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E-mail: 23aida@mail.ru, aakhmetova.71@mail.ru, n_urazbaev@mail.ru**APPLICATION OF AN IMPROVED SYSTEM FOR ACCOUNTING
FOR INCOME AND COST VARIANCES
IN THE "STANDARD-COSTING" SYSTEM**

Abstract. The main purpose of the organization is to calculate the cost and cost accounting system "Standard - costing" – an assessment of the results of an economic entity based on a comparison of actual and standard costs. The first step in assessing the company's performance is to identify variances in the field of efficiency and inefficiency. The article considers the procedure for analyzing and accounting for variances from the norms of income and expenses in the "Standard - costing" system. The cost of materials used in the production of products depends on the cost of materials and the number of materials. Since the actual quantity of materials used differs from the standard, and the actual price may differ from the standard price, the actual costs are different from the standard. Thus, variances in the use of materials can also be calculated based on its price. Variances in material usage are generally monitored by the shop manager. The reason for this variance may be careless loading and unloading of materials by production personnel, purchase of low-quality materials, theft, changes in requirements and methods of production under quality control. Some variations in material costs should be calculated for each type used and divided by responsibility centers. The cause of the variance from the management of ZHAS LLP has not been identified, and the responsibility for the variances should rest primarily with the manager of the production workshop.

Key words: "Standard costing" system, income, expenses, variances, material costs, labor costs, production, manufacture, material, analysis.

Introduction. Variance analysis is the arrangement of the total volume of individual components in order to establish reasonable directions of influence and volume on the factors of variances. This analysis is an important way to obtain the information needed to draw management's attention to various types of variances at the level of controlled costs and revenues that differ from the standards that are not included in the plan at all. The availability of such information makes it possible to take measures to correct the consequences of any operations and phenomena [1].

Methods. The amount of labor that should be spent on the actual consumption of products is determined by the production time in normal hours.

Results and discussion. The general scheme for analyzing income and losses in the Standard-costing system is shown in figure 1.

According to figure 1, income variances can occur in 3 directions: variances in sales and turnover costs, variances in total production costs, and total variances in revenues from total sales. The variance in sales and operating costs are not analyzed in the standard-costing system, as they are designed to account for production costs only [2].

Variances for total production costs are divided into 3 types:

- total variances of the main materials;
- total variances in the wages of the main production workers;
- total variances of variable overhead costs.

