
CALCULATING OF COST OF PRODUCTION USING FULL COSTING AND VARIABLE COSTING METHODS AT PT. ALL MEUBEL

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Abstract

Determining the cost of production is a crucial element in financial management and business decision-making. This study aims to analyze and compare the calculation of production costs using the Full Costing and Variable Costing methods. The Full Costing method includes all production costs, both variable and fixed, while the Variable Costing method considers only variable costs in the production process. The data used in this study include raw material costs, direct labor costs, and factory overhead costs from a manufacturing company. The analysis results indicate significant differences between the two methods in calculating production costs. Full Costing results in higher production costs because it includes all fixed costs as part of production costs, while Variable Costing provides a more focused view of costs that directly vary with production levels. These differences have varying implications for income statements and product pricing strategies. By understanding the characteristic of each method, companies can choose the most suitable approach for management purposes, such as cost planning, pricing strategies, or operational performance evaluation. This study is expected to provide insights to business practitioners and academics for making decisions based on accurate and relevant data.

Keywords: : Decision-Making, Full costing, Production cost, Production expenses, Variable costing.

INTRODUCTION

Every company that has been established certainly wants to continue to grow, be it a service, trade and industry company. In order to grow, of course, the company must be supported by the profits obtained from its business. Gaining profit is not an easy thing to achieve, it can even be more difficult to achieve because of the increasingly developing economic situation and increasingly tight competition in business. The profit obtained by the company is determined by many factors, including revenue, costs and sales volume.

The method of determining the cost of production is a way of calculating cost elements into production costs (Mulyadi, 2014:17). One of the most important elements in determining the cost of goods sold is the cost of production. In determining the cost of production, there are two methods, namely the full costing method and the variable costing method. The full costing method is a method of calculating the cost of production that calculates all elements of production costs into the cost of production consisting of raw material costs, direct labor costs and factory overhead costs that are fixed or variable so that the full costing method is also called absorption costing. The Variable Costing method is a method of determining the cost of production that only calculates variable production costs into the cost of production. The elements of variable costing costs are raw material costs, direct labor costs, and variable factory overhead costs. Based on the description of the background above, the researcher is interested in researching "Calculation of Production Costs Using the Full Costing and Variable Costing Methods in All Furniture Companies."

LITERATURE REVIEW

Cost of Goods Sold:

Production cost refers to the total expenses incurred by a business in the process of manufacturing goods or services. It encompasses all the costs associated with the production process, including the cost of raw materials, labor, overheads (such as utilities and rent), and the depreciation of machinery and equipment. These costs are crucial for determining the pricing of goods or services, as they directly influence a company's profitability. In general, understanding production costs helps businesses in making strategic decisions regarding pricing, budgeting, and cost control to maintain competitive advantage in the market.

Concept and Application of Variable Costing Method:

Variable Costing is a method of cost accounting that only considers variable costs—those costs that change with the level of production—when determining the cost of a product. Fixed costs, such as rent and salaries, are not included in the cost of goods sold under this method, but are treated as period expenses. The concept behind variable costing is that only the costs that vary with production volume are relevant for decision-making regarding pricing, production levels, and profitability. In practice, variable costing is useful for managers when making short-term decisions, as it provides a clearer picture of how production volume impacts costs and profits. This method is often applied in situations like pricing strategies, cost-volume-profit analysis, and break-even analysis, where understanding the relationship between fixed and variable costs is essential for effective decision-making.

Concept and Application of Full Costing Method:

Full Costing, also known as absorption costing, is a cost accounting method that assigns all costs—both variable and fixed—associated with production to the cost of goods sold. Under this method, fixed costs like rent, utilities, and salaries are allocated to each unit of production, alongside variable costs such as raw materials and labor. The key concept behind full costing is that all costs involved in producing a product, regardless of whether they fluctuate with production levels, should be accounted for in the product's total cost. This approach is essential for determining the full cost of a product, which is used for financial reporting and inventory valuation, and is required by generally accepted accounting principles (GAAP) for external reporting. In practice, full costing helps businesses set accurate product pricing, evaluate profitability, and comply with accounting regulations. It is also used for long-term strategic planning, as it provides a comprehensive view of the total costs involved in the production process.

