



DETERMINING SELLING PRICE USING FULL COSTING AND VARIABLE COSTING METHODS AT EKA JAYA OPAK FACTORY

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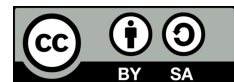
ABSTRACT

Keywords:

Cost of goods sold;
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This study aims to assess the accuracy of production cost calculations, which serve as the foundation for determining an appropriate cost of sales. A descriptive qualitative approach was employed, with data collected through direct observation and interviews. The data includes production details, raw material costs, labor costs, and factory overhead costs over a specified period. The study highlights the potential impact of pricing strategies on consumer behavior: a selling price that is too high compared to competitors may lead consumers to opt for cheaper alternatives, while an excessively low price risks underpricing. The findings revealed significant discrepancies in production cost calculations. The company's simplified method resulted in lower costs compared to both the variable costing and full costing methods. The difference between the company's method and full costing suggests the potential for underpricing, as it neglects certain cost components, particularly fixed overhead costs. In contrast, the full costing method offers a more comprehensive and accurate cost analysis, which is crucial for determining sustainable and competitive selling prices.

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1. INTRODUCTION

In general, the main goal of a company in carrying out its operational activities is to obtain profit or earnings or the greatest possible profit (Yunita et al., 2024). The profit generated will be used for the sustainability of the company's operational activities and can also be used for the company's progress so that it can develop further in the future. In determining the cost of goods sold, there are several methods that can be used, including full costing and variable costing. The difference in approach between these two methods results in different cost calculations, which ultimately affects the determination of selling prices (A. K. Maula et al., 2023). In the context of increasingly fierce market competition, companies need to understand the implications of each of these methods in order to set competitive and sustainable selling prices (Nafisah et al., 2021).

The full costing method calculates all costs associated with production, including both fixed and variable costs, thus providing a comprehensive overview of the expenses incurred. Meanwhile, the variable costing method only considers variable costs, which can provide flexibility in determining selling prices (Silvianti, 2021). Choosing the right method will greatly influence the results of the analysis and pricing decisions (Puspitasari, 2021).

Pabrik Opak Jaya Eka is one of the micro, small, and medium enterprises (MSMEs) engaged in the production of opak. This factory has been established for 25 years and currently has 34 permanent employees. Initially, the factory only had 2 employees and has continued to grow year after year. The Opak Eka Jaya factory produces raw opak that is sold to small business owners in North Sumatra and surrounding areas. Previously, this factory still used simple manual calculations to estimate the cost of goods manufactured and did not include all costs incurred during the production process. In calculating the cost of goods manufactured, this factory only considered variable overhead costs without accumulating raw material costs, direct labor costs, and other factory overhead costs. Therefore, the researcher decided to conduct the study here to calculate the cost of production more thoroughly, which will later serve as the basis for accurately determining the cost of goods sold. If the selling price is too high compared to competitors, consumers may switch to other products with lower prices, while a selling price that is too low risks causing underpricing. To avoid this, accurate calculation of the cost of production and the cost of goods sold is needed using the full costing and variable costing methods (Wakidin, 2022).

Description	Cost
Cost of goods sold	Rp. 208.464.800
Expected profit percentage (30%)	Rp. 62.539.440
Selling price	Rp. 271.004.240
Selling price per kg with production quantity 31.200 kg	Rp. 8.686

The calculation table shows the production cost structure with a Cost of Goods Sold of Rp 208,464,800 for 31,200 kg of production, resulting in a cost per kilogram of Rp 6,681. With a profit target of 30%, the selling price is set at Rp 8,686 per kilogram.

