

ANALYSIS OF CALCULATION OF PRODUCTION COSTS AND DETERMINATION OF PRODUCT SELLING PRICES IN THE ABADI SENTOSA FURNITURE BUSINESS

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Abstract

In order to maximize revenue and profit, company management decides on manufacturing costs and selling prices during the production process. In order to determine the correct expenses, which are incurred during the production process and demonstrate the true cost of items, the manager of the production department must examine production costs. The variable costing method and the full costing method are two techniques used in cost accounting to determine manufacturing costs. In order for Abadi Sentosa to estimate the selling price of per-unit mebeul items, it is necessary to analyze how production expenses are calculated. The activities of this company, which manufactures cabinets, are carried out through a number of manufacturing procedures, allowing the production costs to be factored into the price of the product sold. The quantity of the production costs will be utilized to calculate the selling price of the goods. This study also examines if the cabinet product calculations, made using the current complete costing method, have complied with all requirements. Utilizing sales data for 8 units of 3-door ornamental cabinets with a cost of Rp. 2,202,700 and a unit selling price of Rp. 2,700,000, the results of establishing the cost of items manufactured using the company's full costing approach and the real full costing were compared. A 3-door decorative cabinet costs Rp 17,621,600 in total to produce, including Rp 8,000,00 for raw materials, Rp 5,120,000 for direct labor, Rp 4,304,080 for factory overhead, and Rp 175,920 for non-production costs. The profit was Rp 21,600,000 minus Rp 17,621,600, or Rp 3,978,400, assuming all 8 of the 3-door decorative cabinets—which cost Rp 2,700,000 each—were sold. Descriptive analysis is the analysis technique employed. These findings demonstrate that the corporation does not account for expenses such indirect labor costs, electricity prices, property taxes, and building depreciation in accordance with the full costing principle.

Keywords: *Production Cost, Full Costing Method, Product Sales.*

A. INTRODUCTION

Production costs are calculated while determining the cost of acquiring of goods using the Full Costing method, whereas the selling price of the company is calculated using the Variable Cost-Plus Mark-up method (Fachri Amrullah Faisal, 2020).

All expenses paid in managing raw resources into finished commodities are essentially considered production costs. Expenses associated with turning raw resources into marketable finished goods are called production costs (Mulyadi, 2018:14; 2018:14). There is a clear correlation between production costs and selling prices, with the selling price of a product being dictated more by production costs, even if the selling price is a value or cost burden that is decided for each product (Bustami & Nurlela, 2006:178).

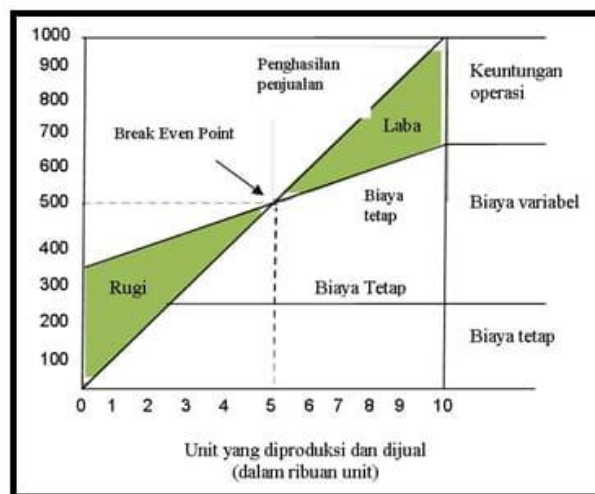
To quantify the costs involved in the production process, such as raw material costs, direct labor costs, and factory overhead costs, it is crucial to determine the cost of production precisely and comprehensively. The outcome of the cost-of-goods calculation will influence the company's decision-making when deciding on the selling price. If the price established

cannot cover all costs spent by the enterprise, choosing the incorrect cost of production will result in a loss for the business. The Abadi Sentosa Furniture Business currently uses the traditional system to calculate the cost of production for the manufacture of chairs, tables, and cabinets, which makes the calculation of the production price per unit less accurate and will have an impact on the determination of the selling price and profit.

It is essential to accurately and thoroughly calculate the cost of production in order to put numbers to the expenses associated with the manufacturing process, such as raw material costs, direct labor costs, and factory overhead costs. When deciding on the selling price, the company's decision-making will be influenced by the results of the cost-of-goods calculation. The wrong cost of production will cause the firm to lose money if the price determined cannot cover all of the costs incurred by the enterprise. The Abadi Sentosa Furniture Business now calculates the cost of production for the creation of chairs, tables, and cabinets using the conventional method, which reduces the accuracy of the calculation of the production price per unit and will affect the choice of the selling price and profit.

