

# Analysis And Optimization Of Product Costs And Expenses In Enterprises

## Nodirjon Yakubdjanovich Artikov

Candidate Of Economic Sciences, Associate Professor Department Of "Economics And Real Estate Management" Tashkent Institute Of Architecture And Construction, Uzbekistan

#### Shavkat Jabborberganovich Kurbanbayev

1-Course Master Student Department Of "Economics And Real Estate Management" Tashkent Institute Of Architecture And Construction, Uzbekistan

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#### ABSTRACT

This article discusses the analysis and optimization of product costs and expenses in enterprises. Manufacturing companies and their financial statements is the subject of this article. The subject of this article is to determine the cost of production in this industrial enterprise, its current state and ways to further reduce it. And this article also aims to identify ways to reduce the cost of production in industrial enterprises in the context of modernization of the economy and to develop scientific conclusions and recommendations.

#### **KEYWORDS**

Natural resources, raw materials, supplies, fuel, energy, fixed assets, labor resources, product costs, seller's salary, marketing, consumer demand research.

#### **INTRODUCTION**

In our country, the work on modernization, technical renewal and diversification of production, the widespread introduction of innovative technologies is being carried out on a large scale. At the same time, improving the financial relations of these entities to meet market requirements, increasing the export potential by effectively reducing the cost of production will ensure the further successful development of enterprises. In the context of the gradual transition of our country to a market economy and the current global financial and economic crisis, it is important to produce competitive products (works, services) in the country. To do this, the country needs to produce inexpensive quality products that can meet the needs of consumers. One of the main issues is to reduce the cost of the product as much as possible.

Product cost - is an expression of the value of all direct and indirect costs incurred in producing that product. Cost of goods (works, services) - the value of natural resources, raw materials, supplies, fuel, energy, fixed assets, labor resources, and other costs used in the production of goods.

The cost of the product includes the following costs. These costs directly affect the production of the enterprise and form the cost of the product:

- Material costs;
- Labor costs;
- Social security contributions;
- Depreciation expense;
- Other expenses

Material costs are one of the main costs of production, which can be around 60-80% of total production costs, depending on the product (work, service). Material costs include costs of raw materials and supplies. Expenditures on raw materials and supplies are all commission and brokerage costs from the purchase of the product to its delivery to the enterprise [1].

We can include the following in material costs:

- a) Fuel and energy costs for technological purposes and household needs;
- b) Purchase of semi-finished products;
- c) Costs for packaging the product;
- d) Depreciation of cheap and perishable inventory;
- e) Taxes and deductions related to the use of natural resources

- f) Domestic waste losses;
- g) Transportation costs incurred in the production process;
- h) Other costs involved in production.

### THE MAIN FINDINGS AND RESULTS

Other costs included in the cost of production. These costs include compulsory insurance of business property, travel expenses in the prescribed manner, training costs, payments for communication services, losses due to defects, fire protection and security costs, rental costs and all other production - related costs. Production units (enterprises) in the national economy try to get more income from the results of their activities. Every company not only strives to sell its products at higher prices, but also to reduce the cost of production and sales. While sales prices of goods are determined mainly by external conditions that do not depend on the activities of the enterprise, production costs depend on the level of efficiency of the organization of production and sales of finished goods. However, there are certain costs involved in producing and selling any product. Production costs are all costs incurred in the production and delivery of goods and services to consumers. Production costs include raw materials, basic and auxiliary materials, fuel and energy costs, depreciation of fixed assets, deductions from wages and social insurance, interest payments and other costs. The monetary expression of all production costs is the cost of the product. Production costs are divided into two costs: packaging, sorting, transportation, transportation and storage. These types of transaction costs are close to the cost of production and are included in the value of the commodity and increase its value. Expenses are reimbursed from the amount of money received after the sale of goods.

# Table 1

Costs	
Production costs	Dealing costs
Salary expenses	additional dealing costs
Costs of raw materials and supplies	
Depreciation expense	net dealing costs
fuel and lubricant costs	
other expenses	

# Costs associated with the production and sale of products in the enterprise

Direct production costs are all costs incurred for the direct production of a product (wages, raw materials, depreciation, etc.). At the unit cost of a commodity, the cost of production is only a part of it. Production costs are less than the cost of goods sold. The concept of transaction costs is related to the process of selling goods, which refers to the costs incurred from the time the goods are received from the manufacturer to the time they are delivered to the consumer. They are divided into two groups: additional transaction costs and net transaction costs. In the drawing, we can see the cost of production and processing of goods in the enterprise, as well as their composition. This means that production costs include raw materials, fuel and lubricants, labor costs, depreciation costs, depreciation and other costs, as mentioned above [2].

