



The Analysis Calculation Cost Of Goods Manufactured By Using Full Costing Method And Variable Costing (Case Study At PT Firdaus Kurnia Indah)

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INFO ARTIKEL

Abstract

Keywords:

Cost of Production, Full Costing, Variable Costing

This research was conducted at PT Firdaus Kurnia Indah which is engaged in the production and sale of herbal medicine. This research aims to analyze the calculation of the cost of production (COGS) using the full costing and variable costing methods. This type of research is qualitative descriptive research. The types of data used are qualitative and quantitative data, with primary data sources obtained from observations and interviews. The research results show that the calculation of the cost of production at PT Firdaus Kurnia Indah using the full costing and variable costing methods produces different amounts. Where the full costing method provides higher results compared to the variable costing method. This difference lies in the treatment of factory overhead costs. The full costing method uses fixed overhead costs and variable costs, while the variable costing method only uses variable overhead costs. Therefore, it is recommended that company management use the full costing method because the full costing method calculates all costs in production and non-production activities so that the company can obtain maximum profits.

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Introduction

Currently, the development of the global industry is taking place rapidly, resulting in competition between companies in producing high-quality products at competitive prices. In this increasingly fierce competitive situation, companies need to develop appropriate strategies and methods in order to survive and generate profits in accordance with the company's original objectives.

Profit maximization is the main goal of every business, especially in an increasingly competitive and complex context as the company grows. In conditions like these, companies must increase efficiency and effectiveness in the production process to ensure the products produced have superior quality and are attractive in the market. Apart from the quality aspect, companies also need to sell their products at competitive prices.

To determine the appropriate price, companies must make accurate and precise calculations in their production. Companies are often less accurate in determining the selling price of their products, especially businesses engaged in manufacturing are often less precise in calculating the cost of goods manufactured by the business. Errors in the calculation of the cost of goods manufactured often result in determining a selling price that is too low or too high. The impact is a mismatch between the expected profit and the actual profit obtained as well as continuous losses or piling up of products in the warehouse due to marketing jams.

Generally, in determining the selling price, the benchmark is the cost of goods manufactured. Cost of goods manufactured is the amount of costs incurred by the company for the process of production activities so that the product is on the market and ready to be sold. According to Mardiasmo (2019: 9) "The cost of goods manufactured is the use of various economic resources used to produce products so as to obtain assets. According to Firmansyah (2014: 57) Cost of Goods Manufactured is the sum of all sacrifices of economic resources used in processing raw materials into finished products. Meanwhile, According to V. Sujarweni W. (2019:148) the price of the material of production is the sum of the entire cost of production consisting of the cost of raw materials, labor cost, and overhead cost of the factory, whereas the method of determining the cost is a way to take into account the cost elements into the cost of goods manufactured. In taking into account costs elements into cost of goods manufactured, there are two approaches: full costing and variable costing.

According to Mulyadi (2014:17): The definition of full costing method is the method of determining the price of a product of production into a price of an item of production, which consists of the cost of raw materials, direct labor costs, and overhead cost of a factory, whether behaving variable or fixed, thus the prices of the product according to full costs consist of the elements of production costs. Pricing on the basis of full costing in general is shown for the purpose of preparing financial reports for external parties. The profit and loss report compiled using this method focuses on the presentation of cost elements according to the relationship of costs with the basic functions in the company such as product functions, marketing functions as well as administrative and general functions.

And according to Mulyadi (2014:18): The interpretation of variable costing method is a method of determining the price of commodities of production that takes into account the behavior of the variable production cost into the value of the commodity of production, which consists of the cost of raw materials, direct labor costs and variable factory overhead costs. Basic price determination based on variable costing is generally shown to management in order to adopt price policy. Loss reporting compiled using this method focuses on cost presentation in accordance with cost behavior in relation to changes in the volume of activity with activity. Companies must be careful and detailed in calculating production costs so that there are no deviations and waste of costs in the production process.

PT Firdaus Kurnia Indah is a company engaged in herbal drinks. With the address Jl. Kh Lemah Duwur Gg. IX No. 60. Pejagan, Kec. Bangkalan, Kab.

Bangkalan, East Java. Established around 1986 under the name of Trading Business (UD) then developed around 2017 into a Limited Liability Company (PT). This business is managed by families for generations, with the current owner Mr. Firdaus. Initially this business used three herbal recipes, until now it has grown to dozens of herbal recipes.