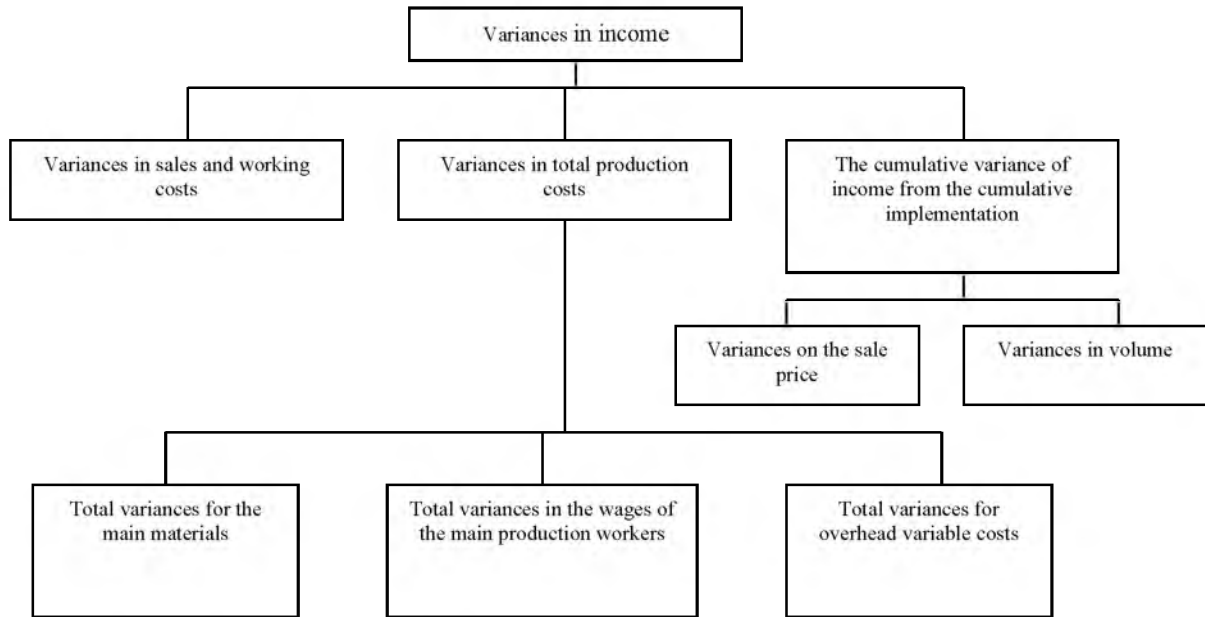


Figure 1 – General scheme of analysis of income and losses in the “Standard-costing” system

The analysis of variances consists in determining the nature and extent of the impact on changes in quantity and price. In this case, the price is not only the price of the material assets used, but also the marginal rate of labor costs and variable invoices. Therefore, the quantity and price variance can be set for all 3 production cost elements.

The total variance by revenue from total sales is the variance that occurs in the sales section: the variance by sales price and the variance by sales volumes [3].

The cost of materials used in the production of products depends on the cost of materials and the number of materials. Since the actual quantity of materials used differs from the standard, and the actual price may differ from the standard price, from the standard of actual costs. Thus, variances in the use of materials can also be calculated based on its price.

Causes of variances:

- variance between the normative and actual costs of the corresponding materials per unit of production;
- variance between the standard and actual price relative to the material.

The place of origin of variances on materials are: in the first case, the production workshops of the enterprise, in the second case, the purchasing department or the warehouse. Variances in the price of the material occur due to an increase in the cost of the material [4].

Also, transport costs received from the company are included in the actual cost price.

Material price variances are calculated using the following formula:

$$MPV=(AP - SP) \times AQ \tag{1}$$

here: MPV – Material price variances; AP – Actual purchased; SP – Standard purchased; AQ – Actual quantity purchased.

The negative view that variations in cost of material will always be derived from the performance of the procurement division. The actual cost may increase due to regulatory changes, depending on the reasons for all increases in the material. Therefore, changes in cost may be beyond the control of the purchasing department. In contrast, adverse cost variances can also be caused by an erroneous calculation in the procurement section when searching for the most efficient suppliers. Acceptable variances in cost may also be associated with the purchase of low-quality materials that cause deterioration of product quality or increase the number of product residues. If the reason for such expenses is the purchase of low-

quality materials, then the responsibility for variances in the use of materials may be assigned to the purchasing department.

In this case, the place of occurrence of variances in the cost of the material is the purchasing department, where such a variance is not controllable, i.e. it does not depend on the person who is responsible for the resulting variance[5].

In addition, there is a variance between the standard and actual material consumption for this type of product. The main place where variances occur is the production shop.

Material usage variances are calculated using the following formula:

$$MUV = (SQ - AQ) \times SP \quad (2)$$

here: MUV – Material usage variance; AQ – Actual quantity of materials for production; SQ – Standard quantity of materials; SP – Standard price of the material

Wheat is used to produce flour. Variances in material usage are generally monitored by the shop manager. The reason for such a breach may be a change in production requirements and the handling of unloaded and unloaded material by the production staff, the purchase of low quality materials, theft, quality control. Some variations in material costs should be calculated for each type used and divided by responsibility centers.

The total variance in material costs is equal to the sum of the variations in material costs and the variations in material use. The total cost variances are calculated by the formula:

$$TCV = SC \times AO - TA \quad (3)$$

here: TCV – total cost variance; SC – standard cost; AO – actual output per unit of production; TA – Total actual labour cost.

At the next stage, variances in labor costs are analyzed. Labor costs are determined based on the cost of labor and the amount of labor used. Thus, fluctuations in cost and quantity also occur here [6].

This variance is similar to the material cost variance. Both variances are calculated by multiplying the difference between the standard and the actual paid cost of a resource unit by the actual amount of resource used. Regulatory variances on the wage rate may be in the indefinite contractual increase in its rates. In this case, the variance is not considered controlled. Variances in the wage rate can be caused by using a standard that has an average rate for operations that employ workers who are paid at several different rates.

