

THE IMPACT OF MARKET FACTORS ON PRICING POLICY

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Introduction. The transformation of the economic system in Ukraine, in the conditions of martial law, has jeopardized the development and functioning of a large number of private establishments. The changes that are taking place in the Ukrainian economy today are mostly negative in terms of changes in the conditions of activity and management of enterprises. The consequences of recent events have become particularly visible in the construction business. The construction sector plays one of the main social and economic roles in the economy of most countries, regardless of their geopolitical situation, population, level of development, population size, and so on.

The suspension of demand for private housing and commercial buildings due to the devastating consequences of military actions threatens the survival of construction enterprises of all levels and orientations across almost the entire territory of Ukraine, which in turn causes destabilization of the national economy. The main problems of the development and functioning of construction-oriented enterprises have become competition and resource limitations. In this regard, the need to improve strategic planning of the organizations' activities as a whole, production optimization, special attention to competitive pricing policies, etc., comes to the forefront.

However, despite certain temporary difficulties, the future reconstruction requires making important management decisions aimed at preserving and developing existing enterprises, as well as creating new innovative ones.

Long-term effective work of modern construction businesses requires detailed prior preparation, both at the stage of enterprise creation and throughout its entire existence. Owners of production organizations need to address a number of priority tasks [1]:

- to forecast necessary financial expenses;
- to develop a strategy for the operation and further development of the enterprise;
- to plan the financial results;
- to develop a pricing policy to determine the competitiveness of products, financial results, and overall feasibility of activities
- others.

Despite the fact that fundamental changes in successful entrepreneurship, from a historical development perspective, contribute to the growing influence of "non-price" factors (product quality, service, personal relationships, sales incentives, etc.) on product sales, price remains an integral component in choosing and giving preference when purchasing a particular product.

Therefore, one of the main objective factors influencing successful planning of the work of manufacturing organizations is the establishment of a justified level of prices in the market of building materials, which includes forecasting the effectiveness of pricing policy and understanding how the planned pricing system will address the possibility of successful development and competition.

Analysis of recent research and publications. Most studies related to the development and analysis of pricing policies of enterprises are focused on issues of market strategy development, as modernization of pricing formation and pricing systems leads to increased profitability and revenue, which are key factors for the effectiveness of any business [2; 3; 4]. Theoretical and methodological foundations for creating pricing

systems and pricing policies in general are the subject of research by scholars such as Korzh M., Mazur O., Demchuk N., Fedorysheva A., Kotler F., Howard K., and others.

Most modern research is focused on improving the methodology and principles of implementing pricing policies. However, in our opinion, forecasting and strategic analysis of the pricing behavior of enterprises directly in the modern market are equally important, both from the perspective of its reaction to the established pricing parameters of a particular product and its overall perception [5; 6; 7]. The necessity of such a comprehensive approach is also determined by a significant increase in competitive struggle in the conditions of a state of war, which changes the rules of the "game" in the market and introduces certain adjustments to the country's economy as a whole.

Objectives of the article. The aim of the research is to develop theoretical and methodological principles for creating the pricing policy of a construction manufacturing enterprise.

The main material of the study. Nowadays, entrepreneurial activity is constrained by fierce competition, which becomes a decisive factor in the process of pricing the products of construction manufacturing enterprises. The process of pricing is one of the key criteria for effective enterprise performance, which is a complex and multifaceted set of measures and begins with the correct definition of common goals from the point of view of production and sales of products [8], the most important of which are:

- creating conditions for effective sales;
- improving profitability indicators and, as a result, increasing profitability;
- capturing the market.

Depending on the nature and conditions of the enterprise's activities, priority may be given to one or another goal to a greater extent at different stages. The correct setting of pricing goals, as the basis for future pricing policy, should ensure objective market prices for its own products, which will allow to achieve sales plans with maximum profit [9; 10].

