



# Analysis of Production Cost Calculation Using the *Full Costing Method* to Determine Prices Production Mainstays in Tempe Business

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**Abstract.** The purpose of this study is to determine and analyze the price main production Tempe Berkah Wasis Susanto per unit if calculated using the method *full costing* and difference price main production Tempe Berkah Wasis Susanto used so far with the *full costing method*. This type of research is a case study with the object of research Tempe Berkah Wasis Susanto business. Data collection was carried out through in-depth interviews and direct observation. Data analysis used qualitative descriptive analysis. The results of the study showed that the cost of production of Tempe Berkah Wasis Susanto per unit when calculated using the *full costing method* was Rp7,050 higher than the calculation results made by the business actor of Rp6,400. The cost of production using the *full costing method* was Rp47,516,250 higher than the calculation results used by the business actor of Rp43,050,000 with a difference of Rp4,466,250. The cost of production per unit using the *full costing method* was Rp7,050 higher than the calculation results made by the business actor of Rp6,400 with a difference of Rp650.

**Keywords:** Case study; Cost of Goods Sold; Cost of production; *Full Costing*; Production Costs

Received: August 23, 2025

Revised: September 06, 2025

Accepted: September 20, 2025

Online Available: September 25, 2025

Curr. Ver.: September 25, 2025



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## 1. Introduction

With the increasingly fierce dynamics of business competition, determining the accurate Cost of Goods Sold (COGS) is a major challenge for many businesses. The complexity of identifying and allocating various production cost elements, such as raw material costs, direct labor, and factory *overhead*, often presents a barrier that must be overcome. Inaccuracies in COGS calculations can have significant impacts, especially on business decision-making, such as setting suboptimal selling prices and erroneous profitability analyses.

Managing COGS is crucial for a business's sustainability, so entrepreneurs must effectively control production costs to set realistic selling prices. Realistic selling prices not only impact product competitiveness in the market but also influence the long-term sustainability of the business (Tahany et al., 2023). To achieve this, business actors must pay attention to all cost components involved in the production process, such as raw material costs, direct labor, and factory *overhead*, which contribute significantly to total production costs.

For industries that process raw materials into finished products, calculating COGS and cost of goods sold is very important because it is the basis for determining the right selling price. (Kartini, 2024). Determining COGS involves adding these three cost elements together, allowing the company to determine how much it costs to produce each unit of product. Once the COGS is known, the company can add a desired profit margin to determine a competitive selling price in the market. (Novietta et al., 2022).

In the world of MSMEs, managing production costs is often an aspect that does not receive serious attention (Indah Dewi Mulyani, 2022). Many business owners lack a thorough understanding of the importance of comprehensive cost recording and allocation. Production cost calculations are generally limited to primary raw materials, without considering direct labor or other *overhead costs*. However, a proper understanding of all cost components is crucial, especially for maintaining operational efficiency and controlling expenses throughout the

production process. Production cost analysis helps ensure that all cost components are correctly accounted for (Arfah & Ayu, 2022).

In Indonesia, the calculation of COGS is clearly regulated in Financial Accounting Standards Statement (PSAK) No. 14, which has now been updated to PSAK 202 on Inventories. In this standard, inventory costs must include all components related to the production process, from raw material purchases and conversion costs to other costs necessary to prepare the inventory for sale. Conversion costs include direct labor costs and the allocation of production overhead, both fixed and variable. (Mutawakkil et al., 2023). Furthermore, PSAK 202 also requires inventory measurement to be based on the lower of cost and net realizable value. Costing methods permitted by this standard include specific identification, FIFO (First-In-First-Out), and the weighted-average method, while the LIFO (Last-In-First-Out) method is not permitted.

However, the reality on the ground shows that most MSMEs in Indonesia do not fully adhere to PSAK 202 when calculating COGS. This discrepancy can lead to inaccuracies in recording production costs, ultimately impacting disproportionate selling prices. Furthermore, financial reports that do not comply with accounting standards tend to have low credibility, which can hinder MSMEs from obtaining funding from formal financial institutions. (Warpuah et al., 2022). One approach that can be applied to align production cost calculations with PSAK 202 is the full costing method, which encompasses all elements of production costs. This method allows business actors to obtain a more accurate picture of the production cost structure and supports the preparation of financial reports in accordance with generally accepted accounting principles. (Rahmat & Wicaksono, 2025). This is particularly relevant for home industries that still rely heavily on traditional approaches in their operations.