**Dealing costs** are also called period costs. Net dealing costs (seller's salary, etc.), marketing

(consumer demand research), advertising and similar costs, Net dealing costs do not increase the value of the commodity and are offset by the profit received after the sale of the commodity created in the production process. According to the modern cost idea, the resources used in the production process of an enterprise can be its own resources or the resources involved. Accordingly, costs are divided into internal or external costs.

External costs are the costs incurred by an entity to pay for the resources and services it needs. Such costs include wages of employees, payments for raw materials and supplies, interest payments on loans, rent for rented land, payments for transportation services and various other services. External costs are documented and are also referred to as accounting costs. Costs associated with the use of resources owned by the enterprise are called internal costs. These costs do not come in the form of cash payments. For this reason, the level of internal costs is assessed by comparing the value of its resources to the market value of similar resources [3].

### Table 2

Production costs	
External costs	Internal costs
Wage costs	Building depreciation
Raw material costs	Machine equipment depreciation
Fuel energy costs	Rent
Transportation and communication services costs	Moderate benefits
Expenses for banking services	Moderate benefits

### Separation of production costs into internal and external costs

The normal profit, rent and wages, which are necessary for the maintenance of business within the enterprise, are an integral part of the costs.

The division of costs into internal and external costs allows you to make a comparative analysis of ways to improve the economic efficiency of the enterprise. Fixed and variable costs also vary depending on the degree of dependence on changes in production. Costs that do not affect the volume of goods that do not change (decrease or increase) in the volume of production are called fixed costs. Fixed costs do not depend on the volume of production, do not directly affect its growth, and can exist at any, even zero volume of production. These include the company's payment obligations (interest on loans, etc.), taxes, depreciation, rent, security fees, equipment maintenance costs, management salaries, etc.

Variable costs affect the increase or decrease in the quantity of goods produced and vary depending on changes in production volumes. It includes expenses for raw materials, supplies, fuel and transportation services, workers' salaries, and so on. At each level of production, the sum of fixed and variable costs is the total or total cost. Uses the concepts of Average Total, Average Fixed Average and Average Variable Costs to calculate unit production costs, Average total costs are the ratio of gross (total) costs to the amount of goods produced. Average fixed costs are determined by dividing fixed costs by the amount of product produced. Average variable costs are determined by dividing variable costs by the amount of product produced.

In order to achieve the highest level of profitability, it is necessary to determine the required amount of commodity production. In addition, it is a tool for economic analysis the concept of cost serves. First of all, the additional cost is the additional cost associated with the production of each unit of subsequent products. Additional costs can be determined for each additional unit of output produced. The large amount of resources an enterprise uses, i.e. live labor, raw materials, fuel and energy consumption, can guickly and easily influence changes in the volume of goods. It takes a long time for the volume of goods to change due to the consumption of other resources. For example, the production capacity of heavy industries can affect the change in output over a much longer period of time. This means that the time factor, ie the time elapsed before the final result of the expenditure, has a significant effect on the calculation of production costs. Therefore, based on the time factor, production costs are analyzed separately in the short and long term.

The classification of costs mentioned above, as noted, is used by management to plan, analyze, calculate, and pay taxes correctly. It is also used to control costs to ensure their efficient use, increase production and sales, and improve quality. At the same time, in order to control costs accurately and skillfully, it is necessary to know and be able to use the indicators that represent them. These include:

- The amount by type of production costs;
- Cost dynamics;
- Cost level and their difference;
- Absolute and relative differences in costs as a result of comparison with base period and business plan data;

The amount of production costs characterizes the monetary change in production costs for a certain period of a particular product (work, service) by enterprise, department. Based on them, it is possible to quantify the volume of production costs, the dynamics of several years and information about their changes. This indicator is necessary for managers to plan expenditures by type and as a whole, as well as to allocate funds for the purchase of necessary inventories, labor and financial resources. The cost structure is necessary to analyze the materiality and labor intensity of enterprises with high level of automation, labor and mechanization, where raw materials are used, along with determining the share of individual cost types in their total amount. Studying changes in the cost structure will be the basis for future management decisions to improve the cost structure and increase their efficiency. To determine the cost structure, the data are taken from Form 2 of the Financial Statements "Income Statement", Form 5 "Appendix to the Balance Sheet", as well as from the statistical report "Statement of Production Expenses". The cost level is the cost of a finished product, commodity, or product sold. This is necessary to calculate the cost-effectiveness, dynamics and their relative differences.

