DOI: https://doi.org/10.59503/29538009-2023.2.12-76

COST FLOW FINANCIAL ANALYSIS ISSUES

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Abstract: The financial measurements of the results of the influence of various factors on the cost flows can carry out with analytical methods of chain replacements or differences. However, in case of managerial decisions, it should be considered that the simultaneous influence of quantitative and qualitative factors is completely attributed to the qualitative factor. Therefore, is suggested application of integral analysis of cost flows, which introduces a clear separation between the resulting measurements of quantitative and qualitative factors.

Keywords: cost analysis, expense, financial management, profit, factor analysis

JEL code: M40

Research objectives: propose effective methods of financial analysis and management of costs flows in production.

Research novelty: presented the advantages and limitations of the chain instolment factor analysis tool in the costs flows financial management process.

Introduction

Recently, revolutionary technologies have significantly changed the logic, chain and continuity of business and production processes. Therefore, cost flow analysis remains relevant to identify the dynamics of work with the latest technologies, business adaptation, impact on costs and their management.

In a constantly evolving and changing market, cost financial analysis at the academic level holds its place from the point of view of identifying potential gaps and conducting timely research, the relevance and effectiveness of analysis methods. An expense in manufacturing, research, retailing, and accounting is money that has been used to produce something or provide a service and is therefore no longer available for use. The amount spent for the implementation of the business is calculated as an expense.

Cost effectiveness analysis is the comparison and comparison of the business plan or project and the actual costs, which enable us to understand whether they have been implemented effectively from a business perspective. The aim of the research is to assess the efficiency of cost flow management, as well as to identify possible ways to reduce costs and increase efficiency in order to increase profits.

Research results

Each organization chooses a unique cost management system that will be suitable for the organization's operating style, accounting policy, but few can analyze this system and evaluate what elements it consists of and how it relates to profitability indicators. saying cost management, we mean accounting, control, management of all types of costs, as well as reducing them as much as possible. The unique rules of the cost management system and the composition of its elements depend on the goal set before the organization and considering cost management as a separate part of the business function [1].

Organizations may face various problems during their activities that may be related to effective cost management. For example, how to attribute incurred costs to a specific product or service or, how to identify hidden costs. Similar issues are resolved by determining the cost of goods and forming an internal management system. Another stage of cost management is the analysis of the composition and structure of costs, considering limited financial opportunities [2].

The main goal of creating a cost management system is not to reduce costs, but to achieve the goal set before the organization through their optimization. It turns out that the priority issue of cost management and reduction is only the tip of the iceberg and includes a number of issues such as increasing organizational efficiency through cost management [3].

What do we mean by sunk costs? In practice, expenses are the outflow of funds from the organization, but from an accounting point of view, not all expenses incurred generate profits. For this reason, the amounts classified as expenses in the expense report differ from the actual cash outflows. When determining the rate of return on costs, the profit of the company is compared only with the part of the entities that provide profit according to accounting standards [4]. The specifics of such calculations are determined according to the organization's accounting policy, and the composition of capitalized costs may differ depending on the direction in which the profitability of costs needs to be calculated.

Indicators of cost profitability do not reflect the profitability of all types of costs incurred by the organization in the reporting period, but show the compensation of the spent resources that participated in the formation of profit. In general, a high rate of cost effectiveness indicates maximum return and efficient use of resources [5].

C**alculation the profitability of the costs incurred for the formation of the cost price**:

Return on Costs 2020 = Gross Profit / Cost of goods sold * 100% = 1,843,938/3,732,332*100 = 49.4%

Return on Costs 2021 = Gross profit / Cost of goods sold * 100% = 2,754,659/5,265,154*100 = 52.3%

Table 1. The changes in cost of goods sold, administrative, selling and other expenses