Achieving the desired financial result through the establishment of an objective pricing policy is not possible without a prior assessment of demand for the particular group of goods. The sales strategy of a construction-production enterprise in the building materials market has some differences in terms of sales technology. A significant share of the plan's implementation depends on direct sales to the target customers, which is why the majority of efforts will be focused on marketing research of the market corresponding to the target customer group with the highest efficiency in this direction. The main aspects of the business environment that need to be taken into account when studying the market situation are:

- specific features of this industry;
- most promising type of customers;
- peculiarities of own production;
- needs of potential customers;
- possible change in demand dynamics due to various factors;
- others.

In the given conditions of existence, in order to maintain and further develop the construction business, special attention should be paid to optimizing production costs, which in turn will allow for the establishment of the most effective pricing policy for the enterprise as a whole. All this cannot be done without improving cost calculation for each individual type of product.

Calculation includes groups of expenses by objects and items, which show a comprehensive measurement and accounting of costs, verify and compare the obtained results with planned ones, and help to conduct a final analysis of the production cycle of product manufacturing, according to which certain management decisions are made. Accounting methods are chosen individually, taking into account the peculiarities of the production process and the enterprise as a whole. At the very beginning of the production creation, the determination of the cost price should correspond to the stages presented in Figure 1.

The effectiveness of financial results will largely depend on the correct identification of product cost at each stage. Overall, all production costs are divided into:

- Direct costs, which include costs for producing a particular type of product and, depending on the manufacturing process and established norms, may immediately constitute its cost of production;
- Indirect costs, which include costs for producing many types of products and are allocated to each of them separately according to established principles.

As part of this scientific research, we will consider a project for the creation of a building material – polystyrene granules, Figure 2, which is one of the main components of polystyrene concrete mixtures. These

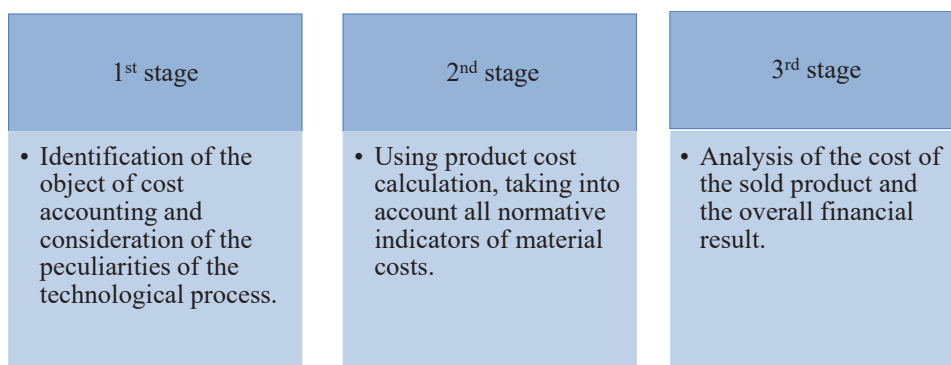


Figure 1. Stages of determining the cost of production

mixtures have found wide application in construction. First of all, they are used in enclosing structures of frame buildings, inter-apartment partitions and load-bearing walls, as an alternative insulation for various types of roofs, floors, attics, for the production of facade decorative insulation panels and building blocks, liquid solution for pouring monoliths, etc.

The main raw material for the production of polystyrene granules is microgranules, each of which consists of microscopic cells filled with air. One cubic meter of this material is 98% filled with air, contained in billions of closed cells. Before using polystyrene to create the final product, it is foamed on special equipment and then cooled. The features of the production process require the organization of a special line with the calculation of costs.

The creation of the product and the maintenance of the production line are carried out by the company's employees. In addition, administrative and management personnel are involved in a minimal amount, as well as service personnel for raw materials and materials. This organization of the production process, sales features, some differences in the construction market, and sales technology of building materials have determined the development of this calculation with the corresponding distribution of direct and indirect costs.

Overall, determining the correct cost of production depends on the proper construction of cost accounting, which is based on the choice of methods for cost objects, effective classification of costs, and the creation of an accurate calculation, as shown in Table 1.