Several previous studies have discussed calculating COGS using the full costing method in various MSME sectors. For example, research conducted by Ardhiarisca et al. (2025) examined the determination of COGS at CV Wulan Jaya and found that the full costing method can provide more accurate calculations and help the company set more competitive selling prices (Ardhiarisca et al., 2025).

A similar finding was also found in research by Peleal et al. (2019), which found that the company's COGS calculation was lower than the COGS calculation using the full costing method. This is because the company's factory overhead calculation did not factor in several costs, such as maintenance and upkeep of production equipment and depreciation, into the cost of production. Furthermore, the company's selling price for products with a 40% markup and the cost-plus pricing method differed by IDR 2,083. (Peleal et al., 2018).

Although several studies have shown that the full costing method can produce more accurate COGS calculations, this method is not without its drawbacks. One of the main drawbacks is its unsuitability for short-term decision-making, as all cost elements, including fixed costs, are allocated to product units, which can obscure contribution margin information. However, in relation to compliance with PSAK 202, the full costing method remains relevant and appropriate for use. This is due to its ability to present complete and comprehensive production cost reports in accordance with generally accepted accounting principles.

On the other hand, implementing this method still faces various obstacles, particularly among small-scale MSMEs that lack a well-organized and structured cost recording system. Many of them only record a portion of their costs, such as raw materials, without fully accounting for labor and overhead costs. One example of an MSME that has not yet implemented the full costing method is Tempe Berkah WS.

Tempe Berkah WS is a home industry engaged in tempe production and is located in Pepedan Village, Dukuhturi District, Tegal Regency. Tempe Berkah WS is known for its commitment to maintaining product quality and innovating in business management. In its operational practices, this business faces various common challenges often faced by MSMEs such as production cost efficiency, raw material price fluctuations, and market competition. For details of raw material usage in the production process in February 2025, it was recorded that 3,000 kg of soybeans were used (equivalent to 60 sacks) at a price of IDR 12,000 per kilogram. Based on this amount, 6,750 molds of tempeh were produced. Direct labor in the production process involved only one man who was responsible for cooking and pressing. For more details on Tempe Berkah WS tempeh production data for the past month, please see the following table.

**Table 1.** Data Tempe Production WS Blessings February 2025

<b>Cost breakdown</b>	<b>Monthly Needs</b>	<b>Unit price</b>	<b>Total cost</b>
Soybeans	3000 kg	12,000	36,000,000
Labor	1 person	1,950,000	1,950,000
Electricity	1 month	-	500,000
Fuel Costs	120 krg	15,000	1,800,000
Production Department	HOK	2,800,000	2,800,000
Total Production Cost (a)			43,050,000
Tempe Production Amount			6,750
Cost of Goods Sold Per Print			6,377.78

Source: Blessed Tempe Business, 2025

Based on the detailed data of production costs incurred by the Tempe Berkah WS business in one month of operation, it is known that the main component that contributes to the total production cost is raw materials in the form of soybeans, with the amount of soybeans needed 3,000 kg and a unit price of Rp12,000, so that the total cost of raw materials reaches Rp36,000,000. In addition to the main raw materials, other costs include: labor with a total expenditure of Rp1,950,000; electricity costs for one month of operation of Rp500,000; fuel costs of 120 sacks with a unit price of Rp15,000, so that the total fuel cost is Rp1,800,000; and production costs of Rp2,800,000 for one month of work.

If all the cost components are added up, the total production cost per month reaches Rp43,050,000, so, with the number of tempe produced as many as 6,750 molds per month calculated from the production capacity of 75 molds per production process multiplied by 3 processes per day, for 30 days of operation, the HPP per 9 x 9 cm mold is Rp6,377.78. This figure is an important basis for business actors in determining the selling price of tempe to remain competitive while obtaining an adequate profit margin. Where pricing is a key strategy as a result of increasingly tight competition, low and high economic growth, and opportunities for a business to strengthen its position in the market and also greatly influence buyer perceptions (Apipah et al., 2022).

