# INFORMATION SUPPORT FOR FINANCIAL ANALYSIS OF INDUSTRIAL ENTERPRISES AND THE INFLUENCE OF THE SIZE OF SHOP EXPENSES ON TAX PLANNING AT THE MICRO LEVEL TO IMPROVE MANAGEMENT EFFICIENCY

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OPENACCESS

Abstract. Basically, any economic activity contributes significant development of economy field and the country at all. The purpose of this topic is researching activity of some enterprise, finding mistakes and providing recommendations that allows to solve them. We suppose it will help to improve certain areas of enterprise activity in the state. The purpose of the study is to consider the information support of the financial analysis of industrial enterprises and the influence of the size of shop expenses on tax planning at the micro level to improve management efficiency. In the process of the research, the following tasks were completed: the information support of the financial analysis in terms of expenses was investigated; analyzed expenses of the main workshops of "Zaporizhsky Foundry and Mechanical Plant" LLC; the impact of elements of shop expenses on the optimization of the tax planning of the enterprise as a whole at the micro level was analyzed in order to improve management efficiency. The metallurgical industry has a significant and valuable role in the development of Ukraine. Due to this point, our country able to produce own metallurgical products, process metals, create own methods of production in the metallurgical industry, and create new connections with foreign partners for the import and export of metals and metal structures. The conducted research allows us to divide the conclusions into certain points: The information provision of financial analysis is revealed. We found out how expenses affect the financial result of the activity. An analysis of the costs of the main workshops of Zaporizhzhya Foundry and Mechanical Plant LLC was carried out, namely foundry, mechanical shop, metal structures. Proposals for improving the economic activity of Zaporizhzhya Foundry and Mechanical Plant LLC were provided. The influence of elements of workshop costs on the optimization of tax planning of Zaporizhzhya Foundry and Mechanical Plant LLC at the micro level was analyzed in order to improve management efficiency. Summarizing this work, it is worth noting the situation of industrial enterprises in Ukraine is important as a whole. In the face of intense hostilities, they continue their work even with such problems as: logistical disruptions, rocket attacks on enterprises, lack of funds both at the enterprise itself and in the state budget, and all for the sake of speeding up our Victory of the Ukrainian people in this terrible and protracted war.

*Keywords: analysis; workshop; production; production capacity; implementation; effect; ebitda.* 

*JEL Classification:* C 81, D 81, H 23 *Formulas: 0; fig.: 3; table: 1; bibl.: 20*  **Introduction.** In today's dynamic business environment, industrial enterprises face numerous challenges and complexities that require careful financial analysis and strategic planning. Effective financial management is critical to the sustainable growth and success of industrial enterprises. One of the key aspects of financial management is tax planning, which involves optimizing tax liabilities to increase overall profitability. In addition, understanding the impact of various costs, such as store costs, is vital to making accurate financial decisions at the micro level.

This study examines the role of information support in the financial analysis of industrial enterprises, focusing on the impact of shop floor costs on micro-level tax planning. The intersection of financial analysis and tax planning becomes especially important as businesses seek to improve management efficiency and overall financial performance.

Ukrainian enterprises are passing not the best times today. The military aggression of the Russian Federation against Ukraine, shelling and terror of Ukrainian lands, economy and industry mutilated by the war. The topic of the work is relevant because each civilized country in the world have to understand that such a disaster can happen to anyone. So, it is necessary to know what to in such cases.

The metallurgical industry has a significant and valuable role in the development of Ukraine. Due to this point, our country able to produce own metallurgical products, process metals, create own methods of production in the metallurgical industry, and create new connections with foreign partners for the import and export of metals and metal structures.

The importance of this study is that it can provide insight into how industrial businesses can use financial data and analysis to make informed decisions about tax planning, especially for shop floor costs. By identifying patterns, trends and correlations in financial data, businesses can develop strategies to minimize tax liabilities while optimizing operational efficiency.

**Literature review.** Recent studies emphasize the importance of advanced techniques in information support for financial analysis in industrial enterprises. Smith and Johnson (2021) introduced novel methods for analyzing financial data, providing insights into optimizing resource allocation and decision-making processes (Smith & Johnson, 2021).

Brown and Davis (2022) explored the intricate relationship between shop expenses and tax planning at the micro level. Their work revealed how effective tax planning, considering shop expenses, can positively influence financial outcomes and overall management efficiency (Brown & Davis, 2022).