In this case, wage variances or their components may be assigned to work by a qualified employee, usually performed by an unskilled employee. In this case, the shop manager is responsible for the variance, since it is necessary to select an employee who has the appropriate qualifications to perform this task. Variances in the salary rate observed by managers may be minimal. In most cases, variances in the actual rate rate do not take into account changes in actual rates, so they are not controlled by managers at the shop level.

Variances in the production of labor occur when there are variances in the volume of labor of the main production workers. The amount of labor that can be spent on actual output is determined by the production time in normal hours.

This variance is similar to the material usage variance. When calculating two variances, the difference between the number of normative and actual resources consumed when constructing the normative cost is added [7].

The amount of labor that must be spent on the actual output of the product, in hours, is determined by the production time.

Variances in labor productivity are usually monitored by the shop manager. They are caused by a variety of reasons. Thus, low quality material, various complexity of work, poor maintenance of machines and equipment, operation of new equipment or tools and changes in production processes - all this can be determined by labor productivity. In this case, the variance is associated with the introduction of new equipment into the production process [8].

The total labor variance is calculated from the quantitative and quantitative elements and calculated using the following method - the difference between the regulatory costs of actual production and the actual labor costs.

Similarly, variable costs are calculated and analyzed. The variable cost variance itself is not sufficiently informed. The analysis of any magnitude of this variance requires comparison with the estimates for individual items of variable overhead.

Actual revenue is not only due to estimated costs change. Real revenue also depends on the success of another sales center - sales department. It is possible to sell the product at a much higher price and at a higher price than planned. Therefore, the calculation ends with an analysis of the actual input variance in the estimate resulting from these two factors [9-11].

The general procedure for calculating and analyzing the income and expenses under the Standard-costing system is shown in Table 1 below.

Table 1 – General procedure for calculating and analyzing income and expenses in the “Standard-costing” system

№	Types of variances	The calculation of variances
Variance in the cost of resources: material, labour, variable costs resources		
1	By resource cost	Amount of resources
2	By the number of resources used	Standard cost of resources
3	Total variance of resource costs	Actual product release x regulatory costs of resources per unit of product – actual costs of resources
Variance from estimate of actual income		
1	At cost of implementation.	The actual volume of sales
2	By volume of implementation	Standard revenue per unit of production
3	The total variance for the total revenue	Total comprehensive income is the total comprehensive income

In the result, it is possible to perform deflection by the system of "Standard costing" with the following data:

- normative income from sales of products;
- standard cost of production;
- the total cost variance from the standards;
- income;
- the total variance of income;
- actual income.

For this in the Barber shop example:

- normative income from sales of products;
- standard cost per ton of products;
- gross income;
- the total variance from the standards;
- income;
- total variance of income 151743.6 thousand tenge;
- actual income.

The company's management must take into account the reasons and features of the difference between the actual income and the estimate. You can reconcile the estimated and actual profit, as shown in table 2, by including the amount of acceptable variances for output and sales, and excluding the amount of adverse variances from this amount.

Table 2 - Estimation of actual and actual revenue for "Standard Costing" calculation system, thousand tenge

Indicator	Variance		The total variance	Income
	Pleasant	Unpleasant		
Estimated net income				544317
Variances on sales: cost of sales	142503,6		151743,6	
Sales volume	9240			
Variances for direct material costs: cost		9272,75	-42476	
Expenditure (use)		38731,25		
Cost of labour: Rate	-		21217	
Performance	18198			
Unspecified variance	3019			
The variances for variable overhead	10324,8		10324,8	
Real profit				685126,4

The report presented in table 2 is a summary of variances for many responsibility centers. The agreement report therefore provides information to senior management to explain the main reason for discrepancies between estimated and actual revenue.

In general, in the standard-costing system, there is no value in terms of controlling the cost of comparing standard costs and actual costs, which is carried out with standard cost accounting methods, since the responsibility for the variance corresponds to different places of cost occurrence. None of the plot may not be the only defendant for rejection. The purpose of analyzing variances of costs and revenues in the Standard-costing system is to calculate and determine the causes of actual variances that occurred in a particular place of cost occurrence [12-14].

Thus, effective control can only be achieved by comparing standard costs and total actual costs over time for each cost location. Comparison of standard and actual costs per unit of production is not possible to determine at what stage of production the variance was made. Analysis of production cost variances per unit of production is not suitable for effective cost control.

Figure 2 shows the general scheme of the standard-costing system for analyzing and controlling variances in costs and revenues.

