THE ADVANTAGES AS AN INSTRUMENT OF MANAGEMENT OF THE VARIABLE COST METHOD IN COMPARISON WITH THE OBSERVATION METHOD: The Case of the Facímpia
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Abstract

This work paper aims to identify and demonstrate the main differences between absorption costing and variable costing methods, comparing the advantages and disadvantages of each of the methods to later be able to identify which would be the best tool to be applied by the company, and the costing method that would offer better profitability for the same, being considered as a trustworthy management tool. A case study of the Facímpia company was used, where it was possible to analyze each method and then to make the right decision, by means of the results obtained with respect to the costs involved in the production as well as to the net profit of the same, having arrived at the conclusion that the stocks of each method could induce the manager to make a decision contrary to what should be due to the fact that the absorption indicates that there is more of stocks and the variable does not.

Keywords: Absorption Costing, Variable Costing, Management.

Introduction

Costing systems or methods are indispensable and very important tools for generating relevant information for decision making in organizations. This indicates the importance of using costing methods that are compatible with the objectives and characteristics of the organizations, and thus easily make their appropriate analyses and decisions. It is therefore important to make this comparative analysis of each type of method under study.

Abbas et al. (2012) apud Pompermayer & Lima (2002), on the subject, they point out that the more intense the competition to which an organization is subjected, the more important it will be to have
a costing method that allows it to know its costs and, from there, to find an advantageous position in relation to its competitors.

The costing methods are not limited to the evaluation of stocks, but they are tools that provide important subsidies for the evaluation of managers' performance, the rate of return on investment decisions, buy versus manufacture decisions and sales price formation, among others, as can be seen, there are several costing methods used by companies and found in the literature (BEUREN, 1993).

Gil (2010), this work, from the point of view of how to approach the subject, is qualitative research, since it does not require the use of statistical methods and techniques, where it seeks to understand the reason for the problem that causes such an effect, and in qualitative research deeper analyses are conceived in relation to the phenomenon that is being studied, aiming to highlight characteristics that are not observed by means of a quantitative study.

The main objective of this paper is to analyze the advantages as a management tool of the variable costing method compared to the absorption method in the company Facímpia. Therefore, the specific ones are:

- Describe the absorption and variable costing method;
- Identify the advantages and disadvantages by comparing them;
- Illustrate in practice what it applies as an efficient management tool.

**Costing Methods**

Costing systems or methods are ways of allocating costs to a product or service, these can be developed under the economic approach or accounting approach (FONSECA, 2015, p. 2). In the economic, it is the use of the results of the costs for the decision making, while in the accounting, its result is aimed at the fulfilment of the results of the period.

Of the other existing literature, all tend to incite and present various costing methods that can be used by both industrial and commercial organizations and service providers, whether for profit or not. These are used, among many other things, to determine the value of the costing items (the latter being the most applied), reduce costs (mainly inherent to production), improve processes (eliminate waste at maximum productive capacity), identify with basis and clarity between
producing or outsourcing the process, among others (DIAS & PADOZEVE, 2016). These methods include activity-based costing, absorption costing and variable costing.

**Types of Costs**

There are several ways of classifying costs to meet a variety of purposes for which they are determined. Costs are classified according to two parameters: their relationship to the cost object and their relationship between the total value of a cost and the volume of activity in a unit of time (MOURA, 2005; PADOVEZE, 2004).

**Absorption Costing**

It is the method derived from the application of generally accepted accounting principles, born from the historical situation, which consists in the appropriation of all production costs to the manufactured goods, and only to these, likewise to the expenses related to the production effort distributed to all products or services made (MARTINS, 2003, p. 37).

This method considers in the calculation process all the costs incurred in the production process of goods and services. The name itself (absorption costing) indicates that it is absorbing from each department and from each final product the overhead costs through absorption rates, whether they are defined as direct or indirect, fixed, or variable, structure or operational costs.