The furniture business of Abadi Sentosa has not yet employed the complete costing technique of analysis. This firm uses a very simple method to establish the price of products sold and the selling price of its products rather than applying the cost of production calculation in accordance with cost accounting rules. This firm has not provided a complete breakdown of the expenses associated with the production process. Furthermore, it has not yet fully focused on or thoroughly assessed all industrial overhead expenditures. As a result, the information generated by this process will be incorrect and inaccurate when used to determine and calculate the retail price of a product created in a factory.

This is the background, the authors conducted research on the Analysis of Calculation of Production Costs and Determination of Product Selling Prices in the Abadi Sentosa Furniture Business:



Based on this background, the main problem of this research is how Abadi Sentosa calculates the manufacturing costs when calculating the selling price of furniture production per unit?

B. LITERATURE REVIEW

1. Definition of Cost

Cost accounting is typically employed by businesses that are involved in manufacturing. Manufacturing businesses use a variety of production techniques to transform from raw ingredients to completed or semi-finished goods that are then sold to customers. The activity cycle of a manufacturing company begins with purchasing raw materials, then processing raw materials in the production department and ends with the delivery of finished

products to the warehouse department. The purpose of operating a manufacturing company is to earn profit, which comes from the sale of finished products. In addition to profits, manufacturing companies must also improve the quality and quantity of their products to face their competitors in the market share of manufactured products. The production financing cycle in a manufacturing company is used to trace the product processing process, from the input of raw materials into the production process until the finished product is produced from the production process. All activities related to the product will be calculated based on existing theories in cost accounting. Cost accounting is the practice of documenting, categorizing, summarizing, presenting, and analyzing the costs associated with producing and disseminating goods and services (Mulyadi, 2015).

Financial accounting and management accounting are the two accounting theories that are included in the complicated science of cost accounting. The idea of cost is the giving up of economic resources, defined in monetary terms, that has already happened or is anticipated to happen for a certain goal. Costs are typically classified according to two fundamental characteristics: Fixed and Variable. One of the metrics used by the business to measure efficiency and determine how much money must be sacrificed to produce a good is cost. Cost is therefore the primary concept to comprehend in cost accounting. Both full costing and variable costing are methods for calculating manufacturing costs. While variable costing simply considers variable production costs, full costing includes both fixed and variable production costs.

The term "cost" typically refers to the giving up of financial advantages in order to receive non-capitalized services. Expenditures that cannot produce advantages in the future or are identical to costs or purchase prices that have passed their expiration date are considered expenses. In relation to this final restriction, where costs are directly considered as expenses in conventional financial reporting, the terms cost and expense are frequently used interchangeably (Samryn, 2012). The value of the advantages given in exchange for the sacrifices made to get products and services is called the cost. can be calculated in rupiah when assets are sold off or debt is incurred. Lukman (2013:4) "is split in two, both broadly and specifically; broadly, Price is the loss of economic resources (scarcity) measured in monetary units that has occurred or is anticipated to occur in order to accomplish some objectives (to secure benefits). Cost is, in a strict sense, a portion of the cost price that is given up in an endeavor to generate income. Costs are outflows of goods or services that will be charged against or matched with income to determine profit. Expired costs are outflows of costs that can be subtracted from income. Mulyadi (2000:8-10) divides the concept of cost into a broad and a specific connotation. Cost can be defined broadly as the sacrifice of financial resources made for a specific goal and expressed in monetary units. While giving up economic resources to acquire assets is the cost in the strict sense.

2. Determination of Production Costs

Expenses associated with turning raw resources into marketable finished goods are called production costs. Costs of raw materials, direct labor, and overhead make up the majority of production costs Mulyadi (2015: 14).

The process of figuring out production costs involves adding cost components to those expenses. There are 2 (two) methods for calculating manufacturing costs, specifically:

a. Full Costing

Full costing is a way of calculating production costs that include all cost factors, including variable and fixed expenses for manufacturing overhead, direct labor costs, and raw material costs. Consequently, the following cost elements make up the cost of manufacturing according to the whole costing method:

Raw material costs xx

Direct labor costs xx
Variable factory overhead xx
Fixed factory overhead xx +
Cost (cost) of production xx

b. **Variable Costing**

The only production costs taken into account for determining production costs utilizing the variable costing technique are raw material costs, direct labor costs, and variable factory overhead costs. Base cost of the item. The cost of terminating inventory will be included in the statement of financial position and cost of goods sold in the income statement, therefore production costs are utilized as the basis for reporting. The amount of sales or the number of purchasers will not change as a result of the selling price, but it will have an impact on the company's overall revenue.