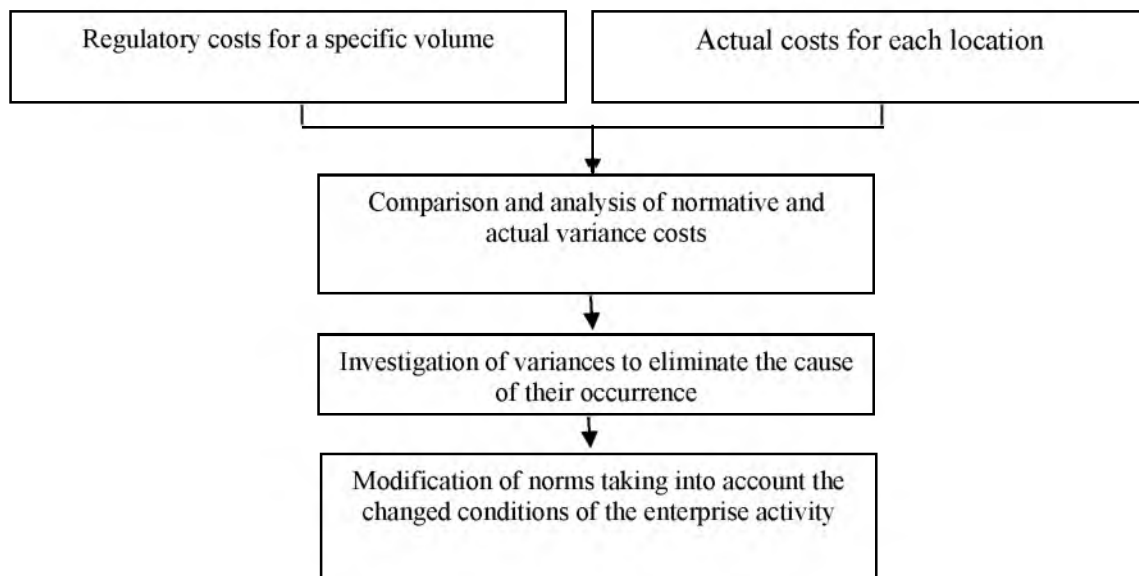


Figure 2 - Scheme of the “Standard-costing” system

Standard costs for the actual volume of production produced for a certain period are provided at the place of origin. For the same period, the actual costs are credited to the site. By comparing normative and actual costs, variances are observed [15].

The Standard-costing cost accounting system allows you to analyze variances in detail. For example, you can define the variance for cost locations by cost elements, and then analyze each cost element in terms of the standard resource expenditure and the standard cost of resources. The accountant helps managers with identifying variances that occur, and the manager can take the necessary measures to find out their causes. For example, if the accountant has identified the reasons for the variance in the use of materials as excessive use of material during a certain operation, then the manager must determine the specific reasons for the losses, examine the entire process. As a result of this check, corrective actions are taken. If the reason for the variance is a steady change in the external environment, then it is necessary to revise the standard.

Monitoring costs are significantly arises at the moment of occurrence of these costs. It is therefore necessary to set standards for the number of consumed materials, labor and services unit, first determine the total regulatory costs of the entire production volume should not. Variances must indicate the reason for their occurrence [16].

If the company has a difference in the estimated amount of actual revenue generated by analyzing variances from costs and revenues, then this variance of actual revenue from the estimate is acceptable for

the company. Two centers were identified for the variances that occurred: the shop and the sales department, and there were unfavorable variances in the cost and use of the material in the processing shop, but this variance is covered by a favorable fluctuation in the sales center's revenue.

As a result, the purpose of calculating variances is to monitor and analyze the work of production departments and departments of enterprises. For example, the analysis of variances in the enterprise is rarely carried out, since the volume of production activity from the full norm can not be considered all sides of the variance of costs. Variances in material costs are analyzed quite clearly, since they have the largest share in the cost of production, respectively, the resulting variance directly affects the company's income.

Based on the analysis of variances, management needs to draw conclusions and identify measures to reduce costs and increase revenue. Promoting the product mix in connection with improving the product structure and increasing production efficiency can lead to lower production costs.

