IMPLEMENTING FLEXIBLE BUDGETING MECHANISMS AND AUTOMATING CONTROL WITHIN THE MANAGEMENT ACCOUNTING SYSTEM OF MANUFACTURING ENTERPRISES (USING POWER BI)

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Abstract. *This article examines the improvement of budgeting and control within a management accounting system, the use of CVP (cost-volume-profit) modeling, the high sensitivity of net profit to changes in revenue, costs, and prices, and the implementation of flexible budgets—illustrated through sales budgets and income and expense budgets—as well as a detailed profit and loss statement format that includes both planned and actual figures.*

Keywords: *Enterprise, improvement, budget, income, expense, modeling, implementation, efficiency.*

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Аннотация. *В данной статье рассматривается совершенствования бюджетирования и контроля в системе управленческого учета, использование анализа CVP-моделирования, высокую уязвимость чистой прибыли по отношению к изменениям выручки, затрат и цен, процесс внедрения гибких бюджетов, на примере, бюджета продаж и бюджета доходов и расходов, детальную форму отчета о прибылях и убытках с плановыми и фактическими значениями.*

Ключевые слова: *Предприятие, совершенствование, бюджет. доход, расход, моделирование, внедрения, эффективность.*

Introduction. One of the most important management accounting tools is budgeting, which is a system of planning, coordinating, monitoring, and evaluating an enterprise's activities through the development of interrelated budgets. In this regard, the budget is the foundation for designing, organizing, and ensuring production efficiency.

An effectively organized budgeting system allows not only to forecast the financial results of the organization's activities, but also to promptly identify deviations from planned indicators, analyze the causes of their occurrence, and take measures to improve management efficiency.

Globally, the importance of budgeting is constantly growing due to the accelerated digitalization of the economy, the development of big data technologies, the implementation of artificial intelligence, and automated business management systems. Traditional budgeting methods

are increasingly criticized for their lack of flexibility and inability to quickly respond to changing market conditions. Consequently, modern management concepts such as Beyond Budgeting, Rolling Forecasts, Zero-Based Budgeting, and Activity-Based Budgeting are gaining widespread acceptance, allowing for greater adaptability in enterprise management systems.

For the Republic of Uzbekistan, the study of budgeting and control issues is of particular relevance in connection with the implementation of state programs in the fieldindustries that create high added value - electronics and electrical engineering, biochemistry and polymer production, pharmaceuticals, mechanical engineering - an increase in the sphere of high-income services such as IT, artificial intelligence, fintech, consulting, transport and logistics, the widespread and active use of bioengineering in agriculture, advanced agricultural technology and water-saving methods that increase crop yields, the transition to "green" energy, waste-free production,Digital transformation of the economy and increased competitiveness of domestic enterprises. Accelerated development of the manufacturing sector requires improved financial planning and control mechanisms to ensure sustainable development of organizations and the rational use of resources.

Analysis of literature on the topic. The development and improvement of budgeting in management accounting systems have been addressed in the works of many foreign and domestic researchers. Significant contributions to the theoretical and methodological foundations of budgeting have been made by C. Horngren, J. Foster, S. Datar, J. Hope, R. Fraser, R. Kaplan, R. Cooper, and other scholars.

Issues of budgeting, financial planning, and management control have also been addressed in the works of K. Urazov, M. Pulatov, S. N. Tashnazarov, N. B. Abdusalomov, D. R. Rofeev, V. A. Hasanov, A. A. Hashimov, and other researchers. Despite a significant number of scientific publications, many issues related to adapting modern budgeting methods to the operating conditions of domestic manufacturing enterprises remain understudied and require further research.

As we discussed earlier, a flexible budget is a company's budget adjusted to reflect actual sales volumes. In other words, it's the budget that would have been created if the company had known the exact future sales volume when it was created.[1]

Research methodology. The study utilized a systematic approach, marketing analysis, benchmarking, and digital metrics. Mass observation methods were used to collect and analyze data from social media platforms.