The main problem is the excessively thin profit margin - only Rp 2,005 per kilogram or 23% of the selling price. This creates several business risks, making it highly vulnerable to cost increases, difficult to invest in development, and potentially creating a perception of low quality in the eyes of consumers. For the manufacturing industry, a healthy profit margin is typically 40-60% of the cost of goods sold (COGS), which means the selling price should range from Rp 9,353-10,690 per kilogram. Companies need to consider operational efficiency strategies, product value enhancement, or market repositioning to achieve more sustainable pricing. The results of previous studies indicate a significant difference in cost calculation results using the three methods. The production cost calculation at PT. Fortuna Inti Alam using the direct costing method results in lower costs because it only considers costs directly related to the product. Conversely, applying the full costing method yields a higher total cost because it includes all costs, both fixed and variable, thus providing a more comprehensive picture of the total production cost. The variable costing method results in lower costs compared to full costing because it only calculates variable costs (Anggaria et al., 2024).

Therefore, this research aims to analyze the differences between factory calculations using the full costing and variable costing methods in determining the cost of goods sold, as well as their implications for setting selling prices. With a better understanding of these two methods, it is hoped that companies can make more informed decisions in their pricing strategies, thereby increasing competitiveness and profitability in the market.

Cost Accounting

Cost accounting is the process of recording, classifying, and analyzing costs incurred in production and sales, with the aim of providing useful information for managerial decision-making (Alqudah et al., 2022). For the purpose of determining production costs, cost accounting presents information about costs that have occurred in the past. For cost control, cost accounting presents information about costs expected to be incurred, compares them with actual costs, and then presents an analysis of the deviations (Mulyadi, 2018).

In the study (Alqudah et al., 2022), cost calculation techniques are defined as the process of transforming input data to generate information output that allows for determining the production of organizational products and services. Quality cost accounting is an essential tool for improving company efficiency and competitiveness, especially in the SME sector, which often lags behind in adopting modern accounting methods (Biadacz, 2020). An effective cost accounting system allows companies to identify and control costs, which in turn increases profitability and competitiveness in the market (Yaser Saleh et al., 2023).

Production Costs

Production is any activity aimed at increasing or adding value to an object, or any activity intended to satisfy others thru exchange. It encompasses all activities for creating and adding value to goods and services, utilizing available factors of production (Fatmawati et al., 2024).

Production costs are all expenses incurred to produce goods or services during a specific period. These costs include raw material costs, direct labor costs, and factory overhead costs. Production costs are an important element in determining the cost of goods sold and the profit generated by a company (Mulyadi, 2018). Production costs are the expenses incurred to process raw materials into finished goods ready for sale. For example, these include depreciation costs of machinery and equipment, raw material costs, auxiliary material costs, and employe

salary costs for those working in the department, whether directly or indirectly related to the production process. (Febrianty & Muchlis, 2020)

Cost of Goods Sold

In the production of a product, the cost of goods sold includes two categories of costs: production costs and non-production costs. Production costs are defined as the expenses incurred in processing raw materials into a product, while non-production costs include marketing activities and general administrative activities (Firtin, 2023). Production costs are the cost of goods manufactured, which is used to calculate the cost of products still in process at the end of the accounting period. These non-production costs are added to the cost of goods manufactured to calculate the total product cost. (Mulyadi, 2018)

It can be concluded that the cost of goods manufactured is the cost sacrificed in the production process or an activity of transforming raw materials into finished goods to obtain profit in a business, including raw material costs, direct labor costs, and factory overhead costs.

According to Hariyani (2018:53) in (Rahmasania & Dahtiah, 2022), "by determining the cost of goods sold, the company can know the amount of production costs that will be incurred, so that the company can determine the selling price of the product with the desired profit margin."

In determining the cost of goods manufactured, there are two methods used: full costing and variable costing. The full costing method is used to determine the cost of goods manufactured, where all production costs are included in the cost of goods manufactured. (Karyadi et al., 2020)

Setting the selling price

Selling price is one of the important factors for a company's success. The right selling price can increase sales and profits, while the wrong selling price can harm the company (Santi Median et al., 2023). Therefore, sellers must consider many factors when determining the appropriate selling price. Additionally, selling price can be defined as the revenue received by the seller from the payment for goods purchased by consumers (A. K. Maula et al., 2023). Its value is equal to the price multiplied by the number of products purchased; if the price changes, the sales revenue will automatically change as well. (Lia Nur Fatmawati et al., 2024)

According to Krismaji and Aryani (2012:325) in (Nadila et al., 2024), "the approach to determining selling price is to add the estimated profit to the cost of production. A markup is the difference between the selling price and the cost of the product; a markup is usually a certain percentage of the cost."

