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Article

Analysis Of Special Order Product Pricing Using A Relevant Cost Approach (A Case Study at Puna Jaya Tempe Factory, Poso Regency)

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Abstract: This study aims to examine, analyze, and describe the determination of selling prices for special orders using the relevant cost approach and the cost-plus pricing method at "Puna Jaya" Tempeh Factory in Poso Regency. This research is a descriptive analytical study. The relevant cost analysis shows that the production cost for special-order tempeh is lower than regular production. The cost-plus pricing analysis indicates that the selling price of large special-order tempeh is 11.68% lower, while small special-order tempeh is 21.43% lower compared to regular production prices. Although the price of special-order tempeh is lower, it maintains profitability levels of 30.85% for large tempeh and 20.57% for small tempeh, consistent with regular production. This analysis is expected to contribute to "Puna Jaya" Tempeh Factory in enhancing its competitive advantage over other tempeh producers in Poso Regency.

Keywords: Cost Plus Pricing, Special Order, Relevant Cost.

1. Introduction

A company is an entity that produces goods and services that have the purpose of making a profit (Griffin & Ebert, 2006) One of the common challenges that companies often face in trying to increase profits is to determine the selling price. The selling price itself is the nominal charged by a business unit to customers for goods or services provided or provided. (Arizah, 2019)

The selling price setting policy is a statement of managerial attitude regarding how to determine the price of a product or service. This policy does not set prices directly, but regulates a number of factors that must be considered and basic principles that must be followed in the pricing process (Supriyono, 2001). According to the accounting concept, cost is seen as a key component for determining the selling price, because cost represents the lowest limit that must be reached with the aim that a company does not feel losses. Based on this, the specified selling price needs to cover all costs that have been incurred and be able to obtain targeted profits. Setting a selling price that is too high has the potential to increase profits, but can weaken consumer purchasing power. On the other hand, a selling price that is too low can have an impact on the decrease in the level of profit obtained by the company.

Special orders are one of the many essential areas, namely the application of relevant costs plays a significant role. Custom orders refer to orders or projects that are created according to what is requested by the customer, have unique requirements and characteristics, different from standard products or services that are usually produced by companies. In this context, managers are obliged to take into account relevant costs to ensure that the decisions to be made are in line with the overall goals of the company (Alfaried, Achmad Fauzi, Syahirah, Eka Suci, & Pamungkas, 2023)

Relevant costs are costs that will arise in the future and have differences among a number of alternative decisions (Sodikin, 2015). A cost is considered relevant if it has two criteria, namely "will happen" and "will be different." Because of these two criteria, relevant costs should be considered in decision-making. The manager is responsible for evaluating relevant accounting information so that the company can determine the right alternative options and achieve optimal profits.

The "Puna Jaya" Tempeh Factory is a small home-based business. The Puna Jaya tempeh factory was founded by Mr. Rusdianto. Puna Jaya tempeh factory is a small business that has

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existed since 2011 which initially had 3 employees and now has 7 employees. The procurement of soybean raw materials, which contain protein, fat, plumula, and hypocotile shaft, is ordered directly at a price of Rp 10,000/kg. The marketing is by selling directly at the factory and in the new Poso market. The amount of production produced per day is 200 kg of soybeans.

The home industry, especially in the Puna Jaya tempeh business, the determination of selling prices is one of the crucial aspects that affect the competitiveness and sustainability of the business. However, the calculation of the selling price in the "Puna Jaya" tempeh home industry still uses estimates or estimates. This often does not take into account various relevant cost components, such as direct variable costs associated with special orders or additional costs incurred as a result of production adjustments.

The cost-relevant approach in selling pricing provides a more systematic framework by considering only the costs directly related to a particular order decision. This approach allows business owners to set more competitive prices and remain profitable, especially when dealing with special orders with specific needs or quantities.