The problem that occurred at the research location at the Tempe Berkah WS business was that cost calculations had not been implemented. Production in comprehensive and structured, especially in determining the Cost of Goods Sold (HPP). Business actors still use a simple approach that only focuses on recording the cost of primary raw materials, without taking into account in detail other cost elements such as indirect labor costs, fixed and variable *overhead costs*, and depreciation costs of production equipment. As a result, product selling prices are determined by estimation and tend not to be based on valid accounting data. This can result in inaccurate business decisions, such as setting selling prices that are too low, resulting in thin profit margins, or even risking losses if there is a surge in raw material prices or operational costs.

In addition, the absence of systematic financial records and bookkeeping also makes it difficult for business actors to assess financial performance periodically (Rahmawati et al., 2024). The mismatch between actual production costs and product selling prices also has the potential to hinder future business development, including when seeking funding from formal financial institutions, which generally require financial reports in accordance with accounting standards. This problem is the background to the importance of analyzing production costs using the *full costing method*, so that Tempe Berkah Susanto's business owners can obtain accurate cost information and set rational and competitive selling prices.

Based on the results of other research above, the author is interested in knowing how the results of calculating COGS using the *full costing* method and determining COGS will ultimately produce a product. Take title study "Analysis of Production Cost Calculation Using the *Full Costing Method* to Determine the Cost of Goods Sold in a Tempe Business".

## 2. Literature Review

### Cost Accounting

Cost accounting is a branch of accounting that focuses on managing and measuring costs within an organization, particularly those related to the production process. as a series of procedures for recording, grouping, summarizing, and presenting data related to production costs and marketing of products or services using certain methods, including interpretation of the data (Wibowo & Meilani, 2019).

Accountancy cost Cost control in an industry plays an important role in producing cost data that can be used by management as a basis for decision making. (Sujarweni, 2019). Cost accounting covers all input costs related to the production process, both variable and fixed. This approach provides management with in-depth insight into the cost components associated with operational activities. Cost accounting encompasses all elements of production-related costs, such as variable and fixed costs. This approach provides in-depth insight into cost management to ensure efficiency and accuracy in calculating COGS.

### Cost

Costs are expenses or sacrifices made to acquire goods or services that are useful for the future or have benefits exceeding one annual accounting period (Sari, 2018). Costs are the costs of goods or services that have provided benefits used to generate income (Tuharea et al., 2025).

### Cost of goods sold

The cost of goods sold is the amount of the asset value, but if during the year the asset (asset ownership) is used to generate income, then the asset must be converted into an expense. *HPP* is a list of production costs that must be incurred by the company in a certain period, which are related to the cost of production equipment, procurement of raw materials, and other production support materials. (Andini et al., 2021). COGS is the calculation of the total cost of goods completed during the current period (Fadli & Ramayanti, 2020). Meanwhile, according to Mulyadi, COGS is the amount of costs incurred to process raw materials into finished products that are ready for sale. (Fadli & Ramayanti, 2020).

Determining production costs can be done using two main methods, namely the full costing method *and* the variable costing *method* (Siregar et al., 2018). *Full costing*, also often called *adsorption costing*, is a method for determining COGS that differentiates all production costs, both fixed and variable, from one product to another. In the *full costing method*, COGS calculations include all elements of production costs, such as raw materials, direct labor, and factory *overhead costs*, both fixed and variable (Rahmat & Wicaksono, 2025).

### Micro, Small and Medium Enterprises

MSMEs are business activities that can expand employment opportunities and play a vital role in the process of equalizing and increasing community income, encouraging economic growth, and realizing national economic stability (Susilowati et al., 2022). According to Law Number 20, 2008, the general provisions for MSMEs are:

- a. Micro Enterprises are productive businesses owned by individuals and/or individual business entities that meet the criteria for micro enterprises as regulated in this law.
- b. A small business is a stand-alone productive economic enterprise, carried out by an individual or business entity that is not a subsidiary or branch of a company owned, controlled, or part of either directly or indirectly a medium-sized business or large business that meets the criteria for a small business as referred to in this law.
- c. Medium Enterprises are independent productive economic enterprises, carried out by individuals or business entities that are not subsidiaries or branches of companies owned, controlled, or are part of either directly or indirectly with small businesses or large businesses with the amount of net assets or annual sales results as regulated in this law.