Analysis of the result. The main problem with traditional (static) budgeting is that it is approved once for the entire year and remains unchanged, even if the market situation is completely out of control. If the company's actual sales decline or rise, comparing the old plan with the new data becomes pointless: we'll see huge deviations in expenses, but we won't be able to understand the reasons for them—whether they're due to resource overruns or simply changes in production volumes. Flexible budgeting solves this problem by automatically adjusting planned costs to the actual volume of output.

To begin, let's look at the main differences between traditional and flexible budgets based on key criteria (Table 1).

Table 1.

Differences between traditional and flexible budgets

[1] Flexible Income and Expense Budgeting in Excel | finalytics.pro

Comparison criterion	Traditional (fixed) budget	Flexible budget
Linking to business activity	Tied to one rigid, "frozen" sales volume figure at the beginning of the period.	Dynamically adapts to different levels and actual volumes of business activity.
Number of forecasts (scenarios)	Only one fixed revenue forecast option is developed.	Several multi-variant scenarios are formed (pessimistic, realistic, optimistic).
Classification and accounting of costs	Expenses are planned as a general fixed amount, without a strict division by the nature of the behavior.	Mandatory division of costs into fixed (unchanging) and variable (calculated per unit of production).
Planning range	Calculates indicators for one specific point of production/sales volume.	Establishes clear boundaries (range) within which the business can realistically operate.
Mathematical model	Uses static total values for each income and expense item.	It is described by the dynamic formula: Total Cost = Fixed Cost + (Variable Cost per Unit * Actual Sales Volume)
Basis for plan-fact analysis	Actual results are compared with the static plan approved at the beginning of the year.	Planned standards are recalculated based on the actual sales volume achieved.
Accuracy of resource control	Does not take into account external market fluctuations, which can lead to false conclusions about savings or overspending.	Allows you to accurately assess the performance of departments and strictly control resource overspending without market noise.

Considering the differences between traditional and flexible budgets, we will consider practical recommendations for Saturn Metal LLC's transition from traditional budgeting to a flexible planning system.

We will study this process using the example of the formation and adjustment of two main budgeting documents: the sales budget and the income and expense budget (IED), the structure of which was shown in the first chapter.

These forms form the basis of the enterprise's general budget: the sales budget is the starting point of the entire planning system, and the income and expense budget serves as a link between the operational and financial blocks of the budgets.

Drawing up a sales budget and an income and expense budget will allow us to answer the following questions:

- How can the initial static sales budget be recalculated when market demand and prices change, and how are its pessimistic and optimistic versions compiled?
- How to divide planned costs in the income and expenditure budget (IEB) into strictly fixed and variable ones?
- How will automatically linking expenses to actual sales volumes allow Saturn Metal LLC's management to conduct high-quality plan-to-actual analysis, quickly control production costs, and see the company's true performance without distortions caused by sales fluctuations?

First, we need to calculate the impact of the first factor on the sales budget: seasonality of demand. To estimate the magnitude of seasonality, we use the so-called seasonality coefficient (), which is calculated using the formula:K_s

$$K_s = \frac{\bar{Y}_i}{\bar{Y}_{total}}$$

Where:

$\bar{Y}_i$— the average value of revenue for a specific month of the period under study;

$\bar{Y}_{total}$ — average monthly revenue for the entire study period.

But before applying this formula, we need to calculate the seasonality coefficients for each year separately to see how the trend is repeated and to exclude the period where various anomalies are present.

To calculate seasonality for a given year by month, you should divide sales for the month by the average value (Table 2).

Table 2.

Calculation of the seasonality coefficient of sales of Saturn Metal LLC for 2023-2025.