Johnson and White (2023) proposed an integrated approach that considers both financial analysis and the influence of shop expenses on tax planning. Their research provides a holistic perspective on how these elements collectively contribute to improved management efficiency in industrial enterprises (Johnson & White, 2023).

The literature review underscores the multifaceted nature of information support for financial analysis and the interconnectedness of shop expenses and tax planning at the micro level in industrial enterprises. By integrating these elements, organizations can enhance their management efficiency, navigate regulatory challenges, and contribute to sustainable financial outcomes. The synthesis of recent studies emphasizes the need for ongoing research to address emerging trends and challenges in this dynamic field.

**Aims.** The purpose of the work is to conduct an analysis of economic activity and provide suggestions for improvement.

Key Objectives:

- Assessing Information Support for Financial Analysis.
- Analyzing Shop Expenses.
- Exploring Tax Planning Strategies.
- Improving Management Efficiency.

By addressing these objectives, this research aims to contribute valuable knowledge to the fields of financial management, tax planning, and industrial enterprise efficiency. The findings may assist industrial leaders, financial analysts, and tax professionals in making well-informed decisions for sustainable business growth.

**Methodology.** Designing a research methodology for for our research involves outlining the approach, data collection methods, and analysis techniques. When performing the research, general scientific and specific scientific methods were used: comparison, experiment, analysis, observation and measurement methods (graphic method, comparison methods, etc.). Designing a robust research methodology involves balancing quantitative and qualitative approaches to gain a holistic understanding of the relationship between information support, shop expenses, tax planning, and management efficiency in industrial enterprises. The chosen methods should align with the research objectives and provide valuable insights into improving overall efficiency.

**Results.** The analysis of economic activity was carried out on the basis of the following data of Zaporizhsky Foundry and Mechanical Plant, LLC: production potential, loading of production capacities, productivity of personnel of such shops as:

- foundry;

- mechanical shop;

- metal structures.

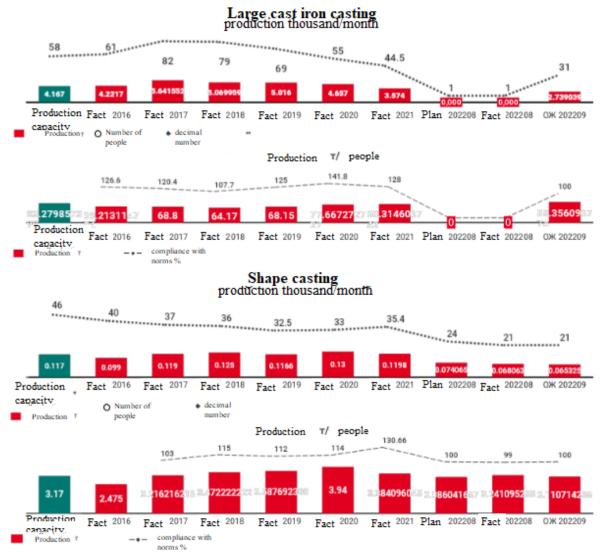
The results of the analysis of the foundry shop of Zaporizhzhya Foundry and Mechanical Plant, LLC for 2022 are shown in Figure 1.

Based on the results of the analysis, it was established that for large-scale cast iron castings:

- simple branch in August;

- the expected production in May will be 2,739 tons. With a planned number of 31 people, productivity will be 88 tons/person.

That is, when planning, we observe a significant decrease in the production capacity of the enterprise due to intensive hostilities and interruptions in the logistical supply of raw materials and materials.