Inaccuracies in the calculation of selling prices can have an impact on a decrease in profit margins, difficulties in competing in the market, or even operational losses. Therefore, the analysis of the sale price of special orders with a relevant cost approach is important to help the "Puna Jaya" tempeh home industry optimize their pricing strategies, increase efficiency, and strengthen the sustainability of their business.

Based on the background previously presented, the author will discuss the Analysis of Selling Prices for Special Order Products with a Relevant Cost Approach. By taking a relevant cost approach, you can find out how relevant cost analysis can help companies determine optimal selling prices and identify a number of costs that can be changed and controlled. Thus, management can make the most profitable decisions and increase the company's profits.

2. Literature Review

Management Accounting

Management accounting is a process of providing information, both financial and non-financial in nature, to support managers in making decisions within companies, institutions, or organizations. Hansen and Mowen (2013) explained that management accounting includes the activities of identifying, collecting, measuring, classifying, and presenting relevant information to internal parties for the purposes of planning, control, and decision-making. (Tani, 2023). Relevant cost analysis is part of the study of management accounting in terms of providing alternative cost information in management decision-making.

Cost accounting is an inseparable component of management accounting. This field of accounting focuses on the process of tracking, recording, and analyzing various expenses related to organizational activities in producing goods or providing services (Emor, 2019)

Relevant *costs* in custom order pricing

Relevant costs are costs that are projected to occur in the future and are used as a basis for budgeting, profit planning, and controlling activities related to short-term and long-term work programs. Samryn (2001), revealed that cost relevance is the concept of cost applied to certain decision-making that involves choosing between several alternatives. These fees meet two main requirements: (1) they are expected to occur in the future, and (2) they differ among a number of available options [1]

Special Orders

Special orders are often an attractive thing, even if the selling price of the product is lower than the normal selling price. (Garrisson, Noreen, and Brewer, 2013) states that "a *special order* is an order that occurs at a certain time and is not part of the company's normal activities. Special orders must be treated differently from products from regular processes, because they are products of non-regular results so there is no need to charge a fixed fee for the product.

3. Method

The research applies a descriptive qualitative approach in the realm of case studies of determining the selling price of special order products. The stages of analysis include: 1) Data Collection, which is collecting data using research instruments, including observation sheets, interview guides, and literature study sheets. The next step is to summarize the data and compile it in the form of a research manuscript. 2) Data Reduction, which is carrying out data reduction, including the procedure of making comparative analysis of data that is still saturated. The tool used to analyze is the relevant concept of cost in calculating prices for special orders. 3) Data Display, which is the presentation of data with complete descriptions and other auxiliary media, including charts, tables.

4. Results and Discussion

This research began with an analysis of production costs with *a full costing* approach, namely raw material costs, direct labor costs, and factory overhead costs.

Raw Material Cost

The use of soybean raw materials at the Puna Jaya tempeh factory is 200 kg per day with a composition of 150 kg large and 50 kg small size. So that the volume of soybean raw materials used in one month is 6,000 kg (30 x 200 kg). The average price of soybeans is IDR 10,000 per kg. Based on the results of observation of the cost of tempeh raw materials per unit of production in two sizes, it can be seen in the table below:

Table 1. Recapitulation of Raw Material Costs with Full Costing

Big Tempeh

Raw Materials	Quantity	Price kg (IDR)	Total cost	Production	Cutting costs
Soybean	4.500	IDR 10.000	IDR 45.000.000	26.850	IDR 1.676

Small Tempeh

Raw Materials	Quantity	Price kg (IDR)	Total cost	Production	Cutting costs
Soybean	1.500	IDR 10.000	IDR 15.000.000	16.500	IDR 910

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

The table explains the total cost of raw materials and production volume during one month of production, where large-sized tempeh has a production volume of 26,850 packs and small-sized tempeh is 16,500 per month. Calculation of raw material cost per unit of production for large-sized tempeh, raw material cost per unit (pack) is IDR 1,676 and for small-sized tempeh, the raw material cost per unit (pack) is IDR 910 per pack.