Month	Revenue			Seasonality coefficient		
	2023	**2024**	**2025**	**2023**	**2024**	**2025**
Jan	16	333	168	**0.02**	**0.26**	**0.34**
Feb	479	939	137	**0.64**	**0.73**	**0.27**
March	1363	2371	773	**1.83**	**1.84**	**1.55**
Apr	1670	522	630	**2.24**	**0.41**	**1.26**
May	597	389	699	**0.80**	**0.30**	**1.40**
June	69	657	269	**0.09**	**0.51**	**0.54**
Jul	2247	1056	492	**3.02**	**0.82**	**0.98**
Aug	731	1052	208	**0.98**	**0.82**	**0.42**
Sep	311	739	250	**0.42**	**0.57**	**0.50**
October	172	3671	905	**0.23**	**2.85**	**1.81**
Nov	535	970	431	**0.72**	**0.75**	**0.86**
Dec	746	2737	1040	**1.00**	**2.13**	**2.08**
Avg. value	**744**	**1286**	**500**			
Sum				**12:00**	**12:00**	**12:00**

Presenting this in the form of a diagram, one can see that in 2024 and 2025 the dynamics have a similar trend, but in 2023 anomalies are noticeable in July and October, which completely violate the pattern (Figure 3.3).

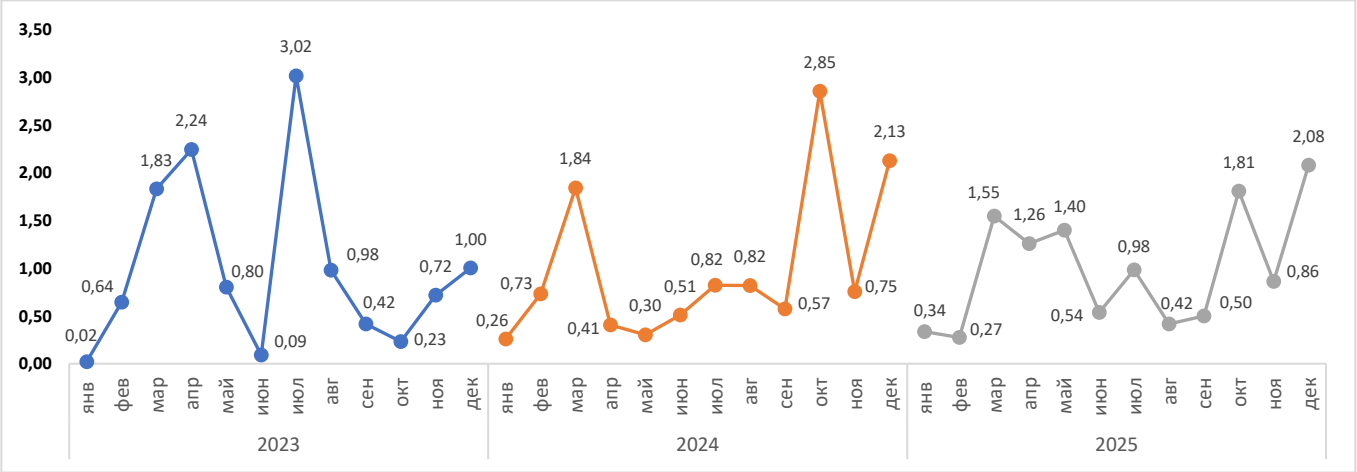

Fig. 1. Identification of seasonal patterns in sales of Saturn Metal LLC for 2023-2025.

To determine the similarities in the dynamics for 2024 and 2025, we need to calculate the Pearson correlation. In fact, the correlation between them was r = 0.725. This is a high positive correlation (on the Chaddock scale, a relationship in the range of 0.7 - 0.9 is considered strong/high).

This mathematically proves that the trend has repeated itself, the processes have stabilized, and the pattern is real. However, between 2023 and 2024, due to an anomaly, this indicator was r = -0.012, indicating that there is absolutely no correlation.

For clarity, let's consider the result of standard data aggregation for the entire available three-year period, ignoring the identified anomalies. Applying the formula above, we obtain (Table 3):

Table 3.

