

PARTICULARITIES OF THE STANDARD SINGLE COST METHOD. METHODOLOGICAL CASE STUDY ON THE INVENTORY, ANALYSIS AND CONTROL OF COSTS BY THIS METHOD - ON THE EXAMPLE OF AN ECONOMIC ENTITY

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ABSTRACT: *The purpose of economic entities is to improve the method of calculating costs and to make it more operational and efficient in providing the necessary information to managers. The methods of calculating the costs used in the footwear industry, the global one and on orders, by which a post-calculation per unit of product is performed proved to be ineffective in determining the unit cost per product, so that the idea of calculating costs in advance Unitary production has led to the unique standard cost method that enables managers to fully meet their information need for making the best managerial decisions. The author considers that the standard single cost method responds to the needs of efficient management and contributes to increasing the economic efficiency of the economic entity. That these goals can be achieved is demonstrated by an empirical study on the example of the footwear company S.C. Raxela Brașov. The article concludes with the author's conclusions, regarding the efficiency of using the standard single cost method.*

KEY WORDS: *deviations, costs, economic efficiency, cost bearers, standard single cost.*

JEL CLASSIFICATIONS: *M41.*

1. INTRODUCTION

The need to know the results on each activity consuming resources and factors of production required the identification of a method and technique for quantifying, measuring and controlling consumption, to be compared with the effects produced and establish the analytical result. Thus, the standard cost method appeared in 1901, in the United States of America with the name of Estimated Cost System, which is a system

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for comparing the commercial price with the established cost standard, as well as a system for analysing the causes. as a result of which the cost deviation between the standard and the actual receipts resulted from the sale. In 1918 it was the first presentation of the standard cost method made by G. Charter Harisson. In Europe, too, the method of cost standards has aroused interest, J.A. Haas, F. Sommer, etc. taking over the American experience they developed and perfected the standard costing method. The standard cost method promotes both the anticipated calculation of production costs and the determination, tracking and control of deviations from them.

This method establishes in advance the direct production costs, based on the technical documentation and the conditions imposed by the manufacturing process, called standard, and for the indirect costs, the expenses of the production sections, the general administration and sales expenses, expenditure budgets are established which serves as a standard for measure or comparison with actual production expenditure.

The standard one-time method best meets such requirements. Starting from the complexity of the activity within the economic units, the centre of gravity of the profitability control is no longer the manufactured product or the order, but the workshop, section, place of work, and the causes of the level of effective costs of the products are identified within the expenditure sectors where the production process for obtaining the finished products took place. Cost control is performed by calculating and analysing by entity, section, the actual deviations from the standard ones which in turn are calculated at the level of organizational structures, calculation items and generating causes.

The application of the standard cost method aims at increasing the role of production costs in ensuring the achievement of the target objectives for the proper functioning of the economic entity concerned. The purpose of such a cost calculation is to provide in an operational and economical way the information necessary to control the company's activity. The method provides the manager with information about each expense, about the place and how the resources were consumed and about deviations, giving the possibility to quickly discover the causes that generated unnecessary expenses that must be removed to maximize profit.

2. STANDARD SINGLE COST METHOD

The proper organization of the primary documentation on the record of production costs and the calculation of costs, as well as the proper organization of the record of deviations from standards, are also prerequisites for the adoption of this method of management accounting and costing. The standard single cost costing method is characterized by several defining features such as:

- applies in the case of diversified production, single production, small series or order-based production;
- consists in tracking deviations in the foreground when registering primary documents, which ensures operational information and cost-effective control;
- requires a large amount of work by tracking deviations on product, by operations;
- involves the development of the three items of expenses: materials, direct labour of account 921 "Expenses of basic activity" which operate as follows: the debit will

record the standard level of expenses and costs related to manufactured production; the credit will record the standard level of expenses and costs related to the finished production.

The standard single cost method involves carrying out the account 921 The expenses of the basic activity on three items of expenses, respectively materials, labour and administration, the debit being recorded the standard level of expenses and costs related to the manufactured production, and its credit records the standard level of expenses and the costs of the finished production. When taking over from financial accounting, the expenses represent their actual level, which implies the registration of price differences - favourable which means savings and unfavourable which means excesses, from the moment of recording the expenses.