Indicators	Value /thousands AMD/		Changes
	2020	2021	
A	1	2	3
Cost of goods sold	3.732.332	5.265.154	+1.532.822
Realization costs	247.051	367.998	+120.947
Administrative costs	439.226	557.464	+118.238
Other costs of continuing operations	216.496	102.064	-114.432
Gross profit	1.843.938	2.754.659	+910.721
Net profit before tax	1.030.256	1.875.389	+722.032
Profit from sale	1.081.539	1.920.282	+838.743

Sales efficiency

Return on Costs 2020 = Profit from sales / (Cost of goods sold + realization costs+ administrative costs) * 100% = 1.081.539/(3.732.332+247.051+439.226)*100= 1.081.539/4.418.609*100 = 24.4%

Return on Costs 2021 = Profit from sales / (cost of goods sold + selling expenses + administrative expenses) * 100% = 1.920.282/(5.265.154+367.998+557.464)*100= 1.920.282/6.190.616*100= 31%

How much profit does all the expenses incurred by the organization provide?

Return on Costs 2020 = Net profit before tax / (Cost of goods sold + Cost of sales + Cost of sales + Other expenses from continuing operations) * 100% = 1,030,256 / (3,732,332+247,051+439,226+216,496) * 100 = 1,030,256/ 4.635.105*100= 22.2%

Return on Costs 2021 = Net profit before tax / (Cost of goods sold + Cost of sales + Cost of sales + Other expenses from continuing operations) * 100% = 1,875,389 / (5,265,154+367,998+557,464+102,064) * 100 = 1,875,389/ 6.292.680*100= 29.8%

From the calculations made above, it is clear that the profitability of the cost price increased by 2.9% compared to 2020, despite the fact that the costs incurred for the formation of the cost price increased by 1,532,822 drams in 2021 compared to 2020, which is mainly due to the increase in sales volumes.

On the other hand, sales profitability also increased by 6.6%. The profit from sales increased by 838,743,000 drams compared to the previous year, which is quite a good indicator, therefore, the increase in sales profitability is related to the volume of sold goods compared to the previous year.

Now let's analyze to what extent the point of covering all kinds of expenses has changed in the reporting period compared to the previous one. In 2021, the Cost increased by 7.6% compared to 2020, that is, in 2021, 1,000 units costs provided 7.6% more profit.

As I have already mentioned, effective cost management does not come down to only identifying possible ways to reduce costs,

but it consists in ensuring high profitability of the company's expenses. Using the method of chain installations, let's try to understand the effect of work factors on the change in the volume of beer production.

Table 2. Data for determining the impact of work factors on the volume of product

Indicators	**2020**	**2021**	**Devia-tions**	**%**
Product volume thousands. V	15.668	15.750	+82	100,52%
Average number of workers, person, P	289	315	+26	108,99%
Average number of days worked by 1 worker during the year, D	251	252	-1	100,3%
Days worked by workers, DW	72.539	79.380	+6.841	109,43%
Average hours worked by workers, HW	580.31	635.040	+54.728	109,43%
Length of working day, hour, H	8	8	-	100%
Average hourly productivity per worker, thousands AMD, P_H	0,027	0,025	-0,002	

Chain replacements and calculations:

$V^0 = P_0 \times D_0 \times H_0 \times P_{H0} = 15.668,42$

$V^1 = P_1 \times D_0 \times H_0 \times P_{H0} = 17.078,04$

$V^2 = P_1 \times D_1 \times H_0 \times P_{H0} = 17.146,08$
$V^3 = P_1 \times D_1 \times H_1 \times P_{H0} = 17.146,08$
$V^4 = P_1 \times D_1 \times H_1 \times P_{H1} = 15.876$

Various factors following influences will be:

Average number of workers $P_1 - P_0 = -1.409,62$
Average number of working days per worker $D_2 - D_1 = -68,04$
Length of working day $H_3 - H_2 = 0$
Average hourly productivity per worker $P_{H4} - P_{H3} = -1.270,08$
The sum of these factors will be equal to $P_4 - P_0 = 139,54$

During 2020-2021, the largest deviation in beer production alone is accounted for by the production volume, which has increased compared to the previous year. The duration of the working day has remained constant (8 hours). The average number of workers increased by 26 compared to 2020. If we talk about the effects of individual factors, we will notice, that the change in the average number of workers working in the brewery had the biggest impact on the production volume. The number of days worked by one worker has undergone little change, in 2021 the number of days decreased by 1. However, this minor change has had an impact on the output volume.