Calculation of generalized seasonality coefficients of revenue of Saturn Metal LLC for 2023–2025, taking into account the abnormal period

Month	2023	2024	2025	Average (2023-2025)	Seasonality coefficient
Jan	16	333	168	172	0.20
Feb	479	939	137	518	0.61
March	1363	2371	773	1502	1.78
Apr	1670	522	630	941	1.12
May	597	389	699	562	0.67
June	69	657	269	331	0.39
Jul	2247	1056	492	1265	1.50
Aug	731	1052	208	663	0.79
Sep	311	739	250	433	0.51
October	172	3671	905	1583	1.88
Nov	535	970	431	645	0.77
Dec	746	2737	1040	1508	1.79

A graphical interpretation of the end-to-end three-year calculation is presented in Figure 3.4. Analysis of this diagram reveals that including the destabilized year 2023 in the overall calculation distorts the true market picture. The resulting curve is mathematically incorrect: it demonstrates false instability and prevents company management from clearly identifying periods of decline and peak loads for working capital planning.

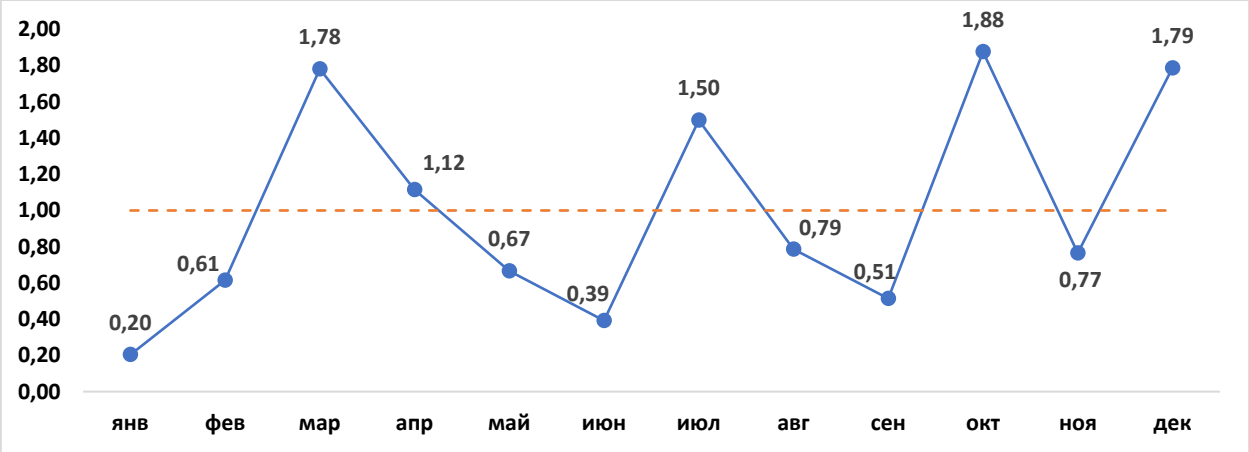

Figure 2.A graph of seasonal fluctuations in revenue for Saturn Metal LLC, constructed using a three-year data set (with anomalies)

Based on the adjusted model (Fig. 3.5), the following analytical conclusions can be formulated regarding the structure of business activity of Saturn Metal LLC:

1. Two-peak activity model. The company has two distinct seasonal peaks. The first (spring) peak occurs in March (1.76), which is associated with the recovery of business activity after the winter period. The second (fall-winter) peak is reached in October (2.56, the absolute maximum of the year), with a second wave of growth in December (2.11), which is due to counterparties closing annual budgets and contracts.

Table 4.

Cleaned calculation of seasonality coefficients of revenue of Saturn Metal LLC for 2024–2025.

Month	2024	2025	Average (2024-2025)	Seasonality coefficient
Jan	333	168	250	**0.28**
Feb	939	137	538	**0.60**
March	2371	773	1572	**1.76**
Apr	522	630	576	**0.65**
May	389	699	544	**0.61**
June	657	269	463	**0.52**
Jul	1056	492	774	**0.87**
Aug	1052	208	630	**0.70**
Sep	739	250	494	**0.55**
October	3671	905	2288	**2.56**
Nov	970	431	701	**0.78**
Dec	2737	1040	1888	**2.11**

