term bank credits	1510			
Other long-term liabilities	1515	30 785,2	35 185,0	17 271,2
Long-term ensuring	1520			
Targeted financing	1525			
<b>Total for Section II</b>	<b>1595</b>	<b>30 785,2</b>	<b>35 185,0</b>	<b>17 271,2</b>
<b>III. Current liabilities and ensuring</b>				
Short-term bank credits	1600			
Current accounts payable				
for the long term obligations	1610			
for goods and services	1615	27 185,3	30 442,8	30 596,4
for payments to budget	1620	99,7	138,6	164,4
for insurance payments	1625	22,9	154,0	186,6
for payments of wages	1630	648,4	524,3	617,7
for received advances	1635			
Current supplies	1660			
Deferred income	1665			
Other current liabilities	1690	15 337,0	3 379,6	233,7
<b>Total for Section III</b>	<b>1695</b>	<b>43 293,3</b>	<b>34 639,3</b>	<b>31 798,8</b>
<b>IV. Liabilities related to non-current assets held for sale and disposal groups</b>	<b>1700</b>			
<b>Balance</b>	<b>1900</b>	<b>53 373,8</b>	<b>49 770,6</b>	<b>35 489,5</b>

## Appendix D

### Retrospective analytical balance sheets LLC Strategia BM, assets

Assets (average)	Code	2017	2018	2019
1	2	3	4	5
<b>I. Fixed assets</b>				
Intangible assets:	1000			
initial value	1001			
accumulated depreciation	1002			
Incomplete capital investments	1005	877,1	204,2	93,8
Fixed assets:	1010	9 869,5	9 487,7	8 409,5
initial value	1011	23 163,9	25 681,2	27 062,8
depreciation	1012	13 294,5	16 193,5	18 653,3
Investment Property	1015			
Long-term biological assets	1020			
Long-term financial investments:				
that records under the equity method other enterprises	1030			
other financial investments	1035			
Long-term receivables	1040			
Deferred tax assets	1045			
Other fixed assets	1090			
<b>Total for Section I</b>	<b>1095</b>	<b>10 746,5</b>	<b>9 691,9</b>	<b>8 503,3</b>
<b>II. Current assets</b>				
Inventories	1100	12 723,8	11 097,0	8 219,1
Current biological assets	1110			
Accounts receivable for products, goods, works, services	1125	23 636,7	19 397,3	16 337,2
Receivables accounts:				
for advances paid	1130			
with a budget	1135	4 587,7	5 872,0	4 002,7
including income tax	1136	649,6	696,3	696,3
Other current receivables	1155	676,6	592,9	487,8
Current financial investments	1160			
Money and cash equivalents	1165	759,8	4 713,8	4 875,0
Prepaid expenses	1170	1 170,7		
Other current assets	1190	687,8	207,4	205,1
<b>Total for Section II</b>	<b>1195</b>	<b>44 242,9</b>	<b>41 880,4</b>	<b>34 126,8</b>
<b>III. Non-current assets held for sale and disposal groups</b>	<b>1200</b>			
<b>Balance</b>	<b>1300</b>	<b>54 989,4</b>	<b>51 572,2</b>	<b>42 630,1</b>



## Appendix E

### Retrospective analytical balance sheets LLC Strategia BM, liabilities

Liability (average)	Code	2017	2018	2019
1	2	3	4	5
<b>I. Equity</b>				
The registered capital	1400	10 100,0	10 100,0	10 100,0
Capital in revaluation	1405			
Additional capital	1410			
Reserve capital	1415			
Retained earnings (uncovered loss)	1420	-24 168,0	-30 479,2	-26 917,1
Unpaid capital	1425			
Withdrawn capital	1430			
<b>Total for Section I</b>	<b>1495</b>	<b>-14 068,0</b>	<b>-20 379,2</b>	<b>-16 817,1</b>
<b>II. Long-term liabilities and ensuring</b>				
Deferred tax liabilities	1500			
Long-term bank credits	1510			
Other long-term liabilities	1515	25 594,9	32 985,1	26 228,1
Long-term ensuring	1520			
Targeted financing	1525			
<b>Total for Section II</b>	<b>1595</b>		<b>32 985,1</b>	<b>26 228,1</b>
<b>III. Current liabilities and ensuring</b>				
Short-term bank credits	1600			
Current accounts payable				
for the long term obligations	1610			
for goods and services	1615	24 981,7	28 814,1	30 519,6
for payments to budget	1620	50,2	119,2	151,5
including income tax	1621	11,5	88,5	170,3
for insurance payments	1625	329,4	586,4	571,0
for payments of wages	1630			
Current ensuring	1660			
Deferred income	1665			
Other current liabilities	1690	18 089,8	9 358,3	1 806,7
<b>Total for Section III</b>	<b>1695</b>	<b>43 462,5</b>	<b>38 966,3</b>	<b>33 219,1</b>
<b>IV. Liabilities related to non-current assets held for sale and disposal groups</b>	<b>1700</b>			
<b>Balance</b>	<b>1900</b>	<b>54 989,4</b>	<b>51 572,2</b>	<b>42 630,1</b>

