Optimizing Selling Prices for MSME Products Through Analysis of Determining the Cost of Good Manufactured

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ABSTRACT
COGS is very important in determining the selling price of a product. The aim of this research is to compare the calculation of the COGS between methods variable costing with method full costing based on market prices as the basis for determining product selling prices. The object of this research is the Traditional Herbal Medicine MSMEs Ibu Mani Pamekasan. The method used is a case study with direct observation. Data analysis techniques using variable costing and full costing. The results of the research, namely in calculating the cost of production, show that the method full costing has a higher nominal figure than the method variable costing so that if the object of the research wants long-term profits then use the calculation of the cost of production using the method full costing because of the method full costing takes into account all elements of production costs both fixed and variable. The results of this research are useful for MSMEs in maximizing their profits.

Keywords : COGS, Variable Costing, Full Costing and Selling Prices

INTRODUCTION
MSMEs (Micro Small and Medium Enterprises) are one of the businesses that can help small communities earn income (Tambunan, 2002:16). One of the goals of MSMEs is to obtain optimum profits. Achieving profits is important because it is related to accounting concepts such as continuity and business expansion (Devianti, 2010). However, as economic development in Indonesia indirectly triggers business competition in various fields, this requires MSMEs to have the right strategies and methods to produce optimum profits and their products are no less competitive with competitors (Purwanto et al, 2020). Therefore, calculating the cost of production is very important because it is related to the selling price of the product which will be included in the financial position report (Samsul, 2013). When calculating the cost of production, the information needed is raw material costs, labor costs, and factory overhead costs (BOP). These three types of costs must be calculated correctly, both when recording and classifying them so that information on the cost of production can be relied on both in determining product selling prices and calculating profit and loss (Batubara, 2013). Calculating the correct cost of production will have an impact on determining the right selling price, not too low or too high from the cost price, so that later MSMEs can generate profits as expected (Djumali et al, 2014).
The problem that is often experienced by MSMEs is that the calculation of the cost of production is still relatively simple and the correct method, such as the *variable costing* or method *full costing* in determining the selling price so that the cost of production does not result in actual costs (Wulandari, 2018). As happened with Ibu Mani’s Traditional Herbal Medicine UMKM which is engaged in manufacturing and selling various kinds of traditional herbal medicine such as Sehat Lelaki, Galian Rapet, Beras Kencur, Bangkes, Appetite Enhancer, Ronronan, Pejje, Jamu Birth, and Selokarang which has problems in determining the selling price of the product because costs have not been grouped according to type, have not applied the calculation of the cost of production in accordance with cost accounting principles, and still determine the selling price of the product only by looking at the market price. Therefore, the aim of this research is to describe and compare the calculation of the cost of production using methods *variable costing*, method *full costing* and based on market prices as the basis for determining the selling price of herbal medicine at the Mrs. Mani Pamekasan Traditional Herbal Medicine MSME.

This research was conducted based on several previous studies including: 1. Elvania (2018), 2. Kusmanto et al (2015) and 3. Setyaningrum (2013) where the research in determining the cost of production of a product uses a method consisting of *variable costing* and *full costing*. Where the results of the research show that there are differences in using methods in determining the cost of production. This background and several previous studies became the basis for conducting this research which is useful for the object of this research, namely Mrs. Mani’s MSMEs whose products are traditional herbal medicine.

THEORETICAL REVIEW

According to Winarso (2014) costs are an important part and must be present in starting a business. Therefore, a business must understand the basic concepts of costs and company units so that these costs can be controlled as best as possible with predictions of large profit levels. Costs are all expenses for obtaining goods or services from third parties. In this case, costs are an amount of money or in the form of debt used in company activities to produce goods or services (Anwar et al, 2010). There are types of costs, including: 1. Raw Material Costs (BB). BB costs are materials that are formed from parts of the entire finished product. Raw material costs are the costs used to provide raw materials that will be used in making products in monetary units (Nainggolan and Patimah, 2020); 2. Direct Labor Costs (TKL). TKL costs are costs used in the use of direct labor when processing a product from raw materials to finished goods. Examples include the costs of wages for workers who work directly on products within the company (Sugiarti, 2018); and 3. Factory Overhead Costs (BOP). BOP is an element of production costs other than TKL costs and direct BB costs used during the production process. BOP is one of the most complex costs and cannot be translated into finished products, so BOP collection can only be known after the ordered goods have been produced (Komara and Sudarma, 2016).