The distribution of cost indicators between individual target groups is carried out by grouping costs by responsibility centers and economic elements. The correct calculation of the cost of production and the choice of the principle method of cost accounting are the primary tasks in creating the accounting policy of the enterprise. The variety of views on their correct formation makes this direction relevant.

From Table 1 it can be seen that the direct costs include the total amount of own costs for raw materials that can be directly attributed to one unit of the product. Indirect costs include the wages of workers and production overhead costs, line maintenance costs, the cost of auxiliary raw materials for production, sales expenses, etc. For convenience in allocating and determining the cost of production, the costs of the entire enterprise's production overheads, which include wages, fuel, charitable contributions, social assistance, office maintenance, etc., have been singled out as a separate category.

When developing a particular structure for allocating the overhead costs of producing a specific product (in this case, polystyrene granules), it is essential to focus on the peculiarities of the technological process and the organization of production itself. They relate all costs to direct and indirect ones and directly influence the formation of the distribution and the establishment of the corresponding cost items, based on inter-industry and sectoral regulations and taking into account the company's accounting policies. The cost item nomenclature should meet the requirements of analytics, controlling, and forecasting scenarios, which will facilitate the determination of the company's total costs.

Overall, the activity of a construction and production company is a certain system that combines economic resources and transforms them into a final product that, in turn, satisfies the needs of society by entering con-



Figure 2. Expanded polystyrene (EPS) granules

Table 1

Calculation of production cost for 1 m3 of polystyrene foam granules

| № | Name of the position | Unit of measurement | Cost per unit | Price per unit, UAH | Cost per unit, UAH |
|---|----------------------|---------------------|---------------|---------------------|--------------------|
|---|----------------------|---------------------|---------------|---------------------|--------------------|

Materials

| | | | | | |
|---------------------------|--|-------|-------|--------|---------------|
| 1 | Polystyrene granules for foaming (fraction 3-6 mm) | kh | 6,200 | 119,98 | 743,88 |
| 2 | Polyethylene bag (0.45 m ³) | piece | 2,222 | 14,12 | 31,37 |
| 3 | Polypropylene twine 1000 m/roll | m | 1,057 | 0,15 | 0,16 |
| Total Direct Costs | | | | | 775,41 |

Expenses

| | | | | | |
|-----------------------------|--|--|--------------|--|---------------|
| | Production costs | | 72,97 | | 72,97 |
| 1 | Production bonuses for the company's employees | | 1,54514 | | 1,55 |
| 2 | Employee bonuses for the company's employees | | 1,86947 | | 1,87 |
| 3 | Water, utilities / production | | 0,24092 | | 0,24 |
| 4 | Fuel for company vehicles / production | | 2,23455 | | 2,23 |
| 5 | Fuel for forklifts + packaging / production | | 6,71452 | | 6,71 |
| 6 | Salary for company employees | | 18,14833 | | 18,15 |
| 7 | Salary for production workers | | 33,04142 | | 33,04 |
| 8 | Taxes on company employee salaries | | 3,17272 | | 3,17 |
| 9 | Taxes on production worker salaries | | 4,87125 | | 4,87 |
| 10 | Equipment maintenance, consumables | | 0,56518 | | 0,57 |
| 11 | Protective clothing and auxiliary / production | | 0,56754 | | 0,57 |
| | Raw materials | | 28,41 | | 28,41 |
| 12 | Gas, heating | | 21,60517 | | 21,61 |
| 13 | Firewood | | 6,80066 | | 6,80 |
| | Sales expenses | | 0,12 | | 0,12 |
| 14 | Samples / Commercial goods | | 0,12071 | | 0,12 |
| Total Indirect Costs | | | | | 101,50 |