## 3. Method

This research uses a qualitative approach, namely an approach that aims to understand and describe phenomena in depth based on the perspective of the subject being studied. The type of research used is a case study, with the research object being Tempe Berkah WS, which is a home business engaged in tempe production and located in Pepedan Village, Dukuhturi District, Tegal Regency, Central Java. Data collection was conducted through in-depth interviews with participants, the owner of Tempe Berkah WS business and family members involved in the production process, documentation and direct observation, to capture complete information regarding the production process, cost recording, and how business actors determine product selling prices. The collected data were analyzed using qualitative descriptive analysis methods, by comparing field practices with the theory of calculating COGS, especially the *Full Costing method*.

#### 4. Results and Discussion Research result

This study involves data that leads to production costs incurred by the Tempe Berkah WS business in February 2025. The selling price set by the Tempe Berkah WS business is IDR 8,000 per 9 x 9 cm mold. The amount of tempe production produced is 6,750 molds per month calculated from the production capacity of 75 molds per production process multiplied by 3 processes per day, for 30 days of operation.

The calculation of COGS using the *full costing method* generally results in a higher cost of goods manufactured compared to the calculation of COGS using the MSME method. This is because the calculation using the *full costing method* clearly details all costs, including raw material costs, direct labor costs, and factory *overhead costs*. Meanwhile, when calculating COGS using the MSME method, the COGS produced are lower because MSMEs do not include all factory *overhead costs* in detail in their production costs. The calculation of production costs using the MSME method is lower than the *full costing method*.

This study will describe the calculation of the cost of goods manufactured using the MSME method and *the full costing method*. After conducting a description and analysis of the data, it was found that Tempe Berkah WS Business had not calculated all costs that should also be calculated by the company even though the production costs in Tempe Berkah WS Business already include raw material costs, direct labor costs and factory *overhead costs*. The following are the details of the calculation of the COGS of Tempe Berkah WS Business.

**Table 2.** Tempe Production Costs WS Blessings for 1 Month

Cost breakdown	Monthly Needs	Unit price	Total cost
Soybeans	3000 kg	12,000	36,000,000
Labor	1 person	1,950,000	1,950,000
Production Staff	HOK	2,800,000	2,800,000
Electricity	1 month	-	500,000
Fuel Costs	120 krg	15,000	1,800,000
Total Production Cost			43,050,000

Source: Blessed Tempe Business, 2025

Based on detailed data on the calculation of production costs incurred by the Tempe Berkah WS business in one month of operations, including:

- Soybeans for one month 3,000 kg, the price of 1 kg is IDR 12,000 (3,000 x IDR 12,000 = IDR 36,000,000).
- Labor (employees) amounting to Rp. 1,950,000.
- Production labor (HOK) amounting to Rp. 2,800,000.
- Electricity for one month of operation Rp. 500,000.
- 120 sacks of fuel with a unit price of Rp. 15,000 (120 x Rp. 15,000 = Rp. 1,800,000)
- WS business actor, the H PP is the price of all the cost components mentioned above added up, so the total production cost per month reaches IDR 43,050,000.
- The total tempe production is 6,750 molds per month calculated from a production capacity of 75 molds per production process with 3 processes per day, for 30 days of operation. Thus, the COGS per 9 x 9 cm mold (unit) is Rp6,377.78 rounded to Rp6,400. Tempe Berkah WS business actors still use a simple approach that includes raw material costs, labor costs, and *overhead costs*. However, Business actors only focus on the costs of the main raw materials and visible *overhead costs*, without calculating in detail the elements of raw material costs and other *overhead costs as well as the depreciation costs of production equipment*.

#### Calculation of Cost of Goods Sold Using the *Full Costing Method*

Full costing is a technique for determining the cost of production that accumulates all costs related to production, including raw material costs, direct labor costs, and factory overhead costs, both fixed and variable. Method full costing applied because this approach ensures the accuracy of information in determining the cost of production in accordance with generally accepted accounting principles. The costs calculated using the full costing method are as follows.

### Raw Material Costs

In the Tempe Berkah WS business, the primary raw material considered is soybeans. However, there are other raw materials that must be considered in the production process, such as yeast and plastic. Below are the raw material costs for tempe production for one month.