According to Lasena (2013) the cost of production consists of 3 (three) main components, namely: 1. BB costs (cost of purchasing materials, purchasing transportation costs, storage costs and so on); 2. TKL costs (all wage costs for employees directly involved in the product manufacturing process); and 3. BOP (all costs excluding BB costs and direct wages). The benefits of determining the cost of production are determining the selling price of products, monitoring information on production costs, calculating gross weight profits or losses for a certain period, determining the cost of inventory, assessing the
efficiency of the production process and guidelines for making business decisions (Lambajang, 2013)

According to Hasyim (2018), the method for determining the cost of production is:
1. Variable Costing. This method is a method that only takes into account production costs that have variable behavior for both BB, TKL and BOP costs; 2. Full Costing. This method is a method that takes into account all elements of production costs, both variable and fixed, namely BB costs, TKL costs and BOP. The differences between these two methods are: variable costing only includes BOPs that behave in variables and does not include fixed BOPs while for full costing includes BOP that behaves both variable and fixed (Fadl and Ramayanti, 2020)

According to Gayatri (2013) the selling price is the amount of money charged for a product or service to consumers for using the product or service. One method of determining the selling price is the method mark up pricing which is often used among retailers, this method adds the cost per unit to the expected profit (Maulani and Nursiholiah, 2022). The selling price formula is based on calculations mark up pricing that is:

RESEARCH METHODS

The object of research in this research is Ibu Mani's Traditional Herbal Medicine UMKM. The selection of this object was made because the author wanted to know whether the selling price of herbal medicine at the Bu Mani Traditional Herbal MSME had used the correct method of calculating the cost of production, such as the Method. Variable Costing and Full Costing or not yet. The type of research used in this research is descriptive with a quantitative approach. The quantitative approach is a method that describes data, descriptions and descriptions that already exist and are clear in order to determine the cost of production (Maneir et al, 2020). The data source used in this research is primary data. Primary data in this research is data obtained directly from the research object in the form of answers and responses to research questions in interviews (Putri, 2015). Technique Data collection used in this research was interviews. Interviews are a method of collecting data by asking questions freely, both structured and unstructured, with the aim of obtaining extensive information about the research object (Pricilia et al, 2014). The analytical method used in this research is a quantitative descriptive analysis method, namely analysis that explains product pricing using the method variable costing and full costing. Quantitative descriptive analysis method, namely collecting data, processing data, analyzing data, comparing and explaining a situation so that it can be concluded regarding the calculation of the cost of production (Mangintiu et al, 2020).

The analysis stages in this research as follows:

a. Analyze production costs by classifying costs including BB costs, TKL costs, indirect labor costs and BOP
b. Calculate the cost of production use method variable costing
c. Calculate the cost of production use method full costing
d. Compare the calculation of the cost of production using the method variable costing and full costing as a determination of the selling price of the product
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e. Calculating the selling price of products using the method mark up pricing

f. Summarize and provide suggestions regarding the results calculation of the cost of production using the method variable costing and full costing as a determination of the selling price of Traditional Herbal Medicine MSME products Mrs. Mani Pamekasan.