Analysis and assessment of the cost of production of an enterprise are related to the method of calculating the cost of production of an enterprise and calculating the cost of production. The total amount of material, labor and financial costs incurred per unit of production is called the cost of the product [8]. The cost of the product (work) can be determined using one of the following calculation methods:

- Sample cost calculation;
- Process calculation;
- Normative calculation.

A typical cost calculation represents a cost of a special order, a bunch of goods, and a contract. The standard costing method is used when a company receives an order from a consumer to produce a group or unit of a product, for example, in construction, printing, aircraft, furniture, machinery, repairs, auditing or consulting services, and so on. The standard method of calculation is divided into three types depending on the volume of orders: 1. order cost calculation; 2. calculation of the cost of a consignment (group) of goods. 3. contract cost calculation.

It is then necessary to calculate and study the impact of internal and external factors on the cost of the enterprise. The main factors that affect the level and amount of costs of the enterprise include:

- Volume of products produced and sold;
- Costs of raw materials and supplies;
- Quantitative and qualitative composition of production staff and management staff;
- Labor productivity of workers;
- Services and description of other organizations;

- Efficiency of use of fixed assets and intangible assets;
- Efficiency of current (working) funds;
- Timely and high-quality structure of contracts with buyers and suppliers and the organization of payment discipline.

Each of these factors has its own way of calculating the cost. Business leaders, analysts, and auditors need to be able to calculate the impact of these factors in cost analysis and analysis, analyze each factor separately, and use them to make cost-effective and costeffective management decision recommendations should produce tips.

## CONCLUSION

The modernization, technical renewal and diversification of production, the widespread introduction of innovative technologies are being carried out in our country on a large scale, which has a direct positive impact on the growth of the potential of our economy. The work carried out by the first President of our country IA Karimov, the development of a program of anti-crisis measures have managed to prevent such negative consequences in a timely manner. Today, leading economists from all over the world are positively assessing work in our country, the anti-crisis acknowledging the correctness of the Uzbek model, and emphasizing the importance of studying the experience of our country. Our country has become one of the few countries in the world that survived the financial and economic crisis. In industrial enterprises, work has always been carried out to improve the cost of production and reduce it. Because in today's market economy, companies are trying to increase their competitiveness are not only in domestic markets but also in foreign markets. However, the importance of this

work, ie the reduction of production costs, has increased in the context of the global financial and economic crisis. For this purpose, in order to provide full support to enterprises in our country, especially those exporting products abroad, benefits and incentives have been provided. The government has taken various measures to reactivate bankrupt enterprises. One of the most important steps in the anticrisis program in our country is to sharply increase the charter of the country's banks in order to increase their financial stability. This will greatly improve the financial relations of banks with enterprises. It has ensured the rapid and timely circulation of funds of enterprises in banks. This will ensure that production is on time. In addition, the increase in banks' reserves has increased the ability of enterprises to provide various soft loans. As a result, many enterprises in our country, especially those exporting products abroad, have been able to obtain soft loans from banks. As a result, the volume and quality of production of enterprises have increased. Temporary interruptions in production were prevented due to non-receipt of funds for the sale of products at exporting enterprises. As a result, productivity has increased, the company has used its assets more efficiently and their profitability has increased. This, in turn, resulted in a reduction in the total cost of production as a result of a reduction in fixed costs, which are part of the cost of production. The high financial condition of the enterprise is very important in reducing the cost of production in industrial enterprises. The acquisition of modern technology, which is necessary for the production of products, increases the quality and volume of products and brings a lot of positive results. The most important of these is Labor Productivity,