**Table 3.** Raw Material Costs

Cost breakdown	Monthly Needs	Unit price	Total cost
Soybeans	3,000 kg	12,000	36,000,000
500 gr yeast	15 packs	18,000	270,000
Plastic	20 pack	9,000	180,000
Total Raw Material Cost			36,450,000

Source: Processed Data , 2025

Based on the table above, the raw material costs for one month of production of the Tempe Berkah WS business Using the full costing method , the cost was Rp36,450,000. This result was achieved by adding yeast and plastic as raw materials. The tempe production volume was 6,750 molds per month.

### Direct Labor Costs

According to information from Tempe Berkah WS, the direct labor involved in the production process involves only one man, responsible for cooking and pressing. He is assisted by family members involved in daily production processes such as soaking, packaging, and marketing. The following is a breakdown of direct labor costs for one month of work.

**Table 4.** Direct Labor Costs.

Cost breakdown	Monthly Needs	Unit price	Total cost
Owner	1 month	3,750,000	3,750,000
Production Department	1 month	2,800,000	2,800,000
Family Member Labor	1 month	1,850,000	1,950,000
Total Raw Material Cost			8,500,000

Source: Processed Data, 2025

Based on Table 4, Mr. WS, who plays a central role in the production process, from washing, soaking, boiling, to fermentation, also needs to consider the owner's labor costs. Therefore, the direct labor costs for the Tempe Berkah WS business are as follows: in one month using the full costing method of IDR 8,500,000.

### Variable Overhead Costs

Tempe Berkah WS business actor In this case, variable overhead costs, such as electricity, have been taken into account. However, tempeh processing also requires PDAM water for washing, soaking, and cooking. The following are the variable overhead costs for tempe production for one month.

**Table 5.** Variable *Overhead* Costs

Cost breakdown	Monthly Needs	Unit price	Total cost
Electricity	1 month	-	500,000
PDAM water	1 month	-	200,000
Total Raw Material Cost			700,000

Source: Processed Data, 2025

Based on table 5, variable overhead costs using the full costing method consist of electricity and PDAM water. So, variable overhead costs WS's Blessed Tempe Business in one month using the full costing method of IDR 700,000.

### Fixed Overhead Costs

Fixed *overhead* costs are fixed costs that are not affected by production volume. The *overhead costs* calculated by the Tempe Berkah WS business In determining the cost of goods manufactured, only fuel costs are included; the costs not included are the depreciation costs of the production equipment used during production activities. The calculation of depreciation costs using the straight-line method without residual value is as follows:

Depreciation Price Per Year

= Harga Perolehan

Umur Ekonomis

Depreciation or reduction costs for production equipment for the Tempe Berkah WS business to find out how to determine the cost of production using the *full costing method*, the details are as follows:

**Table 6.** Depreciation Costs for Production Equipment of the Tempe Berkah WS Business

Description	Qty	Total cost	Age	Monthly Depreciation
Gas stove	1	350,000	5th	5,833
large pot	2	500,000	5th	8,333
Bucket	2	100,000	2 years	4,167
Tempe container	1	150,000	2 years	6,250
Knife	2	100,000	2 years	4,167
Soybean skin peeling machine	1	4,500,000	10th	37,500
Total Depreciation of Production Equipment				Rp. 66,250

Source: Processed Data, 2025

Table 6 shows the calculation of the depreciation costs of the production equipment of Usaha Tempe Berkah WS. From the data, it can be seen that various equipment is used in the production process, ranging from gas stoves, large pans, buckets, tempe containers, knives, to soybean peeling machines. Each tool has a different quantity, total acquisition cost, economic life, and monthly depreciation. The soybean peeling machine has the highest acquisition cost of Rp 4,500,000 with a life of 10 years and a monthly depreciation of Rp 37,500, while other tools have a smaller value and a shorter life, for example, the bucket and knife each have a life of 2 years with a monthly depreciation of Rp 4,167. Overall, the total depreciation cost of production equipment per month reaches Rp 66,250, which reflects the allocation of costs to replace or update production equipment over time.

**Table 7.** Fixed *Overhead Costs*

Cost breakdown	Monthly Needs	Unit price	Total cost
Fuel	120 sacks	15,000	1,800,000
Depreciation of production equipment	1 month	66,250	66,250
Total Raw Material Cost			1,866,250

Source: Processed Data, 2025

Based on Table 7, fixed overhead costs using the full costing method consist of fuel costs and depreciation costs for production equipment. Therefore, the fixed overhead costs for the Berkah WS Tempe Business are: in one month using the full costing method amounting to IDR 1,866,250.