## Appendix F

### Retrospective analytical statements of income LLC Strategia BM

Item	Code	2017	2018	2019
<b>Net income (revenue) from sales of products (goods and services)</b>	<b>2000</b>	<b>72 075,1</b>	<b>49 390,3</b>	<b>54 358,8</b>
Cost of sales of products (goods and services)	2050	49 643,5	43 393,4	45 773,8
<b>Gross:</b>				
<b>profit</b>	<b>2090</b>	<b>22 431,6</b>	<b>5 996,9</b>	<b>8 585,0</b>
<b>loss</b>	<b>2095</b>			
Other operating income	2120	16 443,7	15 436,3	9 424,1
Administrative expenses	2130			
Selling expenses	2150			
Other operating expenses	2180	51 916,2	35 871,3	14 837,5
<b>Financial results of operations:</b>				
<b>profit</b>	<b>2190</b>	<b>-13 040,9</b>	<b>-14 438,1</b>	<b>3 171,6</b>
<b>loss</b>	<b>2195</b>			
Income from equity	2200			
Other financial income	2220			
Other income	2240	58,5	15 717,1	3 325,6
Financial expenses	2250			
Losses from equity	2255			
Other expenses	2270	291,1	628,1	24,0
<b>Financial results before tax:</b>				
<b>profit</b>	<b>2290</b>		<b>650,9</b>	<b>6 473,2</b>
<b>loss</b>	<b>2295</b>	<b>-13 273,5</b>		
Expenses (income) income tax	2300			
Profit (loss) from discontinued operations after tax	2305			
<b>Net financial result:</b>				
<b>profit</b>	<b>2350</b>		<b>650,9</b>	<b>6 473,2</b>
<b>loss</b>	<b>2355</b>	<b>-13 273,5</b>		

## Appendix G

*Table G.1*

### Assets dynamics of LLC Strategia BM in 2017-2019 years, thousands UAH

Assets	2017 year	2018 year	2019 year	Absolute deviation		Growth rate	
				2018/ 2017	2019/ 2018	2018/ 2017	2019/ 2018
I. Fixed assets							
Incomplete capital investments	314,5	93,8	93,8	-220,7	0	29,83	100
Fixed assets:	9 578,9	9 396,5	7 422,5	-182,4	-1974	98,10	78,99
Total for Section I	9 893,4	9 490,3	7 516,3	-403,1	-1974	95,93	79,20
II. Current assets							
Inventories	13 723,1	8 470,9	7 967,3	-5252,2	-503,6	61,73	94,05
Accounts receivable for products, goods, works, services	21 104,1	17 690,4	14 983,9	-3 413,7	-2 706,5	83,82	84,70
Receivables accounts: with a budget	6 308,5	5 435,5	2 569,8	-873,00	-2 865,7	86,16	47,28
including income tax	696,3	696,3	696,3	0,00	0,00	100	100
Other current receivables	818,3	367,5	608,1	-450,80	240,60	44,91	165,47
Money and cash equivalents	1 315,5	1 315,5	1 315,5	6 796,60	-6 474,2	616,66	20,19
Other current assets	8 112,1	8 112,1	8 112,1	-7,00	2,30	96,68	101,13
Total for Section II	44 176,7	40 976,6	28 669,5	-3 200,1	-12 307,1	92,76	69,97
III. Non-current assets held for sale and disposal groups							
Balance	53 373,8	49 770,6	35 489,5	-3 603,2	-14 281,1	93,34	71,70



Table G.2

**Assets structure of LLC Strategia BM in 2017-2019 years, %**

Assets	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
I. Fixed assets					
Incomplete capital investments	0,6	0,2	0,3	-0,4	0,1
Fixed assets:	17,7	18,6	20,5	0,9	1,9
Total for Section I	18,3	18,8	20,8	0,5	2
II. Current assets					
Inventories	25,4	16,8	22	-8,6	5,2
Accounts receivable for products, goods, works, services	39	35,1	41,4	-3,9	6,3
Receivables accounts: with a budget	11,7	10,8	7,1	-0,9	-3,7
including income tax	1,3	1,4	1,9	0,1	0,5
Other current receivables	1,5	0,7	1,7	-0,8	1
Money and cash equivalents	2,4	16,1	4,5	13,7	-11,6
Other current assets	0,4	0,4	0,6	0	0,2
Total for Section II	81,7	81,2	79,2	-0,5	-2
III. Non-current assets held for sale and disposal groups					
Balance	100	100	100	-	-