The following is a list of what the variable costing approach says:

Raw material costs xx
Variable labor costs xx
Variable factory overhead xx+
Product base price xx

Determination of variable costing (variable costing) is a concept of determining cost of goods which only includes variable production costs as an element of product costing. Fixed production costs are considered as period costs or or time costs (period costs) which are directly charged to profit and loss in the period in which they are incurred and are not treated as production costs.

3. Cost of Production

Cost of goods or acquisition price is the exact amount measured in monetary units in the form of:

- a. Cash paid
- b. The value of other assets submitted / sacrificed
- c. The value of services submitted or sacrificed
- d. Add capital

The cost price, which represents the exchange of economic resources, is established by the amount of money spent either directly purchasing assets or indirectly producing revenue. Mardiasmo (2000:20) defines the cost of production as the sum of three cost components, including the cost of raw materials, the cost of direct labor, and the cost of operating the plant. As stated by Bastian and Nurlela (2009:49) The term "cost of production" refers to a collection of manufacturing costs, such as direct costs for raw materials, direct labor, and factory overhead costs, as well as inventories of products at the start and end of the production process. Costs of production are associated with a given time period (Cashmere, 2011:11-12).

As stated by Supriono (1995:20) the components of the cost of manufacturing can be broadly divided into 3 (three) groups:

- a. Cost of raw materials
- b. Direct labor costs
- c. Overhead costs

Fixed factory overhead expenses are added to the cost of inventories of goods that are in the final stages of production and finished goods that have not yet been sold. Goods are only considered expenses once the product has been sold. Production will not occur without incurring fixed factory overhead costs, so full costing considers fixed factory overhead costs as the cost of inventory acquisition (Gersil & Cevdet, 2016). The price of the raw materials used to classify products, or the materials that will be processed into finished products and whose usage may be characterized as an integral component of a certain product, are the raw

material costs. All workers who are directly involved in the manufacturing of completed goods and whose services can be directly linked to the product are considered to be engaged in direct labor. In addition to the costs of direct labor and raw materials, manufacturing overhead expenses are production expenses. The monetary sum that a business unit charges consumers or buyers for the items or services that are sold or provided is the determination of the selling price. Mulyadi (2012; 346), choosing a selling price is defined as choosing a price that can cover all expenses related to producing the item or service together with the targeted level of profit for the business.

Hansen & Howen (2016;633), the goal of establishing the price of goods is:

a. To Calculate the Sales Price.

When a product is first introduced to the market, the cost of production is a key component in determining the selling price. If sales are only below the cost price, the manufacturer won't create the items. In contrast, if the selling price is more than the cost of the product, the producers will keep making the goods.

b. To Evaluate a Company's Efficiency

A company's efficiency can be determined by comparing historical cost prices. The company is not operating efficiently if historical cost prices are greater than standard cost prices.

c. To Define policies in Sales

The cost of goods can also be used to determine whether a sales strategy should focus on channels with the lowest potential selling prices.

d. Selling Price Determination

According to Krismiaji & Aryani (2011: 325) indicates that the common practice is to increase the cost of the things by an expected profit to determine the selling price (markup). The difference between the selling price and the product's cost is known as the markup. A fraction of the product's price is frequently represented via markup. This pricing approach is known as cost-plus pricing since the selling price is determined by adding a predetermined markup percentage to the cost of the goods.

C. METHODS

The goal of this study is to determine the selling price of production at the Abadi Sentosa furniture company, which is based in Kebon Jeruk, West Jakarta, by computing production costs using the full costing method.

Case analysis or descriptive analysis is the research methodology employed. The approach is to methodically describe or paint. Process, analyze, and process the information obtained based on research theory to draw conclusions (Rukajat, 2018). Additionally, Sugiyono (2014: 21) claims that the descriptive analysis approach is a statistical technique that is used to evaluate data by summarizing or describing the information that has been gathered as it is without trying to draw any generalizations or inferences.

Quantitative analysis, a research technique based on the positivist philosophy, is also utilized in this study to investigate populations of statistical quantitative information analysis with the goal of evaluating the established hypotheses. Quantitative information, or information presented as figures and derived directly from the Abadi Sentosa Furniture Business, such as costs incurred by business activities. Qualitative data, or information on manufacturing expenses for 2021, is information acquired from staff members or business executives regarding the health of the Abadi Sentosa furniture sector, such as a synopsis of the business's history and its organizational structure.