Full costing method is a method that takes into account all elements of production costs in the cost of production, including raw material costs, direct labor costs and factory overhead costs, both fixed and variable, as follows.

**Table 8.** Calculation of H PP for Tempe Business WS Blessings for 1 Month Using the *Full Costing Method*

Cost breakdown	Total cost
Raw Material Costs	36,450,000
Direct Labor Costs	8,500,000
Fixed Overhead Costs	700,000
Variable Overhead Costs	1,866,250
Total Production Cost	47,516,250
Monthly Production Amount	6,750
Cost of Goods Sold Per Print (Unit)	7,050

Source: Processed Data, 2025

Based on detailed data on the calculation of production costs incurred by the Tempe Berkah WS business in one month of operations using the *full costing method*, including: raw material costs: Rp36,450,000; direct labor costs: Rp8,500,000; variable *overhead* costs: Rp700,000; and fixed factory *overhead* costs: Rp1,866,250

The cost of production of the Tempe Berkah WS business By using the *full costing method*, the price of all the cost components mentioned above is added up, so the total production cost per month reaches Rp47,516,250. The number of tempe produced during one month is 6,750 molds (units). So the cost of production of the Tempe Berkah WS business according to *the full costing method* is Rp. 7,039.44 rounded to 7,050.

### Difference in Production Cost of Tempe Berkah WS Used So Far with the *Full Costing Method*

Examining the data from the calculation of the cost of production carried out by the Tempe Berkah WS business actor There are differences between the results of calculating the cost of goods manufactured using the full costing method. The following is a comparison between the two COGS calculations.

**Table 9.** Comparison of H PP Calculation Results According to Tempe Business Actors Berkah WS and According to the *Full Costing Method* in One Month

Product name	Units Produced	Cost of goods sold	
		Businessmen	Full Costing
Tempe	6,750	43,050,000	47,516,250
	1 Unit	6,400	7,050

Source: Processed Data, 2025

Based on table 9, there is a difference in the value of COGS carried out according to business actors and the full costing method. The results of the COGS calculation using the full costing method have a higher value compared to the calculations carried out by the Tempe Berkah WS business actor. The COGS value produced by the calculations carried out by the business actor is IDR 43,050,000 while the value produced using the full costing method is IDR 47,516,250 so there is a difference in the COGS calculation of IDR 47,516,250 - IDR 43,050,000 = IDR 4,466,250.

Based on the results of calculations that have been carried out, both by business actors and using the full costing method, the HPP of Tempe Berkah WS is produced. There are also differences in the cost of goods sold per unit. The cost of goods sold per unit calculated by the business owner is Rp6,400, while the value obtained using the full costing method is Rp7,050. The difference in the cost of goods sold for Tempe Berkah WS is per unit is Rp. 7,050 – Rp. 6,400 = Rp. 650.

### Discussion

#### HPP Tempe Berkah W S Per Unit with *Full Costing Method*

COGS is a list of production costs that a company must incur in a certain period, related to the costs of production equipment, procurement of raw materials, and other production support materials (Andini, et al. 2021:46). The calculation of COGS per month according to Tempe Berkah WS business owner is IDR 43,050,000. The amount of tempe produced is 6,750 molds per month calculated from a production capacity of 75 molds per production process with 3 processes per day, for 30 days of operation. Thus, the COGS per 9 x 9 cm mold (unit) is IDR 6,377.78 rounded to IDR 6,400.

The Tempe Berkah WS business actor in calculating the cost of production still uses a simple approach, even though it includes the cost of raw materials, labor costs, and *overhead costs*. However, business owners focus solely on the costs of primary raw materials and visible *overhead costs*, *without taking into account detailed cost elements of other raw materials and overhead costs, as well as depreciation of production equipment*. Determining the cost of goods sold (COGS) is merely an estimate and tends not to be based on valid accounting data.

*Full costing* method is a method that takes into account all elements of production costs into the COGS, including raw material costs, direct labor costs, and factory *overhead costs*, both fixed and variable. The calculation result of the COGS of Tempe Berkah W S per month using the *full costing* method is Rp47,516,250. The number of tempe produced during one month is 6,750 molds (units). So, the COGS of Tempe Berkah WS per unit using the full costing method is Rp7,039.44, rounded up to 7,050 per unit.

