

Литература

1. Инструкция о порядке расчета коэффициентов платежеспособности и проведения анализа финансового состояния и платежеспособности субъектов хозяйствования : утв. постановлением М-ва финансов Респ. Беларусь и М-ва экономики Респ. Беларусь 27.12.2011. – Минск, 2022.
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POSSIBILITIES OF MARGINAL COSTING AS ONE OF THE COST MANAGEMENT TOOLS AT AN INDUSTRIAL ENTERPRISE

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The article deals with the theoretical foundations of marginal costing. The possibilities of this costing technique, which the enterprise receives in the field of economic and financial analysis, are determined. A set of indicators (contribution margin, break-even point, contribution margin ratio, margin of safety) is presented, which can be calculated by an enterprise if margin costing is used. The calculation of these indicators based on the data of OJSC "GZLiN" was carried out.

Keywords: marginal costing, contribution margin, contribution margin ratio, break-even point, margin of safety.

Costs determine the financial result of the enterprise, therefore, the amount of profit directly depends on the level of cost management efficiency. Effective cost management provides for the presence at the enterprise of appropriate organizational and methodological systems for ensuring this management, knowledge of the basic mechanisms for determining costs (techniques of costing), using modern methods for their analysis and planning.

Traditionally, domestic industrial enterprises use the standard costing as the main technique of costing. Standard costing refers to the preparation of standard costs and applying them to measure the variations from standard costs and analyzing the variations with a view to maintain maximum efficiency in production [1, p. 36].

At the same time, the management of the enterprise can use a number of other techniques of costing controlling costs and making managerial decisions. One such technique is marginal costing. It refers to the ascertainment of marginal costs by differentiating between fixed costs and variable costs and the effect on profit of the changes in volume or type of output. In this case, only the variable costs are charged to products or operations while fixed costs are charged to profit and loss account of the period in which they arise [1, p. 36].

Marginal costing, as one of the tools of management accounting helps management in making certain decisions. It provides management with information regarding the behavior of costs and the incidence of such costs on the profitability of an undertaking. Marginal costing is defined as "the ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs". Marginal costing is not a separate costing. It is only a technique used by account-

ants to aid management decision. This technique of costing is also known as “Variable Costing”, “Differential Costing” or “Out-of-pocket” costing [1, p. 321].

The use of this technique of costing enables the enterprise to obtain additional information after calculating the following indicators: contribution margin, break-even point, contribution margin ratio, margin of safety.

The contribution margin is the excess of sales over the variable costs of the product or service. It is the amount of money available to cover fixed costs and to generate profit. The contribution margin is a very valuable indicator when analyzing financial results. With its help, you can rank certain types of products and certain segments of the enterprise according to their level of profitability. It serves as the basis for determining the break-even sales volume for each type of product for the whole enterprise, as well as for substantiating the optimal variant of various management decisions.

The break-even point represents the level of sales revenue that equals the total of the variable and fixed costs for a given volume of output at a particular capacity use rate. Generally, the lower the break-even point, the higher the profit and the less the operating risk, other things being equal. The breakeven point formula is determined by dividing the total fixed costs associated with production by the revenue per individual unit minus the variable costs per unit.

The contribution margin ratio is the contribution margin as a percentage of sales.

The margin of safety is a measure of difference between the actual sales and the break-even sales. It is the amount by which sales revenue may drop before losses begin, and is expressed as a percentage of expected sales. The margin of safety is used as a measure of operating risk. The larger the ratio, the safer the situation since there is less risk of reaching the break-even point [2].

The calculation of the indicators presented above was carried out on the basis of data from an open joint-stock company “Gomel casting and normals plant” (OJSC “GZLiN”), located in the city of Gomel. Currently, OJSC “GZLiN” is a modern industrial organization with a fairly high potential, with sophisticated equipment and qualified personnel. The company carries out the following main activities: agricultural machinery production; production of castings from iron, steel and non-ferrous alloys; manufacture of mechanical fasteners (bolts, nuts, pins, rivets, axles, etc.); manufacturing of foundry equipment, non-standard equipment; production of cold heading tools, dies.

The above tab. 1 shows the sales, variable costs, fixed costs, total cost and profit of OJSC “GZLiN” from 2018–2020. The presented set of indicators makes it possible to calculate all the indicators discussed above.