Cost per unit

876,91

| | | | | | |
|-----------------------|-----------------------------------|--|---------------|--|---------------|
| | АУП | | 131,20 | | 131,20 |
| 1 | Charity / MAP | | 2,82135 | | 2,82 |
| 2 | Bonuses / MAP | | 14,01207 | | 14,01 |
| 3 | Fuel / MAP | | 2,40275 | | 2,40 |
| 4 | Salary / MAP | | 56,95304 | | 56,95 |
| 5 | Stationery / MAP | | 0,41323 | | 0,41 |
| 6 | Business trips / MAP | | 1,64065 | | 1,64 |
| 7 | Utilities, office / MAP | | 2,76518 | | 2,77 |
| 8 | Taxes on core business activities | | 22,68035 | | 22,68 |
| 9 | Taxes on salaries / MAP | | 17,32921 | | 17,32 |
| 10 | Social benefits + NI / MAP | | 2,20961 | | 2,21 |
| | Sales expenses | | 4,00 | | 4,00 |
| 11 | CRM maintenance / advertising | | 3,99078 | | 3,99 |
| Total expenses | | | | | 135,20 |

Cost per unit, incl. VAT

1012,11

sumption through the market mechanism. In these conditions of life, the formation of the right pricing policy depends to a considerable extent on the proper functioning of the production system and is influenced by market forces (the state and the economic system as a whole) and is also an object of regulation carried out by the company's management.

Currently, the dynamism and to some extent, the uncertainty of the external environment influence the definition, development, and achievement of corresponding commercial goals. The management's controlling influence on the production system, aimed at changing its state in accordance with changing external conditions, is focused on achieving the competitive market policy of the enterprise [11; 12]. Therefore, the formation of the final price, along with the understanding of the profitability of the product, will largely depend on the market policies of competing companies.

Let's consider an analysis of the market policies of enterprises in Ukraine that are engaged in the production of polystyrene granules, Table 2.

Table 2

Analysis of Competitors' Marketing Policy

| № | Name of material | Location | Manufacturer | Packing | Price, UAH |
|----|-------------------------------------|--------------------------|-----------------------|------------------|------------|
| 1 | Expanded polystyrene (EPS) granules | Odesa, Ukraine | LLC "Bautech-Ukraine" | 1 m ³ | 1290 |
| 2 | Expanded polystyrene (EPS) granules | Odesa, Ukraine | LLC "Zuzifus" | 1 m ³ | 1250 |
| 3 | Expanded polystyrene (EPS) granules | Odesa, Ukraine | LLC "Sonant" | 1 m ³ | 1170 |
| 4 | Expanded polystyrene (EPS) granules | Odesa, Ukraine | LLC "Navek" | 1 m ³ | 1150 |
| 5 | Expanded polystyrene (EPS) granules | Ivano-Frankivsk, Ukraine | LLC "Stolit" | 1 m ³ | 1150 |
| 6 | Expanded polystyrene (EPS) granules | Lviv, Ukraine | LLC "Yevrobud" | 1 m ³ | 1200 |
| 7 | Expanded polystyrene (EPS) granules | Chernivtsi, Ukraine | LLC "TIKO" | 1 m ³ | 1150 |
| 8 | Expanded polystyrene (EPS) granules | Dnipro, Ukraine | LLC "Samara" | 1 m ³ | 1250 |
| 9 | Expanded polystyrene (EPS) granules | Zhytomyr, Ukraine | LLC "Alfa-M" | 1 m ³ | 1250 |
| 10 | Expanded polystyrene (EPS) granules | Kyiv, Ukraine | LLC "Termoplast" | 1 m ³ | 1280 |
| 11 | Expanded polystyrene (EPS) granules | Kyiv, Ukraine | LLC "VIK BUD TRADE" | 1 m ³ | 1220 |

This analysis allows investigating the competitiveness of the pricing policy of own enterprise, which involves setting prices for products at the same level as competitors, Figure 3.