In determining the cost of goods manufactured, PT Firdaus Kurnia Indah has not fully calculated the costs charged appropriately because it is considered not to have too much effect on the cost of goods, while the smallest costs incurred in production affect the cost of goods produced. PT Firdaus Kurnia Indah in calculating its cost of goods has not separated direct labor costs and indirect labor costs and does not calculate depreciation costs for buildings and production equipment. This company does not use any approach to calculate the cost of goods manufactured in accordance with cost accounting rules. Therefore, the right method is needed to avoid errors in the calculation of production costs in order to produce efficient costs.

For this reason, the author is interested in knowing the calculation of the cost of goods manufactured in determining the selling price using the full costing method and variable costing at PT Firdaus Kurnia Indah.

RESEARCH METHODS

The type of research used is qualitative research. Qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and behaviors observed from the phenomena that occur. This research emphasizes data in the form of words, pictures and not numbers due to the application of qualitative methods. The types of data used in this study can be divided into two types, namely qualitative data and quantitative data. The data source used in this research is primary data. The reason researchers use primary data sources is because the data that researchers take are the results of observations and interviews conducted directly to the leadership of PT Firdaus Kurnia Indah, related to the data needed in the study. The data collection method used in this research is to conduct observations and interviews.

The first data collection technique used in this research is field research. Field research, research by conducting observations at the company that is the object of research and direct interviews and asking for special explanations to company leaders and authorized employees to obtain data in the form of relevant information. The second data collection technique is library research. Library research, research by looking for literature that is closely related to the research to be studied and used as a source of reference for a theoretical framework in discussing findings in field research. The method of analysis that the authors use in this research is the qualitative descriptive analysis method, which is an analysis that describes or illustrates how to set product prices using the full costing and variable costing methods.

RESULT

In this study, the authors chose herbal medicine products of PT Firdaus Kurnia Indah and took one type of product that is most in demand by customers as a research sample, because herbal medicine is a traditional herb that has many properties for body health. Herbal medicine production data taken in September 2023 is presented in this study.

Table 1. Total Production of Herbal Medicine at PT Firdaus Kurnia Indah in September 2023

Types of Herbs	Estimated Number of Products Produced			
	Per Day	Per Week	Per Month	Per Year
Wangi Rapet	15 bottles	100 bottles	450 bottles	5400 bottles

Source: PT. Firdaus Kurnia Indah September 2023

Based on the amount of rapet wangi production above, it can be seen that in a day the amount of rapet wangi herbal medicine produced is 15 bottles, in a week producing 100 bottles, in a month producing 450 bottles, and in a year producing 5,400 bottles.

Table 2. Direct Raw Material Costs

No	Direct Raw Materials	Raw Material Usage per day	Raw Material Usage per month	Unit Price (kg)	Total
1.	Key	4 kg	120 kg	IDR 45,000	IDR 5,400,000
2.	Manjakani	3.5 kg	105 kg	IDR 90,000	IDR 9,450,000
3.	Neat wood	3.5 kg	105 kg	IDR 40,000	IDR 4,200,000
4.	Kumukus	5 kg	150 kg	IDR 85,000	IDR 12,750,000
5.	Other herbal grains	4.5 kg	135 kg	IDR 65,000	IDR 8,775,000
TOTAL					IDR 40,575,000

Source: PT. Firdaus Kurnia Indah September 2023

The table above is a breakdown of direct raw materials per day and per month and the cost of direct raw materials from the production of rapet wangi herbal medicine. PT Firdaus Kurnia Indah carries out the production process every month, so in this study the cost data will be calculated according to the frequency of production, namely the cost per month which reaches IDR 40,575,000.

Table 3. Direct Labor Costs

No	Type of Work	Total Direct Labor	Direct Labor Costs	Total
1.	Packaging Staff	2	IDR 1,500,000	IDR 3,000,000
2.	Sterilization Staff	1	IDR 1,500,000	IDR 1,500,000
3.	Pill Printer Staff	2	IDR 1,500,000	IDR 3,000,000
TOTAL				IDR 7,500,000

Source: PT. Firdaus Kurnia Indah September 2023

Based on the table above, the amount of salary received from direct labor is the labor cost incurred to produce herbal medicine during the working period of one month. The total direct labor costs incurred by the company are IDR 7,500,000.