Direct Labor

The Puna Jaya tempeh factory employs one direct workforce, which is a workforce that directly carries out the production process, both large and small tempeh. The calculation of the cost of direct labor (wages) can be seen in the following table:

Table 2. Direct Labor Costs

Big Tempeh

Number of employees	Standard hourly wage rate	Number of hours	Total direct labor costs	Total production per month	TKL fee per pack
1	IDR 40.000	90	IDR 3.600.000	26.850	IDR 134,08

Small Tempeh

Number of employees	Standard hourly wage rate	Number of hours	Total direct labor costs	Total production per month	TKL fee per pack
1	IDR 40.000	60	IDR 2.400.000	16.500	IDR 145,46

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

Based on the table, it can be explained that the number of direct workers in the Puna Jaya tempeh industry has 1 direct workforce. Based on the average working hours per day with a period of 5 hours and allocated to each product based on the amount of raw materials used. Large tempeh is allocated 3 hours per day (5,100 kg: 6,000 kg x 5 hours) and small tempeh is allocated 2 hours per day (1,500 kg: 6,000 kg x 5 hours). Based on direct labor hours (TKL), labor fees can be charged based on a set rate of IDR 40,000 per hour

Factory Overhead Costs

The factory overhead cost at the Puna Jaya tempeh factory consists of five items, consisting of: indirect labor costs of 6 people, auxiliary materials (yeast, plastic packaging), firewood, electricity, and depreciation costs of factory equipment. The following are the results of the calculation of factory overhead costs:

Table 3. Total Factory Overhead

Component	Annual BOP (IDR)	Monthly BOP (IDR)
Indirect Labor	108.000.000	9.000.000
Firewood	36.000.000	3.000.000
Electricity	25.200.000	2.100.000
Auxiliary Materials	41.040.000	3.420.000
Equipment Depreciation	2.400.166.	200.013,89
Amount of overhead costs	212.640.166	17.720.014

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

The factory overhead costs in the table above are the result of estimates based on information and the latest owner and price data. The application of the depreciation method in this study only uses the straight line method for all types of depreciation of fixed assets. The results of the above BOP calculation have been approved by the Company's owner.

The recapitulation of the production costs of large and small tempeh at full cost at the "Puna Jaya" Tempeh Factory in 2024 can be seen in the following table:

Table 4. Total Cost Per Unit

INFORMATION	BBB	BTKL	BOP	TOTAL
Big Tempeh	IDR 1.676	IDR 134,08	IDR 494,98	IDR 2.305,06
Small Tempeh	IDR 910	IDR 145,46	IDR 268,49	IDR 1.323,95

Data source: Puna Jaya Tempeh Factory 2025. (BBB. raw material cost; BTKL. Direct Labor costs; BOP. Factory Overhead Costs) (Processed by the Author)

Cost Relevance Analysis for Custom Order Products

Fixed Fees

Fixed costs are costs that have a fixed behavior or no change in the change in the volume of activities at a certain level. The volume of activities of a company is constantly changing. but changes in the volume of activities in the company are not followed by changes in fixed costs. because of their nature which tends to remain unchanged.

Variable Costs

Variable cost is a cost that shows a total increase proportional to the increase in activity and a total decrease proportional to the decrease in activity. Variable costs display the amount per unit that tends to be constant with changes in activity in the relevant range.

Table 5. Fixed costs and variable costs of the Puna Jaya tempeh factory

Variable Production Costs	
Raw Material Cost	IDR 60.000.000
Direct Labor Costs	IDR 6.000.000
Firewood Cost	IDR 2.400.000
Yeast Cost	IDR 180.000
Packaging Material Cost	IDR 3.240.000
Total variable costs	**IDR 72.420.000**
Fixed Production Costs	
Indirect Labor Costs	IDR 9.000.000
Electricity Costs	IDR 2.100.000
Depreciation Costs	IDR 2.400.166.69
Total Fixed Costs	**IDR 13.500.166.69**

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

The table shows that the largest production cost in tempeh production is a variable cost element which is dominated by the cost of raw materials. Soybean raw materials are indeed the main element in tempeh production and the highest fixed cost in the indirect labor cost element.