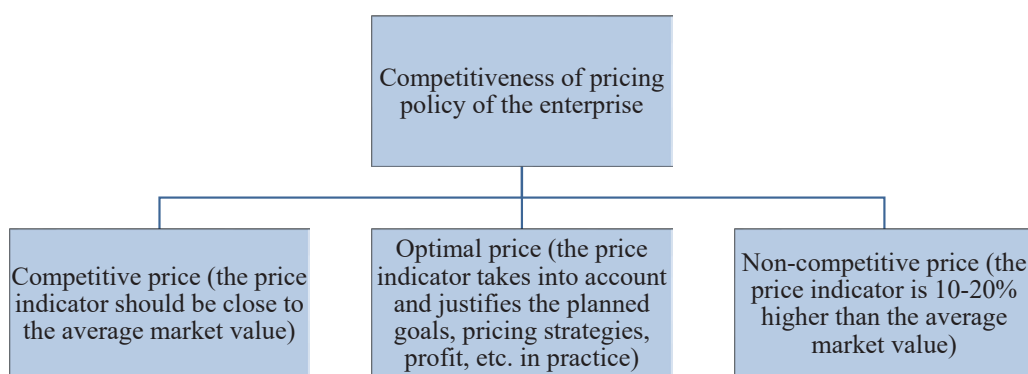


Figure 3. Competitiveness of pricing policy

However, relying solely on competitive analysis when setting prices without considering and optimizing production can be ineffective and lead to reduced profits. This is because the structure and organization of each enterprise are different, and therefore, their costs are also different. The main disadvantage of a purely market-oriented approach is that it does not take into account differences in costs (for production, procurement, labor, etc.) that are borne by different companies. Therefore, implementing a proper pricing policy that balances competitive pricing with the company's natural desire to increase profits requires the use of two effective pricing strategies, as shown in Figure 4.

Internal changes in the pricing process should be oriented towards maximizing the "painlessness" effect of financial and economic activity and be subject to a reasoned response to even the slightest competitive fluctuation.

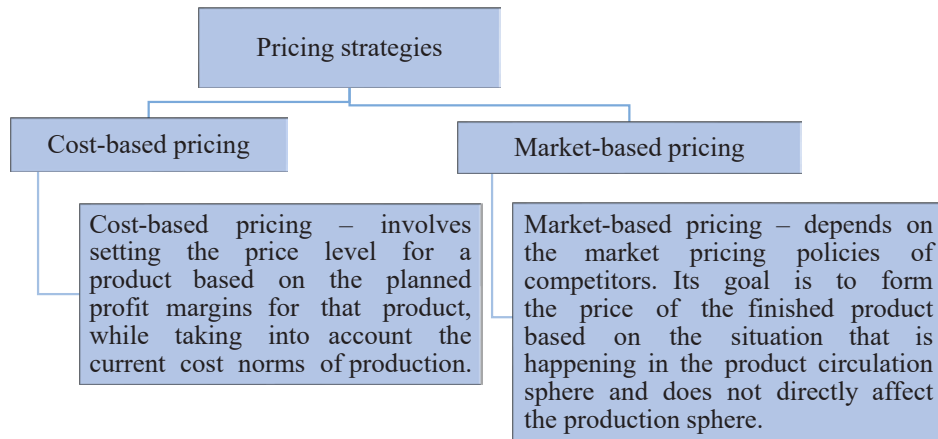


Figure 4. Pricing strategies

tuations in the market, while moving towards increasing the volume and quality of production, overall profit growth, solving necessary planned tasks, achieving strategic goals, etc. Pricing policy is quite ambiguous and complex, which is due to the influence of internal and external factors, as shown in Figure 5.