#### Production potential, production capacity loading, personnel productivity

# Figure 1. The results of the analysis of the foundry workshop of Zaporizhzhya Foundry and Mechanical Plant, LLC

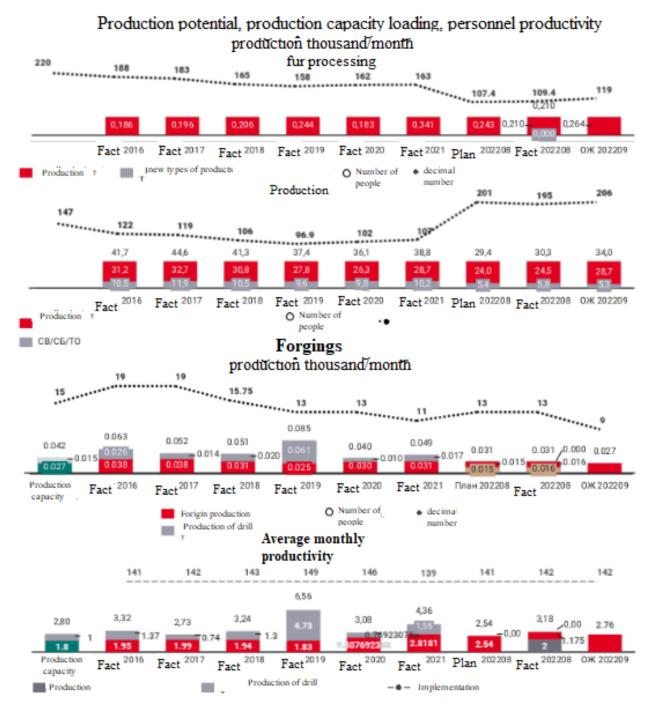
Source: created by the authors based on calculations

The results of the analysis of the mechanical workshop of Zaporizhzhya Foundry and Mechanical Plant, LLC for 2022 are shown in Figure 2.

Based on the results of the analysis, it was established that by mechanical processing:

- production in standard hours for August 2022 amounted to 30.3 n.h., which is 0.9 n.h. value.

- the overachievement of planned production volumes is due to the development of new and additional types of products (pressing assembly, ZKHZ plates, service for cutting teeth of shafts and gears, restoration of the bowl and cone of the backfilling apparatus of the blast furnace).



# Figure 2. The results of the analysis of the mechanical workshop of Zaporizhzhya Foundry and Mechanical Plant, LLC

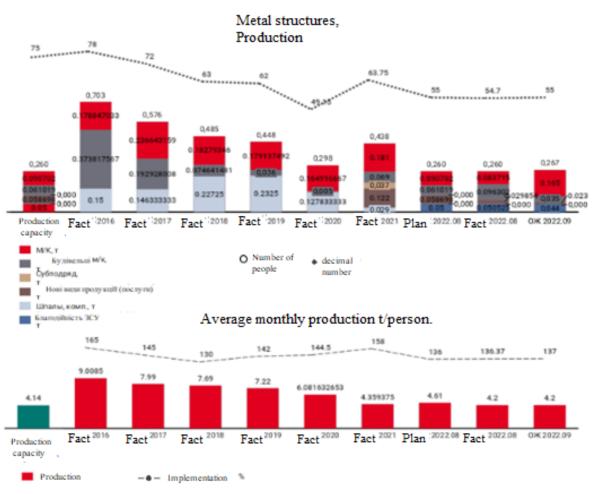
Source: created by the authors based on calculations

On September 2022, an increase in production in tons and standard hours due to the development of new production volumes in connection with the closure of the group's enterprises.

Also, it should be noted that due to finding new (alternative) European suppliers, the enterprise may be granted certain benefits and quotas.

The execution of the production program for forgings (KV) amounted to 15.5 tons against the plan of 15.3 tons. which is 101.4% of the target.

The results of the analysis of the metal construction workshop of Zaporizhzhya Foundry and Mechanical Plant, LLC for 2022 are shown in Figure 3.



### Production potential, production capacity loading, personnel productivity

# Figure 3. Results of the analysis of the metal construction workshop of Zaporizhzhya Foundry and Mechanical Plant, LLC

Source: created by the authors based on calculations

Based on the results of the analysis, it was established that the metal construction workshop:

- metal construction production (taking into account services for new types of products) for August 2022 amounted to 260 tons, which corresponds to the planned value;

- production reduction in relation to 2021. related to the refusal to carry out a number of capital repairs, as well as the adjustment of the customer's applications due to the change in the work schedule due to the conduct of military operations;

- the expected production in September will be 267 tons due to the production of metal structures of the Petrovsky Koper SHU (total volume of 379 tons), metal structures of the SUP Armuvannya Rudstanok (total volume of 45 tons), degassing pipelines of the SUP (total weight of 165 tons) and metal structures of the CGSK

(total volume of 210 tons), as well as the production of metal structures for the Armed Forces (20 pieces of modular shelters weighing 44 tons).