Now let's use both the method of absolute differences and percentage difference method at the same time and understand the effect of work factors on the change in the volume of beer production.

Absolute differences method:

$V_0 = P_0 \times D_0 \times H_0 \times P_{H0} = 15.668,42$

$V_1 = (P_1 - P_0) \times D_0 \times H_0 \times P_{H0} = 1.409,61$

$V_2 = P_1 \times (D_1 - D_0) \times H_0 \times P_{H0} = 68,04$

$V_3 = P_1 \times D_1 \times (H_1 - H_0) \times P_{H0} = 0$

$V_4 = P_1 \times D_1 \times H_1 \times (P_{H1} P_{H0}) = 1.270,08$

Percentage difference method:

$V(t) = P_0 \times (D\% - HW\%) : 100\% = 26,38\%$

$V(P) = P_0 \times (P\% - 100\%) : 100 = 25,98$

$V(D) = P_0 \times (DW\% - P\%) : 100 = 1,27\%$

$V_3 = P_1 \times D_1 \times (H_1 - H_0) \times P_{H0} = 0$

$V_4 = P_1 \times D_1 \times H_1 \times (P_{H1} P_{H0}) = 1.270,08$

Conclusion

Analysis of costs, as well as their competent adjustment, is one of the most important conditions for the financial means of the organization, the uninterrupted flow of the production process, and avoiding risks as much as possible [6].

The analysis shows that the effectiveness of cost management is determined by both the change in the speed of profitability of costs and their structure, also different items in the composition of costs have different speeds of profitability and each change has a significant impact on the financial condition of the organization [7]. In this regard, we emphasize the financial measurements of the results of the influence of various factors on the cost flows, which

we can carry out with analytical methods of chain replacements or absolute differences.

However, case of making managerial decisions, it should be considered that, the simultaneous influence of quantitative and qualitative factors is completely attributed to the qualitative factor.

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ԾԱԽՍԱՅԻՆ ՀՈՍՔԵՐԻ ՖԻՆԱՆՍԱԿԱՆ ՎԵՐԼՈՒԾՈՒԹՅԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ

Դիանա Մինասյան

Հայաստանի պետական տնտեսագիտական համալսարան, տ.գ.թ

Սոնա Հովսեփյան

Հայաստանի պետական տնտեսագիտական համալսարան, մագիստրոսական ծրագրի ուսանող

Բանալի բառեր - ծախսերի վերլուծություն, ծախսումներ, ֆինանսական կառավարում, շահույթ, գործոնային վերլուծություն

Ծախսային հոսքերի ֆինանսական վերլուծությունը կարևորվում է կազմակերպությունների կողմից թողարկման ինքնարժեքը կառավարելիս և շահութաբերության բարձրացման ռեզերվները բացահայտելիս:

Այս առումով արդիական են ծախսային հոսքերի վրա տարբեր գործոնների ազդեցության արդյունքների ֆինանսական չափումները, որոնք կարող ենք իրականացնել շղթայական տեղադրումների կամ տարբերությունների վերլուծական եղանակներով:

Մյուս կողմից, կառավարչական որոշումներ ընդունելիս պետք է հաշվի առնել, որ քանակական և որակական գործոնների միաժամանակյա ազդեցությունն ամբողջովին վերագրվում է որակական գործոնին: Ուստի, շղթայական տեղադրումներին զուգահեռ կարևորվում է ծախսային հոսքերի ինտեգրալային վերլուծության կիրառումը, որը հստակ տարանջատում է մտցնում քանակական և որակական գործոնների արդյունքային չափումների միջև:

Submitted: 02.10.2023; Revised: 05.10.2023; Accepted: 09.10.2023