because one of the biggest costs in manufacturing today is the cost of labor. In some industries, such as computer software development and repair, the highest costs are labor costs. In such conditions, it is very important to increase the production and improve product quality through the effective use of workers in the enterprise. As a result, the cost of production of the enterprise is further reduced. It is also important to calculate the depreciation of long-term assets in the enterprise. In today's fast-changing market economy, the accelerated method of depreciation calculating has its own advantages. The use of accelerated depreciation in the production of goods, on the one hand, increases the cost of production of temporary products, but as a result of depreciation, the company receives a lot of money. As mentioned above, this leads to many positive results. On the other hand, in the early years, the value of the product increases as a result of a large amount of depreciation on an accelerated basis, in subsequent years the depreciation is calculated and the value of the product decreases. As a result of increasing labor productivity, the allocation to the social insurance fund, which is part of the cost of production, will be used more efficiently. This allocation is also one of the main costs for the company and is calculated in direct proportion to the cost of wages. If the company achieves the efficiency of labor costs, in turn, it achieves the efficiency of these costs. This means that in any situation, including in the context of modernization of the economy, enterprises can increase the quality and volume of products, use the benefits provided by different countries, reduce the cost of production as a result of more efficient use of workers and employees. This further increases

the financial stability of the company. Based on the above conclusions, we made the following recommendations for our thesis:

- The efficient use of raw materials in industrial enterprises, that is, their excessive waste should not be allowed. Otherwise, it increases the cost of production by increasing the cost of raw materials and supplies. When used wisely, they can reduce the cost of production.
- 2) It is necessary to increase labor productivity by promoting the effective use of employees. It is necessary to strengthen control over the improvement of quality and quantity in the production of products, the higher the productivity, the lower the cost of production.
- It is necessary to ensure the efficient use of fixed assets. Fixed assets that are less efficient in production should be sold or leased to other enterprises. As a result, depreciation is less, which further reduces production costs.
- 4) It is necessary to keep and analyze all the accounts in the enterprise on a regular basis. The most optimal method of amortization calculation should be selected. At best, it stems from the conditions of the enterprise at that time. The choice of the accelerated depreciation method will bring more money to the company. As a result, the company will be able to finance various operations or quickly acquire the modern equipment needed for production. This allows for a subsequent reduction in production costs.

- 5) It is necessary to effectively use the soft loans provided by banks. In this case, the company will be able to prevent various interruptions in production, to carry out production on time. As a result of the effective use of concessional loans, labor productivity will increase. This will reduce production costs.
- 6) In the context of modernization of the economy, the best way to pay for the sale of products is prepayment. This prevents an increase in the company's accounts receivable and ensures the smooth operation of production.

## REFERENCES

- Vakhobov A., Jumayev N., Hoshimov E. "The global financial and economic crisis: causes, characteristics and ways to mitigate the impact on the economy" Tashkent: "Akademnashr" 2009. 123. -p. 14.
- Vakhobov A, Malikov T. Finance: general issues. Tashkent: "ECONOMY" 2008. 354 p. 15.
- Proceedings of the Republican scientific-practical conference "Issues of improving the financial and budgetary system in the context of the global financial and economic crisis" (Part II) (March 2010). Tashkent: "ECONOMY- FINANCE", 2010. 94 –p. 30.
- Proceedings of the Republican scientific-practical conference "Issues of improving accounting, auditing and analysis in the context of the global financial and economic crisis" (Part II) (December 11-12, 2009). Tashkent: "ECONOMY", 2009. –p. 174

- Polese, A., Rodgers, P., & Rasanayagam, J. (2011). Informal economy, informal state: the case of Uzbekistan. International journal of sociology and social policy.
- Avazov, N. (2020). THE ROLE OF DIGITAL ECONOMY AND ICT IN DEVELOPING ECONOMICS OF UZBEKISTAN. Архив научных исследований, (23).
- Karimov, N. (2020). Development opportunities of scoring method of consumer crediting in Uzbekistan.
  Архив научных исследований, (31).
- 8. Aw-Hassan, A., Korol, V., Nishanov, N., Djanibekov, U., Dubovyk, O., & Mirzabaev, A. (2016). Economics of land degradation and improvement in Uzbekistan. In Economics of land degradation and improvement–A global assessment for sustainable development (pp. 651-682). Springer, Cham.
- Avazov, N., & Abduraxmonov, M. (2020). STRUCTURAL REFORMS IN THE DEVELOPMENT OF THE DIGITAL ECONOMY IN UZBEKISTAN. Архив научных исследований, (26).