Primary data, also known as data that is directly drawn from the study object, might take the form of interviews that provide written and verbal information on the production cost calculation that will be used to determine the production's selling price in 2021. Secondary data

is information that has been gathered from libraries and other sources and is oftentimes referred to as quantitative data.

D. RESULT AND DISCUSSION

1. Production Process

The transformation of raw materials or semi-finished materials into completed items utilizing resources is a part of the production process. Along with experienced and competent human resources, semi-finished materials, machinery, and other equipment are used.

2. Firm Information

Abadi Sentosa Furniture is a firm that uses teak wood as its primary raw material to create various types of cabinets. Due to its stunning fiber and texture, teak wood is the most popular form of wood and is termite and mold resistant.

3. Cost of Production Calculation by the Company

Teak wood is used to make the two types of cabinets that are created, which are wardrobes and decorative cabinets, and the wage of the workers is directly correlated with how long the procedure takes. The quantity of production costs incurred by production to make a product can be used to determine the cost of manufacturing. Full costing is a way of assessing the cost of goods that include all costs associated with production, including those for raw materials, direct labor, and factory overhead, all of which can either be fixed or variable in nature.

4. Raw Material Costs

At Abadi Sentosa furniture, semi-finished teak wood is the primary raw material utilized to build cabinets. The many types of cabinets produced include the following. Meubel Abadi Sentosa charges the following amounts for each unit of its 2-door and 3-door wardrobes made from raw materials:

Purchasing the necessary supplies for a 2-door small wardrobe

- a. Teak wood, which costs IDR 2,000,000/cubic, is the primary raw material utilized to make the two-door tiny wardrobe.

Journal:

Raw material	Rp. 2.000.000,-
Cash	Rp. 2.000.000,-

- b. The raw material used for the manufacture of 1 unit of three-door wardrobe is teak wood with a cash purchase of IDR 2,000,000/cubic.

Journal:

Raw material	Rp. 2,000,000,-
Cash	Rp. 2,000,000,-

(Journal for purchasing raw materials for 3-door wardrobes in cash)

IDR 800,000 is the journal price for the utilization of raw materials for 2-door small wardrobe items.

Goods in process	Rp. 800,000,-
Raw Material	Rp. 800,000,-

Journal of raw materials utilization for a 3-door decorative wardrobe of IDR 2,000,000

Goods in process	Rp. 2,000,000,-
Raw Material	Rp. 2,000,000,-

c. Direct labor costs

Based on how much it actually cost to create the goods, direct labor costs are estimated. Abadi Sentosa Furniture has developed a daily pay system, which is what employees in the production area get paid each day.

The length of working hours is from 07.30, 11.45 breaks and 13.00 starts working until 17.00 WIB. With 2 employees having a daily wage of IDR 80,000/person. For three-door wardrobes and ornamental wardrobes, the daily direct labor expenditures that must be borne by the business are (2 workers x 80,000 IDR) = 160,000 IDR.

Cost of direct labor for a two-door mini-wardrobe. Two employees complete the outfit in three days at a combined payment of Rp. 480,000 (\$8,000).

Journal:

Salary costs Rp. 480,000

Salary expense to be paid Rp. 480,000 (In order to pay a wage per wardrobe unit)

For three-door ornamental cabinets, direct labor expenses. A 4-day project including 2 employees and a 3-door ornamental wardrobe costs Rp. 80,000 per person per day, or Rp. 640,000 for two individuals.

Journal:

Pay expenses Rp. 640,000

Pay expense to be paid Rp. 640,000

(for the purpose of paying a wage per three-door wardrobe unit)

d. Use of Factory Overhead Costs

Costs associated with operating a factory have an indirect impact on the production process. All expenses in a factory that aren't directly related to materials or labor are considered overhead costs.

5. The Full Costing Method for Production Cost Calculation

a. Sales of 5 units of 2-door mini cabinets

The furniture company sold 5 pieces of 2-door small wardrobes in June for IDR 1,800,000. Each item cost IDR 1,741,034 to produce. seen in the table below:

Table 1. Calculation of the Cost of Production between full costing methods

Information	Amount (Rp)
Finished product inventory	8.705.170
Work in progress- Direct material costs	3.333.330
Work in progress- Direct material costs	2.400.000
Work in progress- Direct factory overhead	2.738.440
Work in progress: Mini-wardrobe with two doors and non-production costs for the use of production expenses (Juno)	233.400
Work in progress- Direct factory overhead	8.705.170

Direct material expenses of Rp. 3,333,330, direct labor costs of Rp. 2,400,000, factory overhead costs of Rp. 2,738,440, and non-production expenditures of Rp. 233,400 are needed to make a 2-door compact wardrobe, totaling Rp. 8,705,170.