3. METHODOLOGY OF EVIDENCE BASE, ANALYSIS AND COST CONTROL BY THE STANDARD SINGLE COST METHOD

In order to illustrate the way of calculating the production cost by the standard single cost method, the company S.C. from Braşov, a company whose object of activity is the production and sale of women's footwear. Within the company, the production department that makes shoes based on several raw materials was subjected to the empirical study, respectively the following data are known: expected production: shoes = 1,000 pairs; direct expenses with raw materials: for a pair of shoes = 59.5 lei and 1h 15 labour with 20 lei / hour; indirect expenses: fixed 6,364 lei and variable 9,188 lei, in total 15,552 lei; realized production: shoes = 1,200 pairs; actual direct expenses: raw material valued at 70,800 lei and 1,300 hours valued at 25,350 lei; actual indirect expenses 17,100 lei of which: 7,580 lei fixed and variable expenses 9,520 lei. Based on the methodology of evidence, analysis and cost control, all operations are accounted for according to the standard single cost method and the standard Cost Sheet of the shoe product is prepared.

I. a) Determining the hourly rate related to indirect expenses, as follows:

$$\text{Hourly tariff} = \frac{\text{indirect expenses}}{\text{No. of hours}} = \frac{15.552}{1.250} = 12,44 \text{ lei/oră, where:}$$

$$A = 1000 \times \frac{75}{60} = 1250 \text{ ore}$$

b) Preparation of the standard cost sheet for product A:

Explanations	Product A		
	Amount	Price	Value (lei)
1. Raw materials	1.000 pair	59.5	59.5
2. Labour	75/60= 1.25	20.0	25.0
3. Indirect expenses	75/60 = 1.25	12.44	15.55
4. Total cost			100.050

c) Comparison table for 1200 pairs of shoes

Explanations	Standard cost			Actual cost			Deviations	
	Q _S	P _S	Q _S P _S	Q _E	P _E	Q _E P _E	-	+
1. Raw materials	1200	59.50	71400	1200	59.00	70800	-600	
2. Labour	1500	20.00	30000	1300	19.50	25350	-4.650	
3. Indirect expenses	1500	12.444	18660.0	1300	13.15	17100	-1560	
4. Total cost	1200		120060.0			113250	-6810	

The determination of the number of standard hours related to the pairs of shoes, of the actual price of the raw material, of the actual hourly cost of labour, of the actual hourly cost of indirect costs is performed as follows:

$$T_S = 1.200 \text{ per.} \times \frac{75}{60} = 1500 \text{ hours}$$

$$P_{E(\text{raw materials})} = \frac{70800}{1.200} = 59,00 \text{ lei/per}$$

$$C_{E(\text{indirect expenses})} = \frac{17100}{1300} = 13,15 \text{ lei/oră} \quad P_M = \frac{25350}{1300} = 19,50 \text{ lei/oră}$$

d) Analysis of deviations according to the direct costs of product A;

1. Raw materials:

$$1.1. \text{ Quantity deviations } \Delta Q = (Q_E - Q_S) \times P_S = (1200 - 1200) \times 59,5$$

$$\Delta Q = +0 \text{ lei}$$

$$1.2. \text{ Price deviations } \Delta P = (P_E - P_S) \times Q_E = (59,00 - 59,50) \times 1200$$

$$\Delta P = -600 \text{ lei (favourable difference)}$$

2. Labour:

$$2.1. \text{ Time deviations } \Delta T = (T_E - T_S) \times t_s = (1.300 - 1.500) \times 20$$

$$\Delta T = -4.000 \text{ lei (favourable difference)}$$

$$2.2. \text{ Tariff deviations } \Delta t = (t_E - t_s) \times T_E = (19,50 - 20,00) \times 1300$$

$$\Delta t = -650 \text{ lei (favourable difference)}$$

e) Analysis of deviations according to indirect costs;

1 Volume deviation

Initial budget: 15 552 lei la 12.44 lei/hour

• Fixed expenses 6 364 lei la 5.06 lei/hour

• Variable expenses 9 188 lei la 7.35 lei/hour

The budget will be determined as follows:

$$1. \text{ Budget} = (7.35 \times 1300) + 6364 = 15919 \text{ lei}$$

$$\text{Actual indirect costs} = 17100 \text{ lei}$$

$$\text{Volume deviation} = 17100 - 15919 = 1181 \text{ lei (unfavourable difference)}$$

2 Capacity deviation:

$$5.06 \times (1250 - 1300) = -253 \text{ lei (favourable difference)}$$

3 Yield deviation:

$$12.44 \times (1300 - 1500) = -2\,488 \text{ lei (favourable difference)}$$

Total deviation = Budget deviation + Activity deviation + Yield deviation

$$\text{Total deviation} = -1181 + 253 - 2488 = -1560 \text{ lei (favourable difference)}$$

The deviations found are based on primary consumption and labour documents and are established at the end of the management period. In accounting, these deviations appear on sections and on calculation items, and the production is settled on calculation items at standard costs.