Table 4. Indirect Labor Costs

No	Type of Work	Total Indirect Labor	Indirect Labor Costs	Total
1.	Admin Staff	1	IDR 1,500,000	IDR 1,500,000
2.	Warehouse Staff	2	IDR 1,500,000	IDR 3,000,000
TOTAL				IDR 4,500,000

Source: PT. Firdaus Kurnia Indah September 2023

While the table above is the amount of salary received from indirect labor during the working period of one month. The total indirect labor costs incurred by the company are IDR 4,500,000.

Table 5. Cost of Auxiliary Materials

No	Description	Many	Unit Price	Total
1.	Bottle Packaging	450 pcs	IDR 55.000/20 pcs	IDR 1,237,000
2.	Empty Capsules	450 pcs	IDR 10.000/100 pcs	IDR 45,000
3.	Mask	100 pcs	IDR 25,000	IDR 25,000
4.	Gloves	100 pcs	IDR 25,000	IDR 25,000
5.	Hair Cap	100 pcs	IDR 25,000	IDR 25,000
TOTAL				IDR 1,357,000

Source: PT. Firdaus Kurnia Indah September 2023

Based on the table above, the cost of auxiliary materials included in the variable factory overhead costs used to produce herbal medicine in one month amounted to IDR 1,357,000.

Table 6. Costs

No	Cost Type	Total Cost
1.	Electricity Cost	IDR 3,000,000
2.	Water Cost	IDR 1,500,000
3.	Gas Cost	IDR 1,500,000
4.	Fuel Costs	IDR 2,000,000
5.	Transportation Costs	IDR 2,000,000
6.	Repair and Maintenance Costs	IDR 3,000,000
TOTAL		IDR 13,000,000

Source: PT. Firdaus Kurnia Indah September 2023

Based on the table above, from the total production of all types of herbal medicine at PT Firdaus Kurnia Indah, it is found that the result of variable factory overhead costs (electricity costs, water costs and gas costs, etc.) during September 2023 is IDR 13,000,000.

Table 7. Depreciation Cost of Fixed Assets

No	Description	Many	Acquisition Price	Total	Service Life (Years)	Depreciation per month
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1.	Warehouse	1	IDR 150,000,000	45%x150,000,000:12:6	6	IDR 937,500
2.	Oven Powder	1	IDR 4,500,000	45%x4,500,000:12:6	6	IDR 28,000
3.	Grinding Machine	1	IDR 8,000,000	45%x8,000,000:12:6	6	IDR 50,000
4.	Pill Grinding Machine	1	IDR 7,500,000	45%x7,500,000:12:6	6	IDR 47,000
5.	Printer	1	IDR 13,000,000	45%x13,000,000:12:6	6	IDR 81,000
6.	Heating Machine	1	IDR 12,000,000	45%x12,000,000:12:6	6	IDR 75,000
7.	Drying Machine	1	IDR 10,000,000	45%x10,000,000:12:6	6	IDR 62,500
TOTAL						IDR 1,281,000

Source: PT. Firdaus Kurnia Indah September 2023

Rapet Wangi production is 45% of the total production of all types of herbal medicine produced by PT. Firdaus Kurnia Indah, so depreciation costs are also calculated at 45% of the total depreciation costs for the production cost calculation process, because all machinery and equipment are used for all types of herbal medicine. Based on the table above, depreciation costs at PT. Firdaus Kurnia Indah using the average method with a total depreciation of IDR 1,281,000 per month.

DISCUSSION

From the analysis of the above calculations, the next is to calculate all costs using the method of full costing and costing variables. According to Maringka, etc (2014), full costing consists of raw material costs, labor costs, variable and fixed factory overhead costs. According to Maringka, etc (2014), the costing variable consists of raw material cost, labor cost, and factory overhead variable. The main difference between the two methods lies in the treatment to production costs that behave consistently. This difference in treatment of fixed production costs will have an impact on the calculation of the cost of production and the presentation of the profit and loss statement.