Previous Research:

Previous studies related to the calculation of production costs using the variable costing and full costing methods, which serve as references in this research, were conducted by Lasena (2018), Sitty Rahmi (2018), and Andri, Y.C. (2009). These studies yielded the same research results and conclusions, which align with the comparison between the full costing and variable costing methods.

RESEARCH METHOD

Data Types and Data Sources

The type of study used is a descriptive study, aimed at obtaining descriptive data that can illustrate the composition and characteristics of the studied subject.

Place and Time of Research

This research took place from May 15, 2024, until completion, located at Jl. Raya Politeknik, Buha, Mapanget District, Manado City, North Sulawesi.



Figure 4.1 Factory front view from PT. All Meubel

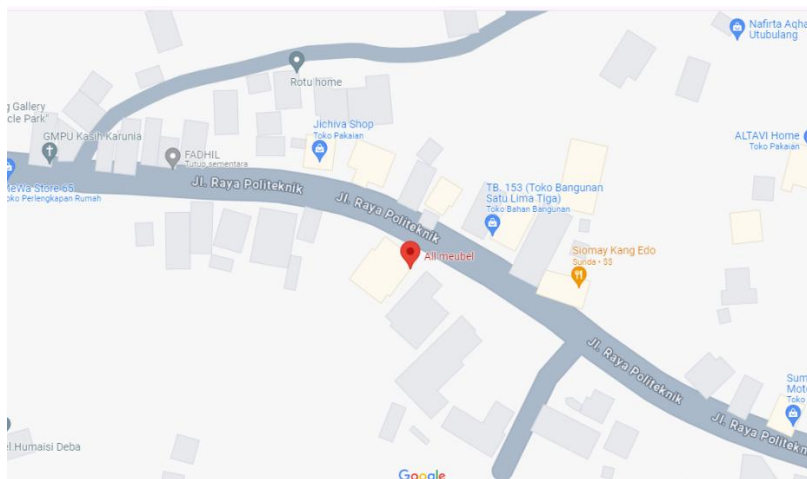
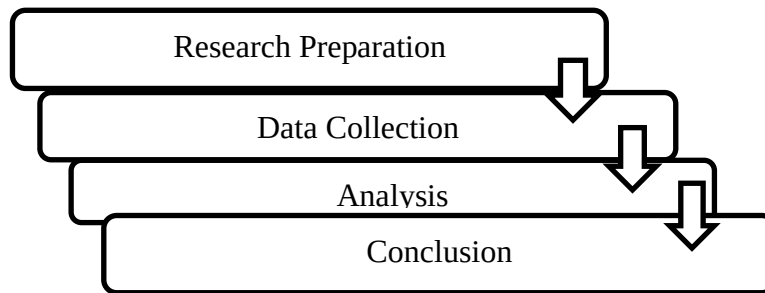


Figure 4.2 Research location

Research Procedures

The procedure followed by the author in conducting this research is illustrated in the following research flowchart:



Data Types

The type of data used in this research is qualitative data. This data is used to describe the research object and indicate its quality.

Data Source

The data source used in this research is primary data. Primary data refers to data collected directly from the research object by the researcher themselves. This research was conducted at PT. All Meubel, Buha District, Manado City.

Data Collection Techniques

For data collection techniques at PT. All Meubel, Manado City, the author chose interview and observation methods to obtain primary data. The data collection was carried out through direct question-and-answer interactions between the researcher and the informants.

Analysis Method

Analysis can be defined as the process of transforming data into information, so that the data can be easily understood and useful in addressing the issues related to the research activities.

The analysis method used in this study is the descriptive method, which describes a situation factually and accurately based on the facts, so that a conclusion can be drawn to address the existing issues.

RESULTS AND DISCUSSION

Overview of Research Object

A Brief History

Before the company was established, the owner was initially a sales representative who helped distribute or market furniture products to customers. In 2022, he decided to start his own business, which was named "All Meubel." All Meubel initially operated from a rented location, but as time passed and sales increased, the owner decided to purchase a new place to expand the business in February 2024. This new location is situated at Jl. Raya Politeknik, Buha, Mapanget District, Manado City, North Sulawesi.