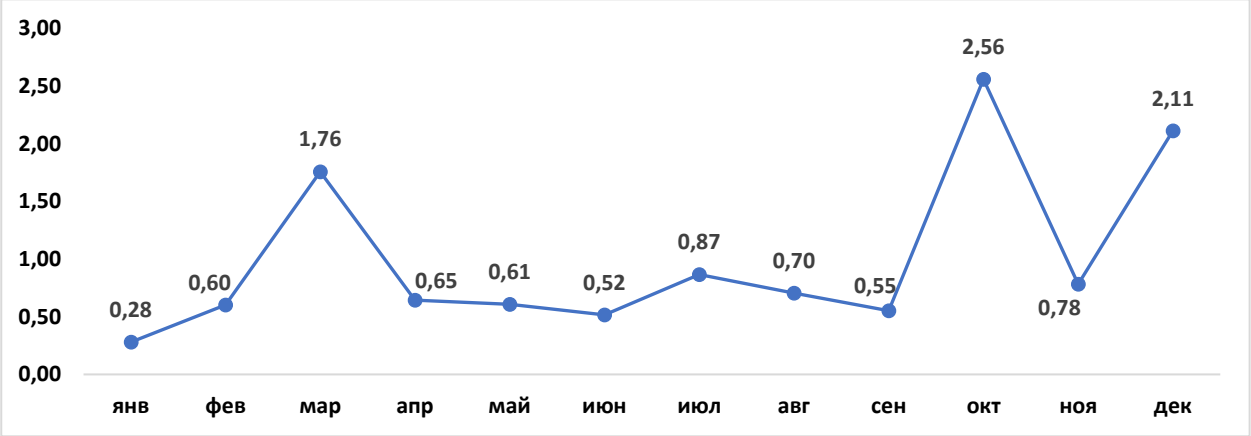

Figure 3. Model of stable seasonal fluctuations in revenue of Saturn Metal LLC based on the results of 2024–2025.

2. Summer plateau of stability. From April to September, the company's internal processes enter a phase of predictable stability. Seasonality coefficients are maintained within a controlled, moderate range (0.52–0.87), minimizing the risk of cash flow gaps and allowing for the optimization of vacation schedules and scheduled equipment maintenance.

3. Winter minimum of business activity. The month with the largest decline is January (0.28). This trend is systemic and can be explained by long holidays and a general slowdown in commercial activity at the beginning of the financial year. This period requires the finance department to build up a capital reserve fund during the preceding peak months.

To improve the accuracy of medium-term forecasting and remove statistical noise from the model, data from 2023 were classified as atypical and excluded from further analysis. The final calculation of the generalized seasonality coefficients was based strictly on a representative two-year period (Table 3.15).

After calculating the net seasonality coefficients, we still have two important factors to consider when planning for 2026: the price increase factor (i.e., changes in metal, raw materials, and logistics prices) and domestic inflation.

The magnitude of these indicators, which directly impact final sales volume, is calculated as a percentage. The resulting values are summed up to represent our overall planned growth rate.

For example, we are setting the following parameters for 2026:

- The expected inflation rate in Uzbekistan will average 7.5%;
- Increase in prices for metal and raw materials - 7%;
- The increase in transport and logistics costs is 5%.

By summing these indicators (and factoring in the target growth of the business itself), we arrive at the overall planned revenue growth rate. Thus, in our case, the final growth rate is 1.195 (meaning we plan to grow by 19.5%).

Now, to get the planned revenue for the next 12 months using the traditional method, we need to multiply the base values of the previous periods by our adjusted seasonality factor and by the resulting growth factor (1.195).

As a result of the adjustments we made, we received the following table (Table 5):

Table 5.