Table 1

**The actual cost of production in OJSC “Gomel casting and normals plant”
for the 2018–2020, rubles**

Indicators	2018	% share	2019	% share	2020	% share
Marketable product (sales)	160959.3	100.0	147507.1	100.0	127257.4	100.0
Total input costs (variable costs)	79501.7	49.4	75093.8	50.9	67663.2	53.2
Fixed costs	61901.7	50.5	66649.56	45.2	52600.8	41.3
Costs of production and sales product (total costs)	141403.4	87.9	141743.6	96.1	120264.0	94.5

Ending of tab. 1

Indicators	2018	% share	2019	% share	2020	% share
Profits from marketable products (profit)	19555.9	12.1	5763.5	3.9	6993.4	5.5

Remark. Own development.

The data in tab. 1 make it possible to conduct a marginal analysis: calculate contribution margin, contribution margin ratio, break-even point, margin of safety (tab. 2).

Table 2

The procedure for calculating indicators

Indicators	Calculation		
	2018	2019	2020
Contribution margin	160959.3 – 79501.7	147507.1 – 75093.8	127257.1 – 67663.2
Contribution margin ratio	$\frac{160959.3 - 79501.7}{160959.3}$	$\frac{147507.1 - 75093.8}{147507.1}$	$\frac{127257.1 - 67663.2}{127257.1}$
Break-even point	$\frac{61901.7}{0.50607}$	$\frac{66649.56}{0.49091}$	$\frac{52600.8}{0.46829}$
Margin of safety	$\frac{160959.3 - 122318.45}{160959.3}$	$\frac{147507.1 - 135767.37}{147507.1}$	$\frac{127257.1 - 112325.27}{127257.1}$

Remark. Own development.

The calculation results are presented in tab. 3.

Table 3

Results of marginal analysis (according to OJSC “Gomel casting and normals plant”) for the 2018–2020

Indicators	Period			Deviation	
	2018	2019	2020	2019 related to 2018	2020 related to 2019
Contribution margin, thousand rubles	81457.6	72413.3	59594.2	–9044.3	–12819.1
Contribution margin ratio	0.506	0.491	0.468	–0.015	–0.023
Break-even point, thousand rubles	122318.45	135767.37	112325.27	13448.9	–2344.1
Margin of safety, %	24.01	7.96	11.73	–16.05	3.77

Remark. Own development.

The conducted marginal analysis showed that the contribution margin has been declining for three years, which is a negative trend; similar dynamics for contribution margin ratio; the break-even value of production (break-even point) is the best in 2020; the value of the margin of safety had a relatively normal value (24.01 %) only in 2018, in 2019 and 2020 the value of this indicator is in the critical zone.

The use of marginal analysis, the determination of the truncated cost of the variable part of the costs and the margin of coverage for each type of product allows you to more correctly determine the profitability of each product and its contribution to the generation of the total margin of coverage and profit of the enterprise compared to the traditional method of calculating the full cost of production. With a full calculation of the cost of production, as a rule, a significant distortion of its level is allowed due to the fact that it is very difficult to choose the right distribution base for overhead costs, as a result of which the cost of some types of products is clearly overestimated, while others are underestimated. Structural policy changes adopted on this basis may turn out to be erroneous; types of products that actually make a significant contribution to the total income of the enterprise can be removed from production.

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ОСНОВНЫЕ ПРИНЦИПЫ И КРИТЕРИИ ЭФФЕКТИВНОГО ФУНКЦИОНИРОВАНИЯ И РАЗВИТИЯ БИЗНЕС-СТРУКТУР В ГОСУДАРСТВЕ ЛИВИЯ

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Приведены обоснованные авторами ключевые принципы и критерии эффективного функционирования и развития бизнес структур в государстве Ливия. Результаты исследования могут быть использованы органами государственного управления Ливии для разработки действенного организационно-экономического механизма функционирования предпринимательских структур и формирования экономической политики стимулирования развития бизнеса в стране.

Ключевые слова: бизнес-структуры, эффективность, конкурентоспособность, государственное регулирование, принципы развития.

BASIC PRINCIPLES AND CRITERIA FOR THE EFFECTIVE FUNCTIONING AND DEVELOPMENT OF BUSINESS STRUCTURES IN THE STATE OF LIBYA

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The article presents the key principles and criteria substantiated by the authors for the effective functioning and development of business structures in the state of Libya. The results of the study can be used by the government of Libya to develop an effective organizational and economic mechanism for the functioning of business structures and the formation of an economic policy to stimulate business development in the country.

Keywords: business structures, efficiency, competitiveness, government regulation, development principles.