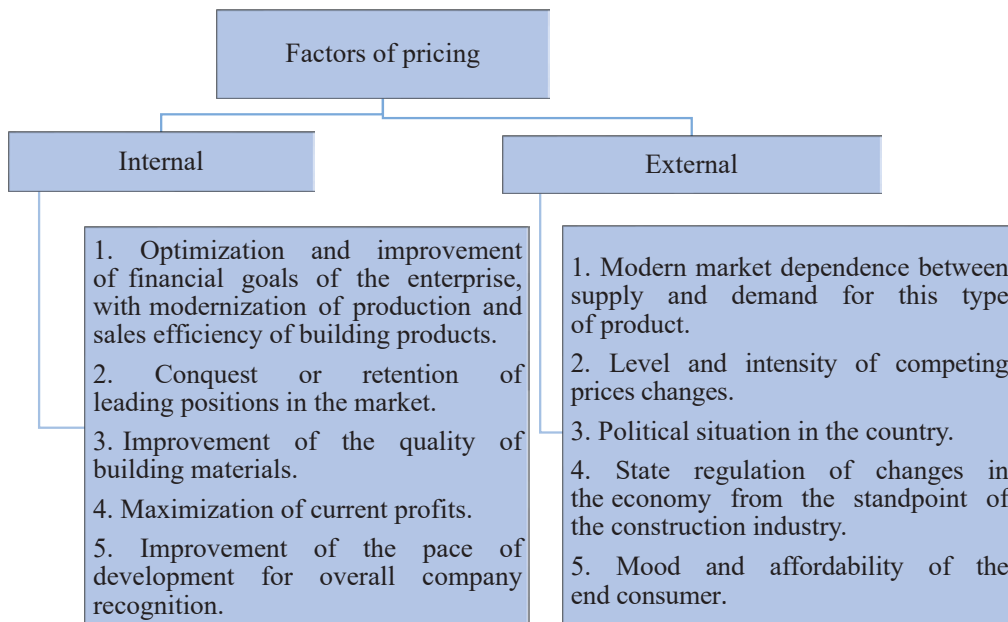


Figure 5. Factors of pricing

The next important step in developing the pricing policy for a construction manufacturing enterprise (using the example of polystyrene granules) will be determining the minimum selling price, as shown in table 3. A unique feature of the proposed strategy is the exclusion of the sales department's motivational component from the production cost calculation, creating a clear division between production and commercial departments.

The planned percentage of sales department representatives' wages depends largely on the price characteristics and profitability of all product groups of the enterprise, forecasted sales volume, compliance with the labor remuneration competitiveness of this field, etc. The minimum selling price, taking into account the production and market characteristics of the product, will be about 15% of net profit. Additionally, the author proposes a methodology for increasing profitability (through price increases) depending on the volume of consumption by various clients of the company, based on an analysis of previous sales.

It should be noted that the increase in the company's profits will largely depend on the managers' interest in selling goods at a higher price, which can be influenced by a properly developed motivation system. Based on the conducted research, the stages of forming the pricing strategy of production enterprises have been developed, as shown in Figure 6.

Table 3

Setting prices according to the developed pricing strategy.

| Name of the product | Packing | Currency / unit of measurement | Cost price | Including sales department motivation | Minimum price (by agreement) | Sales from 150 000 UAH | Sales from 100 000 UAH | Sales from 80 000 UAH | Sales of Call-center | | Recommended |
|---|---------------------|--------------------------------|------------|---------------------------------------|------------------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|-------------|
| | | | | | | | | | Sales from 20 000 UAH | Sales from 100 000 UAH | |
| Expanded polystyrene granules – a filler for polystyrene concrete (fraction 3-6 mm) | 0,45 m ³ | UAH/ m ³ | 1012 | 1093 | 1257 | 1311 | 1366 | 1421 | 1530 | 1584 | 1639 |

| | | | | | | | | |
|---|----|-----|-----|-----|-----|-----|-----|-----|
| Corresponding profitability margin (net profit) | 0% | 15% | 20% | 25% | 30% | 40% | 45% | 50% |
|---|----|-----|-----|-----|-----|-----|-----|-----|



Figure 6. Stages of forming pricing policy at an enterprise

The process of forming and changing pricing policy should be aligned with the corresponding goals of the enterprise and take into account market fluctuations. The correct determination of price will affect the profitability of the enterprise and the volume of sales in the market. Establishing an effective competitive price will influence sales volume, which, in turn, can affect costs and overall enterprise profit. Therefore, it can be concluded that the maximum balance between the interests of producers in terms of profitability, preserving existing and conquering new market positions, increasing sales volumes, etc., should be achieved through the price.