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«СТАНДАРТ-КОСТИНГ» ЖҮЙЕСІНДЕ КІРІС ПЕН ШЫҒЫН АУЫТҚУЫН ЕСЕПКЕ АЛУДЫҢ ЖЕТІЛДІРІЛГЕН ЖҮЙЕСІН ҚОЛДАНУ

Аннотация. Ұйымның негізгі мақсаты шығындар есебінің жүйесін және «стандарт-костинг» өзіндік құнын калькуляциялау – нақты және нормативті шығындарды салыстыру негізінде экономикалық субъект қызметінің нәтижелерін бағалау. Кәсіпорын қызметін бағалауда алғашқы адым – тиімділік және тиімсіздік саласында ауытқушылықты анықтау. Мақалада «стандарт-костинг» жүйесінде кіріс пен шығын нормасынан ауытқушылықтың есебі және талдау жүйесі қарастырылған. Өнімді өндіруде пайдаланылатын материал шығындары материалдар бағасына және санына байланысты болып келеді. Өйткені пайдаланылған материалдардың нақты саны нормативтен өзгеше, ал нақты бағасы нормативтік бағадан, нақты шығындар нормативтен басқаша болуы мүмкін. Осылайша материалдарды пайдалану бойынша ауытқуды оның бағасы бойынша да есептеуге болады.

Материалдарды пайдаланудағы ауытқуды, әдетте, цех басшысы бақылайды. Мұндай ауытқушылық өндірістік персоналдың материалдарды абайламай тиеу және түсіруде, төмен сапалы материалдарды сатып алуда, ұрлықта, сапалық бақылауда талаптардың және өндіріс әдістерінің өзгерісі барысында пайда болуы мүмкін. Материалдық шығындардағы кейбір ауытқулар әрбір пайдалану түріне есептеліп, жауапкершілік орталықтары бойынша бөлінуі керек. «ZHAS» ЖШС басшылығы тудырған ауытқушылық себебі айқындалмаған және ауытқушылыққа қатысты жауапкершілік негізінен өндірістік цехтың басшысына жүктелуі тиіс.

Материалдың құны бойынша ауытқу мен біз талдаған ауытқудың ұқсастығы бар. Екі ауытқушылық та пайдаланылған ресурстың нақты санына ресурс бірлігінің нормативтік және нақты төленген құны арасындағы айырмашылықты көбейту арқылы есептеледі. Еңбекақы мөлшерлемесі бойынша ауытқу нормативтік мөлшерлемеді айқындалмаған келісімнің артуы себебінен болуы мүмкін. Бұл жағдайда ауытқу бақыланбайды. Жалақы мөлшерлемесінің ауытқуы қызметкерлерге бірнеше түрлі мөлшерлемелер бойынша төлемдер алатын операциялардың орташа мөлшерлемесі бар стандартты қолдануға байланысты болуы мүмкін.

Әдетте компоненттерді білікті жұмысшы жалдаудың орнына білікті емес жұмысшы орындайтындықтан жалақы мөлшерлемесінде ауытқу кездесуі мүмкін. Цех жетекшісі бұл ауытқуға жауап береді, тапсырманы орындау үшін білікті қызметкерді таңдауы қажет. Менеджерлер басқаратын жалақы мөлшеріндегі ауытқу төмен болуы мүмкін. Көп жағдайда, нақты мөлшерлеме өзгерісін ескерілмегендіктен ауытқу кездеседі. Цех басшылары бақыламайды.

Түйін сөздер: «стандарт-костинг» жүйесі, кіріс, шығын, ауытқушылықтар, материал шығындары, еңбек шығындары, өнім, өндіріс, материал, талдау.

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ПРИМЕНЕНИЕ УСОВЕРШЕНСТВОВАННОЙ СИСТЕМЫ УЧЕТА ОТКЛОНЕНИЙ ДОХОДОВ И ЗАТРАТ В СИСТЕМЕ «СТАНДАРТ-КОСТИНГ»

Аннотация. Основной целью организации является калькуляция системы учета затрат и себестоимости «стандарт-костинг» – оценка результатов деятельности экономического субъекта на основе сравнения фактических и нормативных затрат. Первый шаг в оценке деятельности предприятия – выявление отклонений в сфере эффективности и неэффективности. В статье рассмотрен порядок анализа и учета отклонений от норм доходов и расходов при системе «Стандарт-костинг». Материальные затраты, используемые в производстве