Methods for Determining the Cost of Goods Manufactured

The method for calculating the cost of goods manufactured is a way of accounting for production cost elements in the cost of goods manufactured. There are two approaches to calculating cost elements in the cost of goods manufactured: the full costing method and the variable costing method. The main difference between the two methods lies in the treatment of production costs in the income statement (Jus et al., n.d.).

- a. Full Costing Method According to Mulyadi (2014:17), the full costing method is a method of determining the cost of production, which includes raw material costs, direct labor costs, and factory overhead costs, whether variable or fixed.
- b. Mulyadi's (2014:18) variable costing method, variable costing is a method of determining the cost of production that only considers variable production costs as part of the cost of production, which consists of raw material costs, direct labor costs, and variable factory overhead costs.

2. RESEARCH METHODS

The research method used in this study is qualitative research with a descriptive approach. The types of research data used are qualitative and quantitative data. In this study, quantitative data refers to production costs and production quantity, while the qualitative data in this study consists of interview results regarding the production process and types of raw materials.

This research was conducted at the Eka Jaya Opak Factory, located in Salam Tani, Pancur Batu District, Aman Abadi Tuntungan 1, Deli Serdang Regency, North Sumatra 20353. The research was conducted in April. The data used are primary and secondary data. Primary data refers to information obtained thru direct observation and direct interviews (Afifah et al., 2020). Therefore, the researcher conducted interviews and direct observations with the owner of Opak Jaya Eka. Meanwhile, secondary data is information taken from references, namely journals relevant to the research title and accessible via the internet (Yunita et al., 2024). The data analysis technique used is qualitative descriptive analysis with several stages: data reduction, data presentation, and conclusion drawing. The resulting conclusions were then systematically organized to provide implications and suggestions for further research (Salimah Salimah et al., 2024).

3. RESULT AND ANALYSIS

The Eka Jaya Opak factory still uses a simple manual calculation method to estimate the cost of goods manufactured, which means not all costs incurred during the production process can be properly accumulated. In calculating the cost of goods manufactured, the factory only considers variable overhead costs, without accumulating raw material costs, direct labor costs, and other factory overhead costs. This can lead to inaccuracies in estimating production costs. The data used in this study was collected from April, which served as the basis for analyzing the effectiveness of the calculation method applied.

The production of opak in one day reaches 1200 kg, and in a month the factory produces 31,200 kg of raw opak. The opak factory calculates the cost of goods sold using a simple method, as shown in the following table:

Table 1. Calculation of production cost for Eka Jaya Opak Factory

No.	Description	Monthly needs	Unit cost	Amount
1	Raw materials	104 ton	1.350/kg	Rp. 140.400.000
2	Solar	206 liter	6.800/liter	Rp. 1.400.800
3	Firewood	13 truck	250.000/truck	Rp. 6.500.000
4	Labor costs	10 sweet potato peeler	Rp. 50.000	Rp. 3.000.000
		4 the man who makes opak	Rp.100.000	Rp. 10.400.000
		7 woman making opak	Rp. 80.000	Rp. 14.560.000
		7 people working to dry opak	Rp. 80.000	Rp. 9.100.000
		4 People work sifting opaque	Rp. 40.000	Rp. 4.160.000
		4 people are opaque	Rp. 90.000	Rp. 8.944.000
	Total production cost			Rp. 208.464.800
	Total production output for one month			31.200
	Cost of goods sold per kg			Rp. 6.681

From Table 1, it is known that the total production cost of opak in one month is Rp. 208,464,800 with a total of 31,200 kilograms of finished opak ready for sale. Therefore, the cost of goods sold can be calculated as follows:

$$\text{Cost of goods sold} = \frac{\text{Total production cost}}{\text{Total Production for One Month}} = \frac{\text{Rp } 208.464.800}{\text{Rp } 31.200} = \text{Rp } 6.681$$

So, from the calculations above, it is known that the total production cost for one month with the number of ready-to-sell opak pieces results in a cost of goods sold of Rp. 6,681.