Conclusions. In the conditions of a state of war, one of the first priority steps towards creating a competitive pricing policy, which is of key importance for the successful operation of the enterprise, is to reduce and optimize production costs. In this regard, cost reduction depends on the proper organization of cost accounting system and internal control.

The determining directions that affect the effective optimization of production costs include:

- improving the speed and efficiency of accounting;
- detailing cost items;
- optimization and proper planning of all expenses, etc.

It should be noted that the competent implementation of the pricing policy at all stages of the life cycle of production enterprises, its elasticity and effectiveness, and the rational introduction of timely necessary amendments as a result of unplanned external and internal factors, ultimately plays one of the main roles in the successful, long-term operation of the company.

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JEL M5

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The impact of market factors on pricing policy.

Nowadays, business activity is subject to strict competitive struggle, which becomes a decisive factor in the pricing of building and manufacturing enterprises' products. Establishing a reasonable level of prices on the market for building materials becomes one of the main objective factors affecting the successful planning of organizations' work, including forecasting the effectiveness of pricing policies and understanding how the planned pricing system will solve the possibility of successful development and resistance to competitive policies. The article presents a methodology for creating pricing policies for construction and manufacturing companies and establishes the main objectives and tasks. The necessity of preliminary assessment of demand for a particular group of products to achieve the desired financial result is identified. Within the framework of this scientific research, a project for creating a calculation of building materials is presented, taking into account all components of the cost of production. The importance of the impact of competitors' market policies on pricing for their own range of goods is substantiated. Factors and methods of pricing are discussed, with particular emphasis on determining the final price of the product.

Key words: pricing strategy, competitiveness, costing, direct costs, enterprise, pricing, profitability.

УДК 339.1-051

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Щербина Олег Сергійович, кандидат технічних наук, аспірант, Одеська державна академія будівництва та архітектури. **Вплив ринкових факторів на цінову політику.**

Призупинення попиту на приватне житло та комерційні споруди, через руйнівні наслідки воєнних дій, ставлять під загрозу можливість виживання будівельних підприємств усіх рівнів та направленостей, майже по всій території України, що в свою чергу, спричинює дестабілізацію національної економіки. Встановлення обґрунтованого рівня цін на ринку будівельних матеріалів стає одним з основних об'єктивних факторів впливу на успішне планування роботи організацій, що включає прогнозування ефективності цінової політики та розуміння того, наскільки запланована система ціноутворення вирішуватиме можливість вдалого розвитку та протистоянню конкурентній політиці. В статі представлена методика створення цінової політики будівельно-виробничих підприємств, встановлені основні цілі та завдання. Виявлено необхідність попередньої оцінки попиту на дану групу товарів для досягнення бажаного фінансового результату. В даних умовах існування, для збереження та подальшого розвитку будівельного бізнесу, особлива увага має приділятися оптимізації витрат на виробництво, що в свою чергу, дасть можливість встановленню найбільш ефективної цінової політики для підприємства в цілому. Все це не можливо зробити без вдосконалення калькуляції витрат для кожного окремого виду продукції. В рамках даного наукового дослідження представлено проект створення калькуляції будівельного матеріалу з урахуванням усіх складових собівартості продукції. Формування остаточної ціни, а разом з тим розуміння рентабельності продукції в значній мірі залежить від ринкової політики конкурентних підприємств. Особливу увагу приділено аналізу ринкової політики та її впливу на ціноутворення власної номенклатури товарів. Розглянуті фактори і методи ціноутворення. Представлена технологія встановлення остаточної вартості продукції відповідно до діючої цінової стратегії з градацією цін в залежності від споживаного об'єму різних клієнтів компанії. На основі проведених досліджень розроблені етапи формування конкурентоспроможної цінової стратегії виробничих підприємств на ринку будівельних матеріалів.

Ключові слова: цінова політика, конкурентоспроможність, калькуляція, прямі витрати, підприємство, ціноутворення, рентабельність.