Preparing forecast values for the sales budget of Saturn Metal LLC for 2026

Month	2025	Average 2025	Seasonality coefficient	Growth rate	2026 Forecast
Jan	168	**500.08**	**0.28**	**1,195**	168
Feb	137	**500.08**	**0.60**	**1,195**	360
March	773	**500.08**	**1.76**	**1,195**	1052
Apr	630	**500.08**	**0.65**	**1,195**	385
May	699	**500.08**	**0.61**	**1,195**	364
June	269	**500.08**	**0.52**	**1,195**	310
Jul	492	**500.08**	**0.87**	**1,195**	518
Aug	208	**500.08**	**0.70**	**1,195**	421
Sep	250	**500.08**	**0.55**	**1,195**	331
October	905	**500.08**	**2.56**	**1,195**	1531
Nov	431	**500.08**	**0.78**	**1,195**	469
Dec	1040	**500.08**	**2.11**	**1,195**	1263

All calculations we've performed up to this point were based on traditional sales budgeting methods. Once the company makes a forecast for 2026, it remains steadfast and adheres to it, which is a drawback of traditional budgeting. To create a sales budget and calculate planned revenue using the flexible method, we need to add two key features:

1) Consider multiple scenarios, that is, pessimistic and optimistic forecasts along with the realistic (baseline) one.

2) Establish clear boundaries of operating capacity within which the company can operate.

For example, let's imagine that Saturn Metal expects two event outcomes in 2026. One is pessimistic, where raw material prices increase not by 7%, but by, say, 10%, and transportation costs increase by 5%. The other is optimistic, where raw material prices increase by only 3% and transportation costs decrease by 2%.

Table 6.

Table of outcomes for making a flexible forecast

Scenario	Inflation	Price of raw materials	Transportation costs	Growth rate
Pessimistic	**7.5%**	**+10%**	**+10%**	**27.5%**
Realistic	7.5%	+7%	+5%	**19.5%**
Optimistic	**7.5%**	**+3%**	**+3%**	**13.5%**

Based on these results, we obtain the results for all three scenarios (Table 7):

Table 7.

Creating a flexible sales forecast Saturn Metal LLC

Month	Seasonality coefficient	Growth rate			2026 Forecast		
Scenario		Pessim	Real	Optimum	Pessim	Real	Optimum
Jan	0.28	1,275	1,195	1,135	179	168	159
Feb	0.60	1,275	1,195	1,135	384	360	342
March	1.76	1,275	1,195	1,135	1122	1052	999
Apr	0.65	1,275	1,195	1,135	411	385	366
May	0.61	1,275	1,195	1,135	388	364	346
June	0.52	1,275	1,195	1,135	330	310	294
Jul	0.87	1,275	1,195	1,135	552	518	492
Aug	0.70	1,275	1,195	1,135	450	421	400
Sep	0.55	1,275	1,195	1,135	353	331	314
October	2.56	1,275	1,195	1,135	1633	1531	1454
Nov	0.78	1,275	1,195	1,135	500	469	445
Dec	2.11	1,275	1,195	1,135	1348	1263	1200

Therefore, using a flexible budgeting method allows an organization to identify periods of potential revenue growth and decline in advance. This enables more effective planning of purchases, production volumes, cash flow, and working capital requirements.

Based on the comparative analysis, it can be concluded that the traditional budgeting method is less adaptive to changes in the external environment and is primarily suitable for stable business conditions. The flexible method, on the other hand, provides a more realistic assessment of the company's future financial performance, as it takes into account seasonality and market fluctuations. Therefore, in today's highly uncertain and dynamic market environment, flexible budgeting is becoming one of the most effective tools for enterprise financial management.

After the sales budget has been developed, the entire chain of drawing up the remaining budgets begins, and before drawing up the financial budget, it is necessary to develop an income and expense budget that links the operational and financial budgets.

Compiling a classic income statement using the traditional method has several drawbacks. When analyzing deviations in traditional budgeting, a simple comparison of actual versus planned total revenue and expense amounts is conducted, which is insufficient. To understand the reasons for these deviations—for example, due to lower production and sales, or changes in external prices—a flexible budget is used. It takes into account the behavior of costs, recalculating the variable indicators of the plan based on actual volumes. This allows for a comparison of the plan and actual figures across the company's variable and fixed expenses.[2]

Now let's look at how to create a flexible budget step by step. The methodology is quite simple: we take the actual budget amounts, multiply them by the planned budget, and finally add in the fixed expenses.