This business was founded based on the skills possessed by Mrs. Indri, who previously worked as a sales representative in the same industry. With the desire to earn a higher income, she decided to leave and start her own business, naming it All Meubel. All Meubel employs 8 people—7 work in production and 1 as a driver. Employee salaries are paid once a week. The employees are paid based on a piece-rate system for each unit of production. As a result, the company has implemented a piece-rate wage system. This approach allows the company to avoid risks related to employee

performance, such as underperformance, since the employees' wages are determined by the quantity of production they complete.

Research Result

Business Activity: Raw Material Purchasing

Raw materials are the main ingredients for the production process. The raw materials for making sofas include wood/boards for the frame, foam or cotton for the cushions, fabric or leather for the covering, as well as sewing fabric and nails for assembly. To obtain raw materials for the production process, All Meubel purchases the materials directly from factory suppliers.

Production Cost Data

Raw Material Cost

Table 4.1 Raw material cost

Sofa Type	Cost Breakdown	Price (IDR)
Minimalis Sofa	Sengon wood 1 set	150.000
	Synthetic leather 12 m	180.000
	Thick foam ¼ ball	200.000
	Rubber tire 3 rolls	36.000
	Foam size 1 cm 2 pieces	24.000
	Foam size 2 cm 1 pieces	40.000
	2 inch nail	35.000
	Puring cloth 4 m	16.000
	Per 12 pieces	12.000
	Staples refill	40.000
	One can of glue	30.000
	19 stainless steel legs	76.000
	Table glass	90.000
	Total Cost of Raw Materials	929.000

Direct Labor Costs

If All Meubel produces 10 sets of minimalist sofas in one week, with each set valued at IDR 300,000, the breakdown is as follows:

Table 4.2. All Meubel

Type of Work	Total Number of Workers	Total Cost (IDR)
Assembler	2 people	1.100.000
Preparation of sofa materials	2 people	1.100.000
Sewing	2 people	600.000
Finishing	1 person	200.000
Total Direct Labor Cost		3.000.000

Factory Overhead Cost Variable Overhead Costs

Table 4.3 Variable overhead costs

No.	Cost Breakdown	Total (IDR)
1.	Electricity cost	150.000
2.	Transportation cost	100.000
3.	Driver's cost	115.000
Total of Variable Overhead Costs		365.000

Fixed Overhead Costs

Table 4.4 Fixed overhead costs

No.	Cost Breakdown	Total (IDR)
1.	Machine maintenance cost	125.000
Total Fixed Overhead Costs		125.000

Calculation of Production Cost Using the Full Costing Method at All Furniture Company

Table 4.5 Calculation of production cost using the full costing method at all furniture company

No.	Production Cost	Capacity	Total Cost
Raw Material Costs:			
1.	Sengon wood	1 set	150.000
2.	Synthetic leather	12 m	180.000
3.	Thick foam	¼ ball	200.000
4.	Rubber tire	3 rolls	36.000
5.	Foam	Size 1 cm 2 pieces	24.000
6.	Foam	Size 2 cm 1 pieces	40.000
7.	Nail	2 inch	35.000
8.	Puring cloth	4 m	16.000
9.	Per	12 pieces	12.000
10.	Steples refill		40.000
11.	Glue	1 can	30.000
12.	Stainless steel legs	19 pieces	76.000
13.	Table glass		90.000
Total Raw Material Cost			929.000
10 set sofa			9.290.000
Direct Labor Costs (10 set sofa):			
1.	Assembler	2 people	1.100.000
2.	Preparation of sofa materials	2 people	1.100.000
3.	Sewing	2 people	600.000
4.	Finishing	1 person	200.000
Total Direct Labor Costs			3.000.000
Factory Overhead Costs:			
Variable Overhead Costs			
1.	Electricity Cost		150.000

2.	Transportation cost	100.000
3.	Driver's cost	115.000
	Total of Variable Overhead Costs	365.000
	10 set sofa	3.650.000
Fixed Overhead Costs		
1.	Machine maintenance cost	125.000
	Total Fixed Overhead Costs	125.000
	10 set sofa	1.250.000
	Total Cost of Goods Sold	17.190.000
	Production Quantity	10 set sofa
	Cost of Goods Sold per set	1.719.000

Based on the calculation above, the production cost using the full costing method for 10 sets of minimalist sofas is IDR 17,190,000. Therefore, the production cost per set of minimalist sofas is IDR 1,719,000.