The results of the calculation of the COGS of tempe using the *full costing method* are different from the calculation results of the Tempe Berkah W S business actor. This is because in the calculation of COGS there are costs that are not calculated by the business actor, both in the cost of raw materials, direct labor costs, and *overhead costs*. In the cost of raw materials, the business actor does not calculate yeast and plastic. While in direct labor costs, the costs that are not considered are the labor costs of the owner himself who basically has a central role in the production process starting from washing, soaking, boiling to fermentation whose working hours exceed other workers. Furthermore, in *overhead costs*, the business actor also does not consider variable *overhead costs* in the form of PDAM water and fixed *overhead costs*, namely depreciation of production equipment (depreciation costs of production equipment).



Business actors consider that the above costs are not production costs, but are considered initial capital or considered small costs so they are not taken into account. So far, Tempe Berkah W S business actors have not paid enough attention to recording and calculating COGS, because the determination of COGS which is still estimated results in a product selling price that is considered to have provided adequate profit, so that the calculation is considered less important.

#### **Difference between H PP Tempe Berkah W S Used with the *Full Costing Method***

Based on the discussion of the research results related to the COGS above, both those carried out by the Tempe Berkah WS business actor and the results of the calculation of the cost of goods produced using the *full costing method* show differences. The results of the COGS calculation using the *full costing method* have a higher value compared to the calculations carried out by the Tempe Berkah WS business actor.

The results of the study show that the value of COGS generated by calculations carried out by business actors is Rp43,050,000 while the value generated using the *full costing method* is Rp47,516,250 so that there is a difference in COGS calculations of  $\text{Rp}47,516,250 - \text{Rp}43,050,000 = \text{Rp}4,466,250$ . While the value of COGS per unit generated by calculations carried out by business actors is Rp6,400 and the value generated using the *full costing method* is Rp7,050. The difference in COGS of Tempe Berkah WS per unit is  $\text{Rp}7,050 - \text{Rp}6,400 = \text{Rp}650$ .

The results of this study align with Marisa's (2022) study, which showed that COGS calculated using the *full costing method* was higher than that calculated using the company's cost of goods manufactured method. Similarly, Fadli & Ramayanti's (2020) study found that *the full costing method* yielded higher COGS than the UKM Digital Printing Prabu method.

Cost of Goods Sold (COGS) is a benchmark for companies or businesses in determining selling prices. The calculation of the cost of goods manufactured uses the *full costing method*, accounting for all costs, including raw materials, direct labor, variable *overhead*, and *fixed overhead*. The result is obtained by adding all these costs, so that the determination of COGS is based on valid accounting data. This method aims to establish a minimum selling price that is in accordance with market conditions, with the hope of achieving maximum profit. To achieve the desired profit, companies or businesses must calculate the correct COGS.

From an accounting perspective, accurate COGS calculations provide a more accurate picture of a company's or business's actual profit or loss. Inaccurate COGS calculations can have significant impacts on the company or business. These include inaccurate business decisions, such as setting a selling price too low, resulting in thin profit margins, or even risking losses if raw material prices or operational costs spike. While these losses are not directly attributable to errors in COGS calculations, they can hinder business growth.

## **5. Conclusion**

Based on the results of the research and discussion that have been conducted, it can be concluded that the COGS of Tempe Berkah WS per unit when calculated using the *full costing method* is IDR 7,050. This value is higher than the COGS calculation results carried out by business actors, which is IDR 6,400. The Tempe Berkah WS business actor in calculating COGS still using a simple approach. Determining COGS is only an estimate and tends not to be based on valid accounting data. HPP using the *full costing method* of Rp47,516,250 is higher than the HPP carried out by business actors, which is Rp43,050,000 with a difference in the cost of production of Rp4,466,250. HPP per unit using the *full costing method* of Rp7,050 is also higher than the results of calculations carried out by business actors, which is Rp6,400 with a difference in HPP. Tempe Berkah WS per unit of Rp650. HPP using the *full costing method* is higher than the HPP carried out by business actors because it has not included all elements of raw material costs, labor costs, and *overhead costs*, both variable and fixed. Andini, A., Rosfyan, UA, & Pangestu, KM (2021). Analysis of the Application of Activity Based Costing in Determining the Cost of Goods Sold at PT. Acosta Global Data. *Tambusai Education Journal*, 5 (2), 3559–3566.

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