**Advantages**

The variable costing method has the following advantages:

− Unitization of fixed costs;
− Is in accordance with the fundamental principles of accounting and tax laws;
− Less costly to implement.

**Disadvantages**

Its disadvantages are:

− Does not separate fixed and variable costs;
− Raw materials and materials are not considered variables;
− Product price is also considered unchangeable.
Therefore, analyzing figure 1 it becomes clear that variable costs and own fixed costs are directed to stocks. The general fixed costs (that are not own to the products) and the fixed and variable expenses are directed to the result for the period.

**Variable Costing**

It is the method where only variable costs are allocated to products, taking fixed costs separately and considering them as expenses of the period, and making the direct calculation for the result (COLLATTO & Reginato, 2005).

For Maher (2001), it is that in which only the variable production costs are allocated to the products, and the fixed costs are considered of the period.

Thus, this costing method can be applied to any costing system. It even offers advantages when applied to job-order costing, process costing, responsibility costing, and especially when these systems are combined with estimated or standardized costing.

**Advantages**

The variable costing method has the following advantages:

- Separation of fixed and variable costs;
- Criticism of fixed unit cost, in absorption costing;
- Removes the effects of inventory changes on profit.
Disadvantages

Its disadvantages are:

− The inventory value bears no relation to the total cost;
− In isolation, it does not apply to sales price formation;
− It is not accepted by external auditing, because it violates the fundamental principles of accounting.

**Figure 2: Schematic of the Variable Costing Method**

Thus, when we analyze the scheme of figure 2, we can notice that in the variable costing method only the variable costs are directed to stocks, while the fixed costs and the variable and fixed expenses are directed to the result of the period.

**Comparative differences between absorption costing and variable costing**

Figure 3, summarizes and alludes to the aspects that clearly explain the differences between the two methods under analysis in the present work.
Figure 3: Comparison of absorption costing (AC) with variable costing (VC) - summary

| Produção versus Vendas | Efeito sobre o estoque | Efeito sobre a despesa do período | Efeito sobre o lucro |
|-------------------------|------------------------|----------------------------------|---------------------|
| Unidades produzidas > Unidades Vendidas ⇒ Aumento ⇒ | Custos fixos de produção lançados como despesa, no CA | < | CA > CV |
| Unidades produzidas < Unidades Vendidas ⇒ Diminuição ⇒ | Custos fixos de produção lançados como despesa, no CA | > | CA < CV |
| Unidades produzidas = Unidades Vendidas ⇒ Nenhuma alteração ⇒ | Custos fixos de produção lançados como despesa, no CA | = | CA = CV |

Source: Adapted by the author. (MAHER, 2001, p. 379)

Looking at the previous table we can see that the production and sale of units of a particular product influences the type of method that is applied and the relationship with it, because the greater the quantity produced in relation to sold, we have that the absorption costing will have a greater effect on profit than the variable, because in the absorption method all costs have been allocated to the cost object, while in the variable method only some will be and then we can analyze which costs to reduce over time.
Case Study - Facímpia

This case study, is based on the exercise proposed by the author Martins (2003, p. 204), of a fictitious company called Facímpia, in order to illustrate the two methods in reality and be able to draw conclusions about which would apply better as a management tool.

Proposed Exercise

The only product of the company Facímpia is sold at an average of 250.00MT per unit; taxes totaling 20% and commissions 5% are charged on this price. Income tax is 30% on the profit.

The direct material cost - raw material, packaging etc. - is 130.00MT per unit and fixed costs and expenses are 840,000.00MT and 172,500.00MT per period, respectively.

In each period - in which there were no opening stocks, the company started production of 30,000 units; 26,000 were completed, 23,000 were sold, and 4,000 were 50% processed. All cost items are incurred uniformly throughout the production process.

It is requested:

a) What is the value of the closing stock for the absorption and variable costing method?

b) Prepare the income statement for the period using the two costing methods.