Calculation of Cost of Goods Sold Using Full Costing and Variable Costing Approaches

The full costing approach is a method used to determine the cost of goods manufactured by calculating all production costs, including raw materials, direct labor, and factory overhead. The variable costing approach is a method used to determine the cost of goods manufactured by calculating only variable overhead costs. In a single production process, the opak factory is able to produce 1,200 kilograms of opak per day, and the total production of raw opak for a month reaches 31,200 kilograms. The costs incurred in opak production are raw material costs, labor costs, and factory overhead costs. Raw material costs are the daily purchase of cassava, requiring 4 (four) tons at a price of Rp. 1,350 per kg, totaling 104 tons per month with a total cost of Rp. 140,400,000. Labor costs consist of direct labor costs, as shown in Table 2.

Table 2. Direct and indirect labor costs

No	Work section	Amount	Individual wages	Daily earnings	Total per Month
1	Sweet potato peeler Rp. 125 per kg	10 people	Rp. 50.000	Rp. 500.000	Rp. 13.000.000
		4 male	Rp. 100.000	Rp. 400.000	Rp. 10.400.000
2	Opaque production	7 woman	Rp. 80.000	Rp. 560.000	Rp. 14.560.000
3	Opek drying workers	7 people	Rp. 80.000	Rp. 350.000	Rp. 9.100.000
4	Opaque foot worker	4 people	Rp. 40.000	Rp. 160.000	Rp. 4.160.000
	Total direct labor cost				Rp. 51.220.000

Based on Table 2, direct labor costs cover various job sections such as peeling cassava, making opak, opak drying workers, and opak sifting workers. Each job section has details on the number of workers, wages per person, total wages per day, and total costs per month. The total direct labor cost listed in the table is Rp. 51,220,000. This cost reflects the total expenditure for all workers involved in the production process during a

one-month period. Direct labor costs are very important to consider in production cost analysis, as they can affect the cost of goods sold and the company's profitability.

Factory Overhead (FOH) costs are all indirect costs incurred in the production process, excluding direct materials and direct labor costs. One of its main components is auxiliary materials, which are materials used during the production process but do not become a main part of the product, such as plastic rope, burlap, etc. Additionally, there are indirect wages, which are salaries for factory employees not directly involved in the production process, such as loading costs. Depreciation costs are an important component, representing the decline in value of assets like factory buildings, machinery, and operational vehicles. Utility costs, such as electricity and water, as shown in Tables 3, 4, 5, and 6.

Table 3. Indirect labor costs

No	Work section	Amount	Individual wages	Daily earnings	Total per Month
1	Cost of loading opak	4	Rp. 86.000	Rp. 344.000	Rp. 8.944.000
Total indirect labor cost					Rp. 8.944.000

Based on Table 3, indirect labor costs include the total expenses incurred for opaque loading labor, which amount to Rp. 8,944,000. This cost reflects the total expenditure for workers involved in activities that support the production process, such as transportation or loading.

Table 4. Auxiliary material costs

No	Description	Daily production	Monthly production	Price	Amount
1	Plastic rope	1 kg	26 kg	Rp. 22.000	Rp. 572.000
2	Glass plastic	4 m	104 m	Rp. 12.000	Rp. 1.248.000
3	Goni	140	3.64	Rp. 2.500	Rp. 9.100.000
4	Solar	8 liter	206 liter	Rp. 6.800	Rp. 1.400.800
5	Wood	Half a truck	13 truck	Rp. 250.000	Rp. 6.500.000
Total cost of auxiliary materials					Rp. 18.820.800

Based on Table 4, auxiliary material costs include various items such as plastic rope, glass plastic, burlap, diesel, and wood. Each item has daily and monthly production details, price per unit, and total costs incurred. The total cost of auxiliary materials in the table is Rp. 18,820,800, which reflects the total expenditure for all auxiliary materials used in the production process during the specified period.