**RESULTS AND DISCUSSION**

1. Data presentation

   a. Raw material. The researcher took 1 (one) type of herbal medicine as the research object, namely traditional herbal medicine for healthy men. The raw materials used are 12 kg/month which can produce 200 units each. Raw material costs within 1 (one) month can be seen in the following table :

<table>
<thead>
<tr>
<th>No</th>
<th>Material Name</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Curcuma</td>
<td>5 kg</td>
<td>IDR 250,000</td>
</tr>
<tr>
<td>2</td>
<td>Meet Black</td>
<td>½ kg</td>
<td>IDR 20,000</td>
</tr>
<tr>
<td>3</td>
<td>Lempuyang</td>
<td>½ kg</td>
<td>IDR 37,000</td>
</tr>
<tr>
<td>4</td>
<td>Ginger</td>
<td>½ kg</td>
<td>IDR 102,000</td>
</tr>
<tr>
<td>5</td>
<td>Aromatic ginger</td>
<td>½ kg</td>
<td>IDR 250,000</td>
</tr>
<tr>
<td>6</td>
<td>Male Garlic</td>
<td>½ kg</td>
<td>IDR 30,000</td>
</tr>
<tr>
<td>7</td>
<td>Herbal Chili</td>
<td>½ kg</td>
<td>IDR 50,000</td>
</tr>
<tr>
<td>8</td>
<td>Black Cumin</td>
<td>½ kg</td>
<td>IDR 50,000</td>
</tr>
<tr>
<td>9</td>
<td>Adas</td>
<td>½ kg</td>
<td>IDR 25,000</td>
</tr>
<tr>
<td>10</td>
<td>Jerk off</td>
<td>2 kg</td>
<td>IDR 80,000</td>
</tr>
<tr>
<td>11</td>
<td>Pulo Sari</td>
<td>½ kg</td>
<td>IDR 30,000</td>
</tr>
<tr>
<td>12</td>
<td>Clabet</td>
<td>½ kg</td>
<td>IDR 40,000</td>
</tr>
</tbody>
</table>

   Amount 12 kg IDR 964,000

   Source: Data processed

   b. Direct labor costs. The workforce at the Buk Mani Pamekasan Traditional Herbal Medicine UMKM which carries out the production process is 6 (six) people with a salary of IDR 1,500,000/person, while in the process of making this men's healthy herbal medicine, 4 (four) TKL are needed so the salary paid is IDR 6,000, 000/month
c. Factory Overhead Costs

Table 2. Factory Overhead Costs

<table>
<thead>
<tr>
<th>No</th>
<th>Information</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electricity cost</td>
<td>IDR 100,000</td>
</tr>
<tr>
<td>2</td>
<td>Raw Material Milling Costs</td>
<td>IDR 102,000</td>
</tr>
<tr>
<td>3</td>
<td>Transportation costs</td>
<td>IDR 100,000</td>
</tr>
<tr>
<td>4</td>
<td>Equipment Depreciation Costs</td>
<td>IDR 20,800</td>
</tr>
<tr>
<td>5</td>
<td>Vehicle Depreciation Costs</td>
<td>IDR 41,700</td>
</tr>
<tr>
<td>6</td>
<td>Machine Depreciation Costs</td>
<td>IDR 250,000</td>
</tr>
<tr>
<td>7</td>
<td>Advertising Costs</td>
<td>IDR 30,000</td>
</tr>
<tr>
<td>8</td>
<td>Equipment Costs</td>
<td>IDR 750,000</td>
</tr>
<tr>
<td>9</td>
<td>Indirect Labor Costs</td>
<td>IDR 500,000</td>
</tr>
</tbody>
</table>

Amount: IDR 1,894,500

Source: Data processed

2. Calculation of the cost of production

The following table is a calculation of the cost of production for traditional herbal medicine MSMEs Mrs. Mani Pamekasan Using Methods Full Costing and Variable Costing with a production volume of 200 units