Although the 5-unit 2-door mini wardrobe has a total selling price of Rp. 1,800,000 x 5, or Rp. 9,000,000, the sales generate a profit of Rp. 9,000,000 - Rp. 8,705,170, or Rp. 294,830 per month: 5 = 58,966. (per unit).

Journal

Cash Rp. 9,000,000

Sales proceeds of Rp. 9,000,000

ARTIKEL

- b. Sales of 3 door decorative cabinets totaled 8 units, with a cost price per unit of IDR 2,202,700 with a unit selling price of IDR 2,700,000. The description can be seen in the table below:

Table 2. Calculation of Cost of Production between full costing methods

Information	Amount (Rp)
Finished product inventory	17,621,600
Work in progress- Direct material costs	8,000,000
Work in progress- Direct material costs	5,120,000
Work in progress- Factory overhead costs	
Non-production expenses for goods that will be used as manufacturing costs for decorative cabinets 3 doors/January	197,520
Cost of goods sold	4,304.08
Finished product inventory	4,304.08

In order to produce a 3-door decorative cabinet, Rp. 8,000,000 in raw materials, Rp. 5,000,000 in direct labor, Rp. 4304,080 in factory overhead, and Rp. 175,920 in non-production costs are needed. As a result, the fundamental price is Rp. 17,621,600, and Rp. 2,700,000 x 8 = 21,600,000 for the 3-door decorative cabinets' total selling price, with a profit of Rp. 21,600,000 -

Journal

Cash IDR 21,600,000

Sales proceeds of Rp. 21,600,000

According to research by Devi Satria regarding the Abadi Sentosa Furniture Business' estimate of production costs and determination of the cost of manufacturing, production costs have an effect on determining the selling price, which means that any increase in production costs will be followed by a rise in selling prices, and a decrease in production costs will also be followed by a decline in selling prices (2016). The findings of Raras Maftukhah's research (2016) further clarify production expenses incurred, such as raw material costs, labor costs or employee pay, and unforeseen expenses or overhead expenditures. The selling price provided is not significantly impacted by these three charges.

E. CONCLUSION

Some expenses that the business incurs but does not include in product prices are power bills, property and building taxes, and building depreciation expenses. As a result, the company's cost calculations don't actually adhere to the entire costing principle. The results of this research are the same as the research conducted with Dian Purnama, Saiful Muchlis and Andi Wawo (2019) which states that there are differences in the calculation of the cost of production according to the full costing method. This happens because there is a difference in charging fees from the start. The company's method does not take into account both fixed and variable BOP. Therefore, the full costing method is more profitable for the company because it will charge all costs that affect the production process. Abadi Sentosa's furniture business sold the 2-door little wardrobe for a selling price that produced a profit of just 3.74% per quarter, but the riskier source furniture company sold the 3-door decorative wardrobe for a selling price that produced a quarterly profit of 18.41%.

REFERENCES

- Badriyah, H. (2015). *Buku Pintar Akuntansi Biaya Untuk Orang Awam*. Jakarta: Penerbit HB.
- Faisal, F. A. (2020). Analisis Biaya Produksi dalam Menentukan Harga Jual Produk Liquid Hero 57 Study Kasus pada CV. Cloud Heaven Makassar. (*Fakultas Ekonomi dan Bisnis Universitas Muhammadiyah Makassar*).

ARTIKEL

- Kristiani, B. (2013). Kualitas Minuman Serbuk Effervescent Serai (*Cymbopogon Nardus* (L.) Rendle) dengan Variasi Konsentrasi Asam Sitrat dan NaBikarbonat. (*Fakultas Teknobiologi Universitas Atma Jaya Yogyakarta*).
- Mulyadi. (2015). *Akuntansi Biaya*. Yogyakarta: STIM YKPN.
- Purnama, D. (2019). Harga Pokok Produksi Dalam Menentukan Harga Jual Melalui Metode Cost Plus Pricing Dengan Pendekatan Full Costing. *JRAK*, 10(1), 119-132.
- Surjadi, L. (2013). *Akuntansi Biaya*. Jakarta: Indeks.
- Dewi, S. P., & Kristanto, S. B. (2013). *Akuntansi Biaya*. Jakarta: In Media.