To begin, let's look at a more detailed form of the income statement with planned and actual values for 2025 and divide expenses depending on their nature, that is, into variable (the amount of which changes with an increase or decrease in sales volume) and fixed (the amount of which does not change).

[2] Flexible Income and Expense Budgeting in Excel | finalytics.pro

This table shows that the organization failed to consider the worst-case scenario and, while they planned for a profit of 578 million soums, they ended up with a loss. Calculating the deviations reveals the differences between the figures. However, some of the company's expenses are variable, so comparing them to the plan is inaccurate.

Table 8.

Adjusted analytical form of the income statement

Budget item	Plan 2025	Fact 2025	Deviation	% Issue
Sales, units	**9250**	**9550**	**300**	**1.03**
Revenue	**11,500,000.00**	**7,971,075.00**	**-3,528,925.00**	**0.69**
Cost of sales	9,850,000.00	7,196,327.00	-2 653 673,00	0.73
Gross profit	**1,650,000.00**	**774,748.00**	**-875 252,00**	**0.47**
Operating expenses:	**820,000.00**	**748 220,00**	**-71,780.00**	**0.91**
Variables				
Transportation costs	410,000.00	298,220.00	-111,780.00	0.73
Constant				
Payroll / Salary	280,000.00	320,000.00	40,000.00	1.14
Rent	80,000.00	80,000.00	0.00	1.00
Depreciation	50,000.00	50,000.00	0.00	1.00
Operating profit (EBIT)	**830,000.00**	**26,528.00**	**-803 472,00**	**0.03**
Other income from fixed activities	50,000.00	170,478.00	120,478.00	3.41
Earnings before interest and taxes	**880,000.00**	**197,006.00**	**-682,994.00**	**0.22**
Interest payable	50,000.00	40,789.00	-9 211,00	0.82
Exchange rate losses	300,000.00	285,111.00	-14,889.00	0.95
Other income from financial activities	150,000.00	116,999.00	-33,001.00	0.78
Profit (loss) before tax	**680,000.00**	**-11,895.00**	**-691 895,00**	**-**

Income tax (15%)	102,000.00	0.00	-102,000.00	-
Net profit (loss)	**578,000.00**	**-11,895.00**	**-589 895,00**	**-**

Calculation of variable planned indicators

At this step we installvariable planned indicators such as planned prices and unit costs, as well as variable planned costs per unit of the sales plan.

Table 9.

Variable planned prices and unit costs

	plan	changeable plan per unit
Sales, units	**9250**	
Revenue	**11,500,000.00**	**1,243.24**
Cost of sales	9,850,000.00	**1,064.86**
Gross profit	**1,650,000.00**	**178.38**
Variable costs		
Transportation costs	410,000.00	44.32
Total variable expenses	**410,000.00**	**44.32**

Flexible budgeting

To create a flexible budget, we take actual sales volume and multiply it by planned prices and variable costs. Fixed costs remain unchanged—we carry them over from the regular plan as is.

Table 10.

Flexible income and expenditure budget (FIEB)

Budget item	Plan 2025	Flexible Budget 2025	Deviation
Sales, units	**9250**	**9550**	**300**
Revenue	**11,500,000.00**	**11,872,972.97**	**372,972.97**
Cost of sales	9,850,000.00	10,169,459.46	**319,459.46**
Gross profit	**1,650,000.00**	**1,703,513.51**	**53,513.51**
Operating expenses:	**820,000.00**	**873,297.30**	**53,297.30**

Variables			
Transportation costs	410,000.00	423,297.30	13,297.30
Constant			
Payroll / Salary	280,000.00	320,000.00	40,000.00
Rent	80,000.00	80,000.00	0.00
Depreciation	50,000.00	50,000.00	0.00
Operating profit (EBIT)	**830,000.00**	**830 216.22**	**216.22**
Other income from fixed activities	50,000.00	170,478.00	120,478.00
Earnings before interest and taxes	**880,000.00**	**1,000,694.22**	**120,694.22**
Interest payable	50,000.00	40,789.00	-9 211,00
Exchange rate losses	300,000.00	285,111.00	-14,889.00
Other income from financial activities	150,000.00	116,999.00	-33,001.00
Profit (loss) before tax	**680,000.00**	**791 793.22**	**111,793.22**
Income tax (15%)	102,000.00	118,768.98	16,768.98
Net profit (loss)	**578,000.00**	**673,024.23**	**95,024.23**