Calculation of Production Cost Using the Variable Costing Method at All Meubel Company

Table 4.6 Calculation of production cost using the variable costing method at all meubel company

No.	Production Cost	Capacity	Total Cost
Raw Material Costs:			
1.	Sengon wood	1 set	150.000
2.	Synthetic leather	12 m	180.000
3.	Thick foam	¼ ball	200.000
4.	Rubber tire	3 rolls	36.000
5.	Foam	Size 1 cm 2 pieces	24.000
6.	Foam	Size 2 cm 1 pieces	40.000
7.	Nail	2 inch	35.000
8.	Puring cloth	4 m	16.000
9.	Per	12 pieces	12.000
10.	Steples refill		40.000
11.	Glue	1 can	30.000
12.	Stainless steel legs	19 pieces	76.000
13.	Table glass		90.000
	Total of Raw Material Cost		929.000
	10 set sofa		9.290.000
Direct Labor Cost (10 sofa sets):			
1.	Assembler	2 people	1.100.000
2.	Preparation of materials cost	2 people	1.100.000
3.	Sewing	2 people	600.000
4.	Finishing	1 person	200.000
	Total of Direct Labor Costs		3.000.000
Factory Overhead Costs:			
Variable Overhead Costs			
1.	Electricity cost		150.000
2.	Transportation cost		100.000
3.	Driver's cost		115.000
	Total of Variable Overhead Costs		365.000
	10 set sofa		3.650.000
	Total of Variable Overhead Costs		15.940.000
	Production Quantity		10 set sofa
	Cost of Goods Sold per set		1.594.000

Based on the calculation of production cost using the variable costing method, the cost for 10 sets of minimalist sofas is IDR 15,940,000. Therefore, the production cost per set of sofa is IDR 1,594,000.

Comparison of Production Costs Using the Full Costing and Variable Costing Methods at All Furniture Company

Table 4.7 Comparison of production costs using the full costing and variable costing methods at all furniture company

No.	Product	Cost of Goods Sold per set		Difference
		Full Costing	Variable Costing	
1.	Minimalis sofa	Rp.1.719.000	Rp.1.594.000	Rp.125.000

Based on the calculation table above, it can be observed that there is a difference in the values produced by the full costing and variable costing methods. The production cost calculation using the full costing and variable costing methods for minimalist sofas shows a difference of IDR 125,000. The difference in values is due to the fact that the variable costing method only includes variable production costs. Variable costing assumes that if factory overhead costs are fixed and do not directly contribute to the production of a product, they should not be included as part of the production cost but should remain classified as period expenses. As a result, the production cost calculated using variable costing is lower than that calculated using full costing. The full costing method includes all factory overhead costs, both fixed and variable, allocated to the produced products based on actual factory overhead costs.

Product Marketing

Sales is the process of marketing the produced products to generate revenue. All Meubel products are marketed through freelance salespeople via online media. Additionally, at the All Meubel production site, sales are also conducted, both retail and wholesale. All Meubel also handles sales in bulk or by special order.

Company Problems

Based on the observations with the informant, Mrs. Indri, the business owner, one of the issues that often arises during the production process is the surrounding environment. When orders increase, the business owner is concerned about disturbing the nearby residents due to the loud noise from the production process, especially since production is often carried out until late at night.

CONCLUSION

Based on the discussion above, the following conclusions can be drawn:

- Based on the production cost using the full costing method, the production cost per set of minimalist sofas is IDR 1,719,000. In determining the selling price, the full costing method shows a higher nominal value compared to the variable costing method in calculating the production cost. This is because the full costing method includes all cost components, both fixed and variable costs.
- Based on the calculation of production cost using the full costing method, the production cost per set of minimalist sofas is IDR 1,594,000. In determining the selling price, the variable

costing method shows a lower nominal value compared to the full costing method. This is because the variable costing method only considers variable costs in calculating the production cost.

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