Table 8. Calculation Results of Cost of Goods Manufactured of Herbal Herbs with the Full Costing Method for September 2023

Direct Raw Material Costs	IDR 40,575,000	
Direct Labor Costs	IDR 7,500,000	
Variable Overhead Costs	IDR 14,357,000	
Fixed Overhead Costs	<u>IDR 5,781,000</u>	
Cost of Goods Manufactured of Herbs September 2023		IDR 68,213,000
Production Quantity		<u>450 bottles</u>
Cost of Goods Manufactured Per Bottle		IDR 151,000

Source: Processed Data, 2023

Table 8 above is the Cost of Goods Manufactured of Herbal Herbs using the Full Costing method. The total cost of goods manufactured using the full costing method for September 2023 is IDR 68,213,000, while the total cost of goods manufactured per bottle is IDR 151,000.

Table 9. Calculation Results of Cost of Goods Manufactured of Herbal Herbs with the Variable Costing Method for September 2023

Direct Raw Material Costs	IDR 40,575,000	
Direct Labor Costs	IDR 7,500,000	
Variable Overhead Costs	<u>IDR 14,357,000</u>	
Cost of Goods Manufactured of Herbs September 2023		IDR 62,432,000
Production Quantity		<u>450 bottles</u>
Cost of Goods Manufactured Per Bottle		IDR 139,000

Source: Processed Data, 2023

Table 9 above is the Cost of Goods Manufactured of Herbal Herbs using the variable costing method. The total cost of goods manufactured using the variable costing method for September 2023 is IDR 62,432,000. The total cost of goods manufactured per bottle is IDR 139,000.

In the full costing method, variable costs and fixed costs are calculated, while the variable costing method only uses variable costs. From the calculation results of tables 8 and 9 above, there is a difference in the calculation of the full costing method and the variable costing method of Rp 5,781,000. Where the calculation of the cost of goods manufactured using the full costing method is higher than using the variable costing method, which is Rp 68,213,000 and Rp 62,432,000, respectively.

CONCLUSION

Based on the analysis of the calculation of the cost of goods manufactured using the full costing and variable costing methods carried out at PT Firdaus Kurnia Indah, it can be concluded that: Calculations using the full costing method result in a higher cost of goods manufactured than using the variable costing method. This is because the full costing method charges all production costs, both variable and fixed, to the cost of goods manufactured. Meanwhile, the variable costing method only charges variable production costs to the cost of goods manufactured. Apart from that, there are differences in the calculation results between the full costing and variable costing methods in determining the cost of production. However, both methods can be used as a basis for determining effective and efficient selling prices.

From the research results as concluded above, it is recommended that PT Firdaus Kurnia Indah should choose a method of determining the cost of production that suits the needs of the company and take into account all costs associated with the production process. The company should also carry out proper cost classification and consider using the variable costing method in making decisions on the use of production costs and the use of the full costing method in setting a more accurate selling price.

REFERENCE

- Febrianti, R., & Rahmadani, R. (2022). Analisis Perbandingan Penentuan Harga Pokok Produksi Untuk Menentukan Harga Jual Produk Menggunakan Metode Full Costing Dan Variable Costing. *Jurnal Ilmiah Akuntansi Kesatuan*, 10(1), 47-52.
- Harefa, P. R. A., Zebua, S., & Bawamenewi, A. (2022). Analisis Biaya Produksi Dengan Menggunakan Metode Full Costing Dalam Perhitungan Harga Pokok Produksi. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, 1(2), 218-223.