Table 5. Electricity and water costs

No	Description	Monthly cost
1	Electricity and water	Rp. 50.000
Total cost of electricity, water, and other expenses		Rp. 50.000

Table 5 above presents a breakdown of monthly costs for utilities, specifically electricity and water. The total cost for electricity and water is Rp. 150,000.

Table 6. Depreciation Costs of Machinery and Equipment

No.	Description	Amount	Purchase price	Residual value	Economic life	Monthly depreciation expense	Amount
1	Box steamer	3	Rp. 3.500.000	Rp. 500.000	2	Rp. 125.000	Rp. 375.000
2	Cassava container	3	Rp. 1.000.000	Rp. 200.000	10	Rp. 6.667	Rp. 20.001
3	Cassava grinder	1	Rp. 3.500.000	Rp. 750.000	10	Rp. 29.160	Rp. 29.160
4	Press printing machine	1	Rp. 6.000.000	Rp. 1.000.000	10	Rp. 41.666	Rp. 41.666
5	Print opak	1	Rp. 3.500.000	Rp. 750.000	10	Rp. 22.916	Rp. 22.916
6	Dumpling machine	1	Rp. 7.000.000	Rp. 1.500.000	10	Rp. 45.833	Rp. 45.833
Total depreciation cost of Eka Jaya opak factory machinery and equipment							Rp. 534.576

Based on Table 6, the depreciation cost of machinery and equipment is the allocation of the cost of fixed assets such as machinery and equipment over their economic life. The box-shaped steamer has the highest

depreciation contribution (70% of the total) due to its short economic life (2 years), while machines with high investment values such as dumpling machines and press molding machines have relatively low depreciation because of their 10-year economic life.

Based on the overhead cost data outlined above, calculated using the full costing method as shown in Table 7.

Table 7. Calculation of factory overhead costs using the full costing method at Eka Jaya Opak Factory

No	Cost Breakdown	Total cost
1	Variable factory overhead	
	Cost of auxiliary materials	Rp. 18.820.800
	Electricity and water costs	Rp. 50.000
	Variable factory overhead	Rp. 18.870.800
2	Fixed factory overhead costs	
	Indirect labor costs	Rp. 8.944.000
	Depreciation expense for machinery and equipment	Rp. 534.576
	Fixed factory overhead	Rp. 9.478.576
	Total factory overhead cost	Rp. 28.299.376

From Table 7, it can be seen that the total factory overhead costs amount to Rp 28,299,376, consisting of variable overhead costs of Rp 18,870,800 and fixed overhead costs of Rp 9,478,576. Variable overhead costs include expenses that change with production volume, such as auxiliary materials and electricity & water, while fixed overhead costs cover indirect labor and depreciation of machinery and equipment, which have a relatively constant value regardless of changes in production volume.

From the previous explanation, information can be obtained regarding the results of calculating raw material costs, direct labor costs, and factory overhead costs. With this data, the cost of goods manufactured is calculated using the full costing method (Nurdilasari et al., 2021), as shown in Table 8.

Table 8. Calculation of cost of goods manufactured at Eka Jaya Opak Factory using full costing

No	Description	Total cost
1	Raw material cost	Rp. 140.400.000
2	Direct labor cost	Rp. 51.220.000
3	Variable factory overhead	Rp. 18.870.800
4	Fixed factory overhead costs	Rp. 28.299.376
	Total production cost	Rp. 238.790.176

From Table 8, it is known that the total cost of opak production in one month is Rp. 238,790,176 with a total of 31,200 kg of finished opak ready for sale. Therefore, the cost of production is calculated as follows:

$$\text{Cost of goods sold} = \frac{\text{Total production cost}}{\text{Total Production for One Month}} = \frac{\text{Rp } 238.790.176}{\text{Rp } 31.200} = \text{Rp } 7.653$$

So, from the calculations above, it is known that the total production cost for one month with the number of ready-to-sell opak is Rp. 7,635.