Table 3. Calculation Of Cost Of Production

<table>
<thead>
<tr>
<th>Fee Name</th>
<th>full costing</th>
<th>variable costing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Material Costs</td>
<td>IDR 964,000</td>
<td>IDR 964,000</td>
</tr>
<tr>
<td>Direct labor costs</td>
<td>IDR 6,000,000</td>
<td>IDR 6,000,000</td>
</tr>
<tr>
<td>Factory Overhead Costs :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed BOP</td>
<td>IDR 842,500</td>
<td>-</td>
</tr>
<tr>
<td>Variable BOP</td>
<td>IDR 1,052,000</td>
<td>IDR 1,052,000</td>
</tr>
<tr>
<td>Total Factory Overhead Costs</td>
<td>IDR 1,894,500</td>
<td>IDR 1,052,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>IDR 8,858,500</td>
<td>IDR 8,016,000</td>
</tr>
<tr>
<td>Number of Products (packs)</td>
<td>200 pcs</td>
<td>200 pcs</td>
</tr>
<tr>
<td>Total Product Price</td>
<td>IDR 44,293</td>
<td>IDR 40,080</td>
</tr>
</tbody>
</table>

Source: Data processed

From the results of calculating the cost of products using the method full costing It was found that the cost of producing healthy men's herbal medicine was IDR 44,293 or if rounded up to IDR 44,300/pcs when using the variable costing It was found that the cost of producing healthy herbal medicine for men was IDR 40,080 or if rounded up to IDR 40,100/pcs
3. Calculation of product selling prices

When determining the selling price of products, Traditional Herbal MSMEs Mrs. Mani Pamekasan still determine the selling price of products only by looking at the market price of IDR 40,000 per product so the author uses the method of determining the selling price markup *pricing* with the company's expected profit of 10% of the previous profit. The following is a calculation of the selling price of healthy traditional herbal medicine that men use mark *up pricing* with a method approach full *costing* and variable *costing*

<table>
<thead>
<tr>
<th>Table 4. Comparison of product selling prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
</tr>
<tr>
<td>Company</td>
</tr>
<tr>
<td>Full costing</td>
</tr>
<tr>
<td>Variable costing</td>
</tr>
<tr>
<td>Men's Healthy Herbal Medicine</td>
</tr>
</tbody>
</table>

Source: Data processed

Based on the table above, the selling price of traditional healthy herbal medicine for men based on the full costing method is IDR 48,700. Meanwhile, the selling price of traditional healthy herbal medicine for men is based on the variable costing method, namely IDR 44,100. This proves that the calculation of the cost of production using the full costing and variable costing methods as the basis for determining product selling prices using the mark up pricing method produces product selling prices that are higher than the product selling prices determined by the company. In determining the selling price of the product, the company is still based on the market price, which is IDR 40,000 so, if the UMKM Traditional Herbal Medicine Hj. Sumiati wants maximum profit and selling price, it is best to use the full costing method in calculating production cost prices as a basis for determining product selling prices using the mark up pricing method.

**CONCLUSIONS AND SUGGESTIONS**

In calculating the cost of production, it shows that the method full costing produces a higher nominal than the method variable costing. This happens because the method full costing takes into account all elements of production costs, both variable and fixed, while using the method variable costing only takes into account production costs that behave variable. The results of calculating the cost of production using the method full costing amounting to Rp. 8,858,500, whereas when using the variable costing method for traditional healthy men's herbal medicine it is Rp. 8,016,000 so that there is a difference in the results of calculating the cost of production between the methods full costing with variable costing will result in different product selling prices. The results of calculating the selling price using the method mark up pricing with the company's expected profit of 10% for the method full costing namely 48,700 whereas when using the method variable costing namely traditional herbal medicine for healthy men, Rp. 44,100

The advice that can be given by the author is if the UMKM Traditional Herbal Medicine Hj. Sumiati wants maximum profit and selling price, preferably when calculating the cost of production using the method full costing as a basis for determining the selling price of products using the method mark up pricing because this method takes into account all elements of production costs, both variable and fixed, such as fixed and variable BB, TKL and BOP costs. Of course, if the Traditional Herbal Medicine MSME Hj. Sumiati uses the method full costing as a basis for determining the selling price of products using the method mark up pricing, the resulting calculation of the cost of production will be more detailed than the calculation of the cost of production using the method variable costing.
BIBLIOGRAPHY