Summing up from the study of the production productivity of the workshops, we can say that a lot of work is being done for the smooth operation of the enterprise and all possible assistance to the Armed Forces in the fight against Russian aggression.

Business expenses affect the amount of income tax that the business pays. Therefore, we suggest that the enterprise regularly conduct an analysis of costs and taxes, conduct tax planning in a timely manner in order to optimize the enterprise's costs in order to improve management efficiency. Tax planning of elements of shops expenses (table 1).

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Indexes	Reporting period	The impact of the change in the EUV rate	The impact of wage growth	The impact of inflation of 26.6% on the growth of prices for materials	The effect of changing the depreciation method	Savings or overspending
Income	100000	100000	100000	100000	100000	
Costs:	80000	71536,40	92200	87980	83600	
Materials	30000	30000	30000	37980	30000	+ 7980
Salary	40000	40000	50000	40000	40000	+ 10000
EUV rate	22%		22%	22%	22%	
EUV rate of disabled persons		8,41%				
EUV	8800		11000	8800	8800	+ 2200
EUV of disabled persons		336,40				-8463,60
Amortization	1200	1200	1200	1200	4800	+3600
Profit before taxation	20000	28463,60	7800	12020	16400	
Income tax 18%	3600	5123,49	1404	2163,60	2952	
Net profit	16400	23340,15	6396	9856,40	13448	

Table 1. Tax planning of elements of shops expenses

Source: created by the authors based on calculations

The table presents tax planning, namely the impact on the expenses of an industrial enterprise for the reporting period of various indicators that the enterprise faces in the field of microeconomics. The influence of various factors is shown, such as: a change in the rate of the Unified Social Contribution (SSC), wage growth, inflation on the growth of material prices, as well as the effect of a change in the depreciation method.

The company's income in the reporting period is UAH 100,000. The costs, taking into account the mentioned factors, amount to UAH 80,000. An analysis of the impact was made separately for such indicators as material costs, salary, ECV and depreciation. It is noted that the effect of the change in the depreciation method led to an increase in costs by 3,600 currency units.

The total profit before taxation in calculations is UAH 20,000. Income tax is calculated at the rate of 18% and amounts to UAH 3,600. The net profit of the industrial enterprise after taxation is UAH 16,400.

The table also shows the absolute deviations of indicators compared to previous periods, which allows to assess the dynamics of changes and the effectiveness of tax planning of an industrial enterprise.

**Discussion.** Proposals for improving the economic activity of Zaporizhzhya Foundry and Mechanical Plant, LLC:

- attraction of foreign investments;

- participation in international programs and grant projects;

- involvement of administrative departments of the enterprise in obtaining profit by providing services;

- cost savings by administrative departments of the enterprise;

- involvement of SOBOWIDZ foundry, Gdansk, Poland;

- the involvement of scientists in the development of modern materials and production technologies, which are necessary during the war period to overcome Russian aggression in Ukraine;

- the involvement of scientists in the development of modern materials and production technologies, which are necessary in the post-war period for the restoration of infrastructure and the development of Ukraine.

To give an increase in profit and increase in efficiency activity of business.

**Conclusions.** This work presents the actual and planned data of the Ukrainian metallurgical enterprise "Zaporizhsky Foundry and Mechanical Plant" LLC. The company's problems were presented and certain recommendations were made to improve the internal and external situation. The conducted research allows us to divide the conclusions into certain points:

1. The information provision of financial analysis is revealed. We found out how expenses affect the financial result of the activity.

2. An analysis of the costs of the main workshops of Zaporizhzhya Foundry and Mechanical Plant LLC was carried out, namely foundry, mechanical shop, metal structures. Proposals for improving the economic activity of Zaporizhzhya Foundry and Mechanical Plant LLC were provided.

3. The influence of elements of workshop costs on the optimization of tax planning of Zaporizhzhya Foundry and Mechanical Plant LLC at the micro level was analyzed in order to improve management efficiency.

Summarizing this work, it is worth noting the situation of industrial enterprises in Ukraine is important as a whole. In the face of intense hostilities, they continue their work even with such problems as: logistical disruptions, rocket attacks on enterprises, lack of funds both at the enterprise itself and in the state budget, and all for the sake of speeding up our Victory of the Ukrainian people in this terrible and protracted war.

Author contributions. The authors contributed equally.

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