## Appendix H

Table H.1

### Liabilities dynamics of LLC Strategia BM in 2017-2019 years, thousands UAH

Liabilities	2017 year	2018 year	2019 year	Absolute deviation		Growth rate	
				2018/ 2017	2019/ 2018	2018/ 2017	2019/ 2018
<b>I. Equity</b>							
The registered capital	10 100,0	10 100,0	10 100,0	0,0	0,0	1,00	1,00
Retained earnings (uncovered loss)	-30 804,7	-30 153,7	-23 680,5	651,0	6 473,2	0,98	0,79
Total for Section I	-20 704,7	-20 053,7	-13 580,5	651,0	6 473,2	0,97	0,68
<b>II. Long-term liabilities and ensuring</b>							
Other long-term liabilities	30 785,2	35 185,0	17 271,2	4 399,8	-17 913,8	1,14	0,49
<b>III. Current liabilities and ensuring</b>							
Current accounts payable: for goods and services	27 185,3	30 442,8	30 596,4	3 257,5	153,6	1,12	1,01
for payments to budget	99,7	138,6	164,4	38,9	25,8	1,39	1,19
for insurance payments	22,9	154,0	186,6	131,1	32,6	6,72	1,21
for payments of wages	648,4	524,3	617,7	-124,1	93,4	0,81	1,18
Other current liabilities	15 337,0	3 379,6	233,7	-11 957,4	-3 145,9	0,22	0,07
Total for Section III	43 293,3	34 639,3	31 798,8	-8 654,0	-2 840,5	0,80	0,92
Balance	53 373,8	49 770,6	35 489,5	-3 603,2	-14 281,1	0,93	0,71

Table H.2

**Liability structure of LLC Strategia BM in 2017-2019 years, %**

Liabilities	2017 year	2018 year	2019 year	Absolute deviation	
				2018/2017	2019/2018
I. Equity					
The registered capital	18,92	20,29	28,46	1,37	8,17
Retained earnings (uncovered loss)	-57,72	-60,59	-66,73	-2,87	-6,14
Total for Section I	-38,79	-40,29	-38,27	-1,50	2,03
II. Long-term liabilities and ensuring					
Other long-term liabilities	57,68	70,69	48,67	13,02	-22,03
III. Current liabilities and ensuring					
Current accounts payable: for goods and services	50,93	61,17	86,21	10,23	25,05
for payments to budget	0,19	0,28	0,46	0,09	0,18
for insurance payments	0,04	0,31	0,53	0,27	0,22
for payments of wages	1,21	1,05	1,74	-0,16	0,69
Other current liabilities	28,74	6,79	0,66	-21,94	-6,13
Total for Section III	81,11	69,60	89,60	-11,52	20,00
Balance	100,00	100,00	100,00		



## Appendix I

Table I.1

### A-score method for LLC Strategia BM

Defects	Points
1) Autocrat (yes – 8 points, other styles of management – 0 points).	8
2) Executive – CEO (yes, and he is an autocrat – 4 points, no – 0 points).	0
3) Inactive executives. If other executives don't participate in a decision-making process – 2 points.	0
4) Unbalanced management. If a board of directors is comprised of persons with insufficient professional skills – 2 points.	2
5) Weakness of a financial executive. If a financial executive is not smart and powerful enough and there is no understanding with a board – 2 points.	0
6) Accounting faults. If there is not used a system of budgetary control – 3 points plus 3 points more if there is no system of cash flows planning.	3
7) Management level. If there are no qualified persons of middle management – 1 point.	0
8) Changes vulnerability. If a company is obsolete in major aspects or if it reacts to considerable changes of internal and external environment with delay – 15 points.	0
<b>Result</b>	<b>13</b>
Mistakes	
1) A part of loan proceeds in a capital – 15 points in case this part is growing to the level when its future can become dependent on creditors.	15
2) Surplus of trade expansion – 15 points if a sales rate drops behind a fixed assets growth rate.	15
3) A large project – 15 points if a company has recently developed a project of such a scale; if in the project there were made miscalculations which stipulate great losses.	0
<b>Result</b>	<b>30</b>
Symptoms of failure:	
1) Financial signs – 4 points if financial proportions, a financial risk ratio, a balance sheet, etc. testify to financial state aggravation.	4
2) Unsatisfied accounting – 4 points if a researcher reveals any accounting tricks aimed at the accounts dissimulation (depreciation, overestimation of reserves or assets, undervaluation operational costs, etc.)	4
3) Nonfinancial signs – 3 points if there are such signs as a decrease of products' quality, drop in shares' prices at the market, necessity of doing repair, etc.	3
4) Ultimate signs – 1 point if there are partial charge-offs, rumours, dismissals.	0
<b>Result</b>	<b>11</b>
<b>Final result</b>	<b>54</b>