Determination of Relevant Costs for Special Order Costs

A custom order is an order that is outside of a normal order that is estimated at the sell price where it is lower than the normal sell price. There are times when companies get sales orders at a special price. but of course the application of such special sales is only determined on special orders that do not have an impact on normal sales. and companies generally carry out a separation between normal sales and sales to provide special orders. There are a number of conditions for the special order to be accepted. namely with the number of special orders that are smaller than or equal to the idle capacity of the company and the second condition is that the selling price given to the buyer is greater than or equal to the cost incurred to carry out the production of special orders. Tempe puna jaya increased in March to coincide with the holy month of Ramadan so that production increased and was different from the previous month.

Table 6. Differential Cost Determination

Information	No Special Orders	With custom orders	Differential costs
Variable Costs			
BBB			
a. Big Tempeh IDR 1.500 x 26.850 b. Small Tempeh IDR 500 x 16.500	IDR 40.275.000 IDR 8.250.000		
a. Big Tempeh IDR 1.700 x 5.100 b. Small Tempeh IDR 800 x 2.400		IDR 8.670.000 IDR 1.920.000	IDR 47.600.000 IDR 14.400.000
BTKL			
a. Big Tempeh IDR 1.000 x 26.850 b. Small Tempeh IDR 1.000 x 16.500	IDR 26.850.000 IDR 16.500.000		
a. Big Tempeh IDR 1.000 x 5.100 b. Small Tempeh IDR 1.000 x 2.400		IDR 5.100.000 IDR 2.400.000	IDR 18.000.000 IDR 28.000.000
Variable Costs			
1**. Firewood cost** a. Big Tempeh IDR 100 x 26.850 b. Small Tempeh IDR 100 x 16.500	IDR 2.685.000 IDR 1.650.000		
a. Big Tempeh IDR 100 x 5.100 b. Small Tempeh IDR 100 x 2.400		IDR 510.000 IDR 240.000	IDR. 2.800.000 IDR. 1.800.000
2. Yeast Cost a. Big Tempeh IDR 18.000 x 26.850 b. Small Tempeh IDR 18.000 x 16.500	IDR 483.300.000 IDR 297.000.000		
a. Big Tempeh IDR 18.000 x 5.100 b. Small Tempeh IDR 18.000 x 2.400		IDR 91.800.000 IDR 43.200.000	IDR 504.000.000 IDR 324.000.000
3. Plastic Packing a. Big Tempeh IDR 1.620 x 26.850 b. Small Tempeh IDR 675 x 16.500	IDR 43.497.000 IDR 11.137.500		
a. Big Tempeh IDR 1.620 x 5.100 b. Small Tempeh IDR 675 x 2.400		IDR 8.262.000 IDR 1.620.000	IDR 45.360.000 IDR 12.150.000
Amount of Production Cost Variable			
Fixed BOP			
Indirect Labor Costs	IDR 9.000.000	IDR 9.000.000	
Electricity Costs	IDR 2.100.000	IDR 2.100.000	
Depreciation Costs	IDR 2.400.166	IDR 2.400.166	
Differential Production Quantity	**IDR 944.644.666**	**IDR 177.222.166**	**IDR 998.110.000**

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

Differential revenue and differential earnings calculation

Differential is the difference between ordering a product from a sales transaction without a special order to a special order for a special order. The regular tempeh production data is 26.850 for large size. and for small tempeh is IDR 16.500 while for special order tempeh production will increase in March 2024 to 28.000 for large tempeh and 18.000 small tempeh. where the difference increases to 1.150 for large tempeh while small tempeh is 1.500.