Meanwhile, if calculated using variable costing, the results can be seen in Table 9.

Table 9. Calculation of production cost at Eka Jaya Opak Factory using variable costing

No	Description	Total cost
1	Raw material cost	Rp. 140.400.000
2	Direct labor cost	Rp. 51.220.000
3	Variable factory overhead	Rp. 18.870.800
	Total production cost	Rp. 210.490.800

From Table 9, it is known that the total cost of opak production in one month is Rp. 210,490,800 with a total of 31,200 kilograms of finished opak ready for sale. Therefore, the cost of production is calculated as follows:

$$\text{Cost of Goods Sold} = \frac{\text{Total production cost}}{\text{Total Production for One Month}} = \frac{\text{Rp } 210.490.800}{\text{Rp } 31.200} = \text{Rp } 6.746$$

So, from the calculations above, it is known that the total production cost for one month with the number of ready-to-sell opak products results in a cost of goods sold of Rp. 6746.

Comparison of Production Cost Calculation for Eka Jaya Opak Factory using Full Costing and Variable Costing Methods

The calculation of the cost of goods sold using three different methods shows a significant difference. When comparing the factory method with variable costing, a difference of Rp65/kg was found. This is because variable

costing has taken into account all variable costs that were not fully included in the factory method calculation. A larger difference was seen when comparing the factory method with full costing, reaching Rp972/kg. This significant difference occurred because full costing not only includes variable costs but also incorporates all fixed costs that were previously ignored by the factory method. Additionally, the comparison between variable costing and full costing showed a difference of Rp907/kg, confirming that the fixed costs added in full costing contribute significantly to the total production cost.

Calculating the selling price after calculating the cost of goods sold by adding the total production costs to an estimated 30% profit and dividing it by the total production output for the month. Below is the calculation of the selling price:

Table 10. Calculation of selling price using the company's method

Description	Cost
Cost of goods sold	Rp. 208.464.800
Expected profit percentage (30%)	Rp. 62.539.440
Selling price	Rp. 271.004.240
Selling price per kg with a production volume of 31,200 kg	Rp. 8.686

In Table 10, the calculation shows the production cost structure with a Cost of Goods Sold of Rp 208,464,800 for 31,200 kg of production. The company sets a profit target of 30%, so the selling price per kilogram of product is calculated to be Rp 8,686.

Table 11. Calculation of selling price using the variable costing method

Description	Cost
Cost of goods sold	Rp. 210.490.800
Expected profit percentage (30%)	Rp. 63.147.240
Selling price	Rp. 273.638.040
Selling price per kg with a production volume of 31,200 kg	Rp. 8.770

In Table 11, the calculation shows the production cost structure with a Cost of Goods Sold of Rp 210,490,800 for 31,200 kg of production. The company sets a profit target of 30%, so the selling price per kilogram of product is calculated to be Rp 8,770.

Table 12. Calculation of selling price using the full costing method

Description	Cost
Cost of goods sold	Rp. 238.790.176
Expected profit percentage (30%)	Rp. 71.637.052,8
Selling price	Rp. 310.427.229
Selling price per kg with a production volume of 31,200 kg	Rp. 9.949

In Table 12, the calculation shows the production cost structure with a Cost of Goods Sold of Rp 238,790,176 for 31,200 kg of production. The company sets a profit target of 30%, so the selling price per kilogram of product is calculated to be Rp 9,949.

Based on the selling price calculations using three different methods, it can be concluded that there is a significant difference in the selling price determination of opak at the Eka Jaya Opak Factory. The simple method currently used by the factory results in a selling price of Rp8,686/kg, which only accounts for a portion of production costs. Meanwhile, the variable costing method, which includes all variable costs, yields a higher selling price, with a difference of only Rp84/kg, or Rp8,770/kg. The full costing method, which includes all production costs, including fixed costs, results in the highest selling price of Rp9,949/kg. The price difference between the factory method and full costing is Rp1,263/kg, indicating that the method currently used by the factory has the potential to lead to underpricing because it does not account for all cost components.