Methodological steps:

- Recording the takeover of standard expenses with raw materials, labour and administration:

921.01. "Expenditure on basic activity" (raw materials)	=	901. "Internal settlement of expenditure"
921.02. "Expenses of the basic activity" (labour)		
921.03. "Basic activity expenses" (administration)		

- Recording differences (deviations) in quantity and price in materials, as follows:

931.01. "Cost of obtained production" (raw materials)	=	903.01. "Internal settlements regarding price differences" (quantity difference)
		903.01.2. "Internal settlements on price differences" (price difference)

- Recording the differences (deviations) of time and tariff for labour, as follows:

931.02. "Cost of obtained production" (labour)	=	903.02.1. "Internal settlements regarding price differences" (time difference)
		903.02.2. "Internal settlements regarding price differences" (tariff difference)

- Recording the differences (deviations) of volume, capacity and administration efficiency, as follows:

931.03. "Cost of obtained production" (administration)	=	903.03.1. "Internal settlements regarding price differences" (volume difference)
		903.03.2. "Internal settlements regarding price differences" (capacity)

• Recording the result of the period (account 905 “Result of the period” will be used):

902 “Internal settlements regarding the obtained production”	=	905 “Result of the period”
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I. Making accounting records, according to the standard method - single cost:

Stage I. Collecting the standard expenses

No.	Explanations	Debit account	Credit account	Debit amount	Credit amount
1.	Recording standard expenditures on raw materials, labour and administration	921.01	901	71400	120060
		921.02		30000	
		921.03		18660	
2.	Recording differences (deviations) in quantity and price in materials	931.01	903.01.1	0	0
			903.01.2	-600	-600
3.	Recording differences (deviations) in time and tariff for labour	931.02	903.02.1	-4000	-4000
			903.02.2	-650	-650
4.	Recording differences (deviations) in volume, capacity and yield	931.03	903.03.1	1181	1181
			903.03.2	-253	-253
			903.03.3	-2488	-2488

Stage II. Recording the production obtained at standard cost and its settlement

1200 pieces x 100050 lei / pair = 120060 lei

No.	Explanations	Debit account	Credit account	Debit amount	Credit amount
5.	Recording the standard cost of the finished obtained products	931.01	902	71400	120060
		931.02		30000	
		931.03		18660	
6.	Recording the settlement of standard costs related to the obtained production	901	921.01	71400	71400
			921.02	120060	30000
			921.03	18660	18660

Stage III. Closing of expense accounts for the obtained production

No.	Explanations	Debit account	Credit account	Debit amount	Credit amount
7.	Transferring price differences to account 902	903.01.1	902		-6810
		903.01.2		-600	
		903.02.1		-4000	
		903.02.2		-650	
		903.03.1		1181	
		903.03.2		-253	
		903.03.3		-2488	

8.	Recording the closing of the expenditure accounts regarding the obtained production	902	931.01 931.02 931.03	126870	72000 34650 20220
9.	Recording the result of the management period	902	905	13620	13620

4. CONCLUSIONS

The study concludes that the application of the standard single cost method does not require special conditions of applicability. Any economic entity must assume the techniques of efficient management and ensure the establishment of an information system appropriate to the activity it carries out.

Cost information is the main means of ensuring the competitiveness and profitability of an economic entity. In conclusion, the introduction of the standard single cost method by the analysed economic entity responds to the need to increase the usefulness of the information on the internal activity regarding the management of production costs and leads to the strengthening of the economic management as a whole.

The standard single cost method allows for operational comparisons between actual and pre-established consumption, taken as a reference. The objective of the standard single cost method is to be concerned with increasing the responsibilities of economic entities.

The determination of deviations essentially contributes to the identification of areas of efficient and inefficient activity. Therefore, the standard single cost method is also an effective means of delegating power and decentralizing decisions.

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