The table shows that, with sales volumes equal to the actual ones, the company should have earned 673 million soums in profit, not 578 million soums, as stated in the income statement. The largest deviations are in revenue and cost figures, while transportation costs are higher than actual ones, both due to the increase in sales volume and after accounting for price effects.

The study showed that the implementation of flexible budgeting mechanisms in Saturn Metal LLC's management accounting system significantly improves the quality of financial planning, control, and management decision-making. Unlike the traditional approach based on a single static forecast, flexible budgeting takes into account the impact of seasonality, changing market conditions, and various environmental scenarios, enabling a more realistic assessment of the company's future financial performance.

During the analysis, a revenue forecasting model was developed based on adjusted seasonality coefficients calculated using representative data for 2024–2025. These calculations allowed for the formation of not only a baseline sales forecast for 2026 but also alternative scenarios, significantly expanding management's ability to manage risks and plan the company's operations.

The use of a flexible income and expense budget demonstrated particular practical value. Unlike traditional plan-to-actual analysis, which only captures final variances, the flexible budget allowed us to separate the impact of sales volume from the impact of price factors on the company's financial performance. For example, the analysis revealed that of the total net profit variance of 589,895 thousand soums, the positive impact of increased sales volume accounted for 95,024 thousand soums, while the majority of the variance (-684,919 thousand soums) was due to changes in prices, costs, and other performance factors. Consequently, management is able to not only acknowledge the failure to achieve planned targets but also identify the specific causes of these variances.

To implement the proposed system, it is advisable to use modern digital tools for automated management accounting. In particular, the use of Power BI allows for automated data collection from enterprise accounting systems, prompt recalculation of flexible budget indicators when sales volumes change, visualization of key performance indicators (KPIs), creation of interactive dashboards, and real-time multivariate variance analysis. Automated calculations reduce the labor intensity of the budget process, minimize the likelihood of errors, and provide managers with up-to-date information for management decision-making.

In conclusion, the implementation of flexible budgeting combined with modern analytics and data visualization tools contributes to increased transparency in management accounting, greater control over the use of enterprise resources, improved financial planning, and increased resilience of Saturn Metal LLC to changes in the external economic environment. In today's highly uncertain market environment, this approach is one of the most effective tools for improving the company's financial performance and competitiveness.

REFERENCES

1. Law of the Republic of Uzbekistan (new edition) "On Accounting"https://lex.uz/acts/90764
2. On approval of the national accounting standard of the Republic of Uzbekistan (NAS No. 1) “Provision of financial statements and accounting policies” Order of the Minister of Economy and Finance of the Republic of Uzbekistan, registered on August 6, 2024, registration number 3544
3. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 4, “On approval of the regulation on the procedure for developing, monitoring and evaluating the effectiveness of budget programs of budget fund distributors when implementing the program budgeting system in the Republic of Uzbekistan” dated 04.01.2024.
4. Sarantsev V.N. Analysis of budgeting models in the field of public finance management / Bulletin of SSSEU. - 2011. - No. 4 - P. 131 - 135.
5. Yusupova F.Z., Makhmudova O.N. Budgeting as a tool of management accounting // Luch nauki. - 2026. - Part 61. - Vol. 3. - P. 15-21.
6. Musaeva Sh.A. Marketing research. Textbook, STAR-SEL LLC, publishing and creative department. Samarkand, 2024.
7. Musayeva Shoira Azimovna, Usmanova Dilfuza Ilhomovna Method for assessing the effectiveness of the system of state regulation and support of entrepreneurial activities YASHIL IQTISODIYOT VA TARAQQIYOT 2026-yil, oktabr. 10-son, II-qism.