Resolution

\[ E_i = 0 \]

Production of 30,000 un

\[ \frac{26,000 \text{ un. completed}}{4,000 \text{ un} \ (50\% \text{ processed})} = 23,000 \text{ un sold} \]

\[ \frac{3,000 \text{ un stocks}}{2,000 \text{ un}} \]

Production effort equivalent to 26,000 + (0,5 × 4,000) = 28,000 un.

We will first find the net income by absorption, which in the course of the same process we can then find the value of the stocks at the beginning and end of the process.
Likewise, we move on to the variable costing method, where we can obtain information regarding the initial and final stocks in the production process and our net profit.
Next, we will compare the results obtained through the absorption and variable costing method statements, to be able to answer the questions we were asked.

|                                | ABSORPTION | VARIABLE | DIFFERENCE |
|--------------------------------|------------|----------|------------|
| Ending Stocks of Products in Manufacture | 320,000.00 | 260,000.00 | 60,000.00 |
| Finished Goods Stocks          | 480,000.00 | 390,000.00 | 90,000.00 |
| Income Before Income Tax       | 460,000.00 | 310,000.00 | 150,000.00 |

**Conclusions**

With this study we have concluded that the absorption method is no longer applicable in management, unlike the variable method, because the costs related to the production process have a difference of about 780,000.00MT, which is exactly 18.75% in favor of the variable method, and thus we can clearly see the costs related to production.

The conclusion was reached that in the absorption method we have more stocks for both situations, be it of the manufacturing process as well as in finished goods, unlike the variable and has a difference of approximately 18.80% for the situation in manufacturing and 19.60% finished goods, and in the profit, we have a variation of 32.60%.

Furthermore, the differences in both inventory and profit help management to make a better decision when it comes to the need to use a method to control their costs, even if in the long term, none of them change the total result of the company, and in this case the manager should opt for the variable method, thus better controlling the production costs in the short term.

**References**

Abbas, K., Gonçalves, M. N., & Leoncine, M. (2012). Os métodos de custeio: vantagens, desvantagens e a sua aplicabilidade nos diversos tipos de organizações apresentadas pela literatura. *Contexto*.

Beuren, I. M. (1993). Evolução Histórica da Contabilidade de Custos. *Contab. Vista & Rev. Belo Horizonte*.

Collatto, D. C., & Reginato, L. (2005). Método de Custeio Variável, Custeio Direto e Teoria das Restrições no contexto da Gestão Estratégica de Custos: Um Estudo Aplicado ao Instituto de Idiomas Unilínguas. *IX Congresso Internacional de Custos*.
Dias, E. A., & Padozeve, C. L. (2016). OS DIFERENTES MÉTODOS DE CUSTEIO E SUA IMPLICAÇÃO NA APURAÇÃO DE CUSTO DO PRODUTO: UM ESTUDO CASO EM EMPRESA DE GRAXAS E ÓLEOS INDUSTRIAIS. *Gestão e Sociedade*.

Fonseca, A. S. da. (2015). Métodos de custeio. *Fundação de Ensino e Pesquisa*, 42(1), 19.

Gil, A. C. (2010). *Como Elaborar Projetos de Pesquisa. Como Elaborar Projetos de Pesquisa*.

Maher, M. (2001). *Contabilidade de Custos: Criando Valor Para a Administração*. São Paulo: Atlas.

Martins, E. (2003). *Contabilidade de custos* (9th ed.). São Paulo: Atlas.

Moura, H. da S. (2005). O Custeio Por Absorção E O Custeio Variável : Qual Seria O Melhor Método a Ser Adotado Pela Empresa ? *Sitientibus*.

Padoveze, C. L. (2004). *Contabilidade Gerencial: Um enfoque em sistema de informação contábil* (4th ed.). São Paulo: Atlas.

Pompermayer, C. B., & Lima, J. E. P. (2002). Gestão de custos. *Finanças Empresariais*, 4(1), 15.