The results of this study are in line with the cost accounting theory put forward by Mulyadi (2018), which states that the fundamental difference between full costing and variable costing lies in the treatment of fixed overhead costs. This research proves that full costing provides more comprehensive cost information because it allocates all production costs, both fixed and variable, to the cost of goods sold. This finding is consistent with the research by Karyadi et al. (2020) and Nitami Indah (2023), which states that the full costing method is more accurate in reflecting total production costs because it includes all cost elements. The difference in the cost of goods sold (COGS) of Rp 972/kg between the factory method and full costing indicates the significant impact of ignoring fixed costs in the traditional calculation that the company has been using.

The difference in selling price of Rp 1,458/kg between the factory and full costing methods indicates a significant risk of underpricing. This aligns with the findings of Anggaria et al. (2024) at PT. Fortuna Inti Alam, which showed that the direct costing method (similar to the factory method) resulted in lower costs because it only considered direct costs, thus risking inaccurate pricing that did not reflect the true costs. This underpricing phenomenon has the potential to harm companies in the long run due to several factors. First, profit margins become unrealistic, where using the factory method, the profit margin appears to be 30%, but is actually only around 20% when using full costing. Second, there is an inability to cover fixed costs, where the depreciation of machinery and other fixed overheads are not optimally recovered. Third, there is a risk of long-term losses, as explained by Nafisah et al. (2021), that neglecting fixed costs can reduce long-term profitability. Although variable costing results in a higher cost of goods sold (COGS) of Rp 6,746/kg compared to the factory method, the difference is only Rp 65/kg. This indicates that the factory method is already quite good at identifying variable costs, but is not yet comprehensive in allocating all variable overhead costs. The results of this study support the findings of Febrianty & Muchlis (2020) and Hasmi et al. (2020) that variable costing provides flexibility in setting selling prices because it separates costs based on their behavior. However, for long-term pricing purposes, variable costing still has limitations because it does not account for fixed costs, which are an important component of a company's cost structure.

The research results indicate that full costing is the most appropriate method for SMEs like the Eka Jaya Opak Factory. With a total fixed cost of Rp 9,478,576 per month, neglecting this component in the factory method leads to significant distortion of cost information. Full costing ensures that all investments in production machinery and infrastructure are factored into pricing, allowing the company to maintain its operational sustainability. Setting the selling price at Rp 9,949/kg using the full costing method, although higher, actually provides several strategic advantages. From a long-term profit perspective, this method provides financial sustainability by ensuring all costs are covered and delivering a realistic profit margin. Additionally, the company has better reinvestment capabilities, where with the right margins, it can maintain and replace machinery. This method also provides better price stability, as prices that reflect actual costs are more stable against cost fluctuations.

4. CONCLUSION

The research findings reveal fundamental differences between the two costing methods analyzed. The full costing method includes all costs associated with production, both fixed and variable, thus providing a more comprehensive picture of total production costs. This approach ensures that all cost components, including machine depreciation and other fixed overheads, are properly allocated in the calculation of the cost of goods sold. Conversely, the variable costing method only considers variable costs in the calculation of the cost of goods sold. Although this method can provide flexibility in short-term pricing and facilitate margin contribution analysis, neglecting fixed costs in the calculation can pose risks in long-term pricing decisions. This study revealed that factories using simple or non-comprehensive calculation methods are at risk of significant underpricing. This condition can result in thin profit margins and difficulty in covering the fixed costs the company has incurred. The long-term impact of this underpricing not only affects profitability but can also disrupt the company's competitiveness and operational sustainability in the future. The risk of underpricing is becoming increasingly critical for MSMEs like Pabrik Eka Jaya Opak, as the available margin for error is relatively small compared to large companies. Therefore, accuracy in cost calculation and pricing becomes a determining factor for business success.

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