- Hartatik, S. (2019). Analisis Penentuan Harga Pokok Produksi Menggunakan Metode Full Costing Sebagai Dasar Penetapan Harga Jual Pada Ud. Mutia Meubel. *Soscied*, 2(2), 56-63.
- Hasyim, R. (2018). ANALISIS PENENTUAN HARGA POKOK PRODUKSI DAN HARGA JUAL DENGAN MENGGUNAKAN METODE FULL COSTING PADA HOME INDUSTRY KHOIRIYAH DI TAMAN SARI, SINGARAJA. *Jurnal Pendidikan Ekonomi Undiksha*, 10(1), 65-75.
- Irman, M. T., & Lestari, D. (2016). Analisis Perhitungan Harga Pokok Produksi Tahu dengan Menggunakan Metode Full Costing dan Variable Costing pada Tahu Mang Ujang Pekanbaru. *Procuratio: Jurnal Ilmiah Manajemen*, 4(4), 467-477.
- Jibrail, A. (2020). Analisis Perhitungan Harga Pokok Produksi Menggunakan Metode Full Costing Dalam Menentukan Harga Jual Pada CV. Sumber Mas Paving. *Journal of Accounting, Finance, and Auditing*, 2(02), 125-133.
- Lambajang, A. A. (2013). Analisis Perhitungan Biaya Produksi Menggunakan Metode Variabel Costing PT. Tropica Cocoprime. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(3).
- Maghfirah, M., & BZ, F. S. (2016). Analisis perhitungan harga pokok produksi dengan penerapan metode full costing pada UMKM Kota Banda Aceh. *Jurnal ilmiah mahasiswa ekonomi akuntansi*, 1(2), 59-70.
- Mangintiu, A. C., Ilat, V., & Runtu, T. R. (2020). Analisis perhitungan harga pokok produksi roti tawar dalam penetapan harga jual dengan menggunakan metode variabel costing (studi kasus pada Dolphin Donuts Bakery Manado). *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 8(4).
- Nafisah, N., Dientri, A. M., Darmayanti, N., Winarno, W., & Hairudin, H. (2021). Analisis Perhitungan Harga Pokok Produksi Dengan Metode Full Costing dan Variable Costing Sebagai Dasar Penetapan Harga Jual Produk. *J-MACC: Journal of Management and Accounting*, 4(1), 1-15.
- Nofiani, S. Y., Komariah, K., & Syamsudin, A. (2022). Analisis Penentuan Harga Pokok Produksi berdasarkan Metode Full Costing pada UMKM Sehi Kerpik. *Journal of Management and Bussines (JOMB)*, 4(1), 115-127.
- Nugroho, T. P., Priyatama, A., & Ramadhan, F. (2022). Analisis Perhitungan Harga Pokok Produksi Untuk Menentukan Hargajual Menggunakan Metode Full Costing Pada Ukm Seblak Ws. *Jurnal Ekonomi dan Manajemen*, 1(2), 37-50.
- Pelealu, A. J., Manoppo, W. S., & Mangindaan, J. V. (2018). Analisis Perhitungan Harga Pokok Produksi Dengan Menggunakan Metode Full Costing Sebagai Dasar Perhitungan Harga Jual (Studi Kasus Pada Kertinaâ€™™ s Home Industry). *Jurnal Administrasi Bisnis (Jab)*, 6(002).
- Pomantow, L. P., Tinangon, J. J., & Runtu, T. T. (2021). Perhitungan Harga Pokok Produksi Dengan Menggunakan Metode Full Costing Pada Rm. AYAM GORENG KRISPY DAHAR. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(3), 843-852.
- Porawouw, S. (2013). Analisis Perbandingan Metode Penentuan Harga Pokok Produksi Pada Pt. Bangun Wenang Beverages Co. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(4).

- Purwanto, E. (2020). Analisis Harga Pokok Produksi Menggunakan Metode Full Costing Dalam Penetapan Harga Jual. *Journal of Applied Managerial Accounting*, 4(2), 248-253.
- Salindeho, E. R. (2015). Analisis Perhitungan Harga Pokok Produksi Pada UD. The Sweetets Cookie Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 3(1).
- Salindeho, E. R. (2015). Analisis Perhitungan Harga Pokok Produksi Pada UD. The Sweetets Cookie Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 3(1).
- Setiadi, P. (2014). Perhitungan harga pokok produksi dalam penentuan harga jual pada CV. Minahasa Mantap Perkasa. *Jurnal Berkala Ilmiah Efisiensi*, 14(2).
- Sylvia, R. (2018). Analisis perhitungan harga pokok produksi dengan menggunakan metode full costing dan variabel costing pada tahu mama kokom kotabaru. *Jurnal Ekonomi Dan Manajemen*, 12(1), 53-59.
- Thenu, G., Manossoh, H., & Runtu, T. (2021). Analisis Harga Pokok Produksi Dengan Metode Full Costing Dalam Penetapan Harga Jual Pada Usaha Kerupuk Rambak Ayu. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(2).
- Weny, S. Y. (2023). Penentuan Harga Pokok Produksi Untuk Penetapan Harga Pokok Penjualan Pada PT. Sejahtera Sentosa. *JURNAL MANAJEMEN DAN BISNIS EKONOMI*, 1(1), 101-113.