The calculation of differential revenue and profit in March 2024 can be seen in the following table:

Table 7. Differential operating profit calculation in March 2024

Information	No special orders		With custom orders		Prescription Fees
Sales		IDR 115.005.000		IDR 120.352.950	IDR 5.347.950
Cost of goods sold:					
Production Cost:					
Raw material cost	IDR 48.525.000		IDR 10.590.000		IDR 62.000.000
Direct labor costs	IDR 43.350.000		IDR 7.500.000		IDR 46.000.000
BOP Variable	IDR 839.269.500		IDR 145.632.000		IDR 890.110.000
Fixed BOP	IDR 13.500.166		IDR 13.500.166		-
Total production cost	IDR 944.644.666		IDR 177.222.166		IDR 998.110.000
Cost of goods sold		IDR 944.644.666		IDR 177.222.166	IDR 998.110.000
Gross profit		**IDR 829.639.666**		**IDR 56.869.216**	**IDR 992.762.050**

Data source : Puna Jaya Tempeh Factory 2025 (Processed by the Author)

Selling price analysis

One of the strategies applied to optimize profits from tempeh sales is to apply the target costing method. This method sets the cost of production which is a reference for determining the selling price. so that the targeted profit can be achieved. In addition. based on the calculation of costs carried out by the company. profit margins are obtained in accordance with expectations. Based on this. a calculation of the costing target is carried out which can be presented in the form of calculation as follows:

General Selling Price (Regular)

Big Tempeh

Selling Price = Total Production Cost + Profit Margin
= IDR 2.305.06 + 30.85%
= IDR 2.305.06 + IDR 1.028.27
= IDR 3.333.33

Small Tempeh

Selling Price = Total Production Cost + Profit Margin
= IDR 1.323.95 + 20.57%
= IDR 1.323.95 + IDR 342.72
= IDR 1.666.67

Special Order Selling Price

Big Tempeh

Selling Price = Total Cost + Profit Margin
= IDR 1.735.71 + 30.85%
= IDR 1.735.71 + IDR 1.028.27
= IDR 2.943.98

Small Tempeh

Selling Price =Total Cost + Profit Margin
= IDR 966.66 + 20.57%
= IDR 966.66 + 342.72
= IDR 1.309.38

Based on the results of the analysis carried out. it can be concluded that decisions about selling prices must take into account internal and external factors. Internally. the selling price must cover all production costs and can provide sufficient profit margins for the company. Regarding the custom ordering system. the price must adapt to market conditions. consumer purchasing power. and competitor pricing strategies. Therefore. the process of price specific orders may decrease and differ from regular orders. but it should be based on a comprehensive analysis so that the specified price is not only beneficial to the company. but also well received by consumers and promotes business growth in a sustainable manner.

5. Conclusions

The Puna Jaya tempeh home industry in calculating and making decisions to price special orders so far still uses estimates or estimates and tends to be the same as the price of regular tempeh products**.** The results of the analysis using the relevant cost approach found that the price of special order tempeh can be sold lower than the price of regularly produced tempeh. This is because the production calculation cost for special order tempeh is not allocated a fixed cost in charging production costs.

The selling price method applied is the *cost plus pricing* method. The results show that even though special orders are sold at a lower price. they can still maintain the same percentage of profitability level as tempeh that is sold regularly. The results of this study are expected to be used as a basis for determining selling prices for special orders. so that it can increase the Company's competitive advantage when compared to other tempeh factories in Poso Regency.

Reference

[1] R. Martini. M. Thoyib. and Y. Yulita. "Application of Relevant Cost Calculation in Special Order Decision-Making." J. Ilm. Ekon. Glob. Present. vol. 11. no. 1. pp. 9–15. 2020. doi: 10.36982/jiegmk.v11i1.1054.

[2] R. W. Griffin and R. J. Ebert. "Business. Eighth Edition." 2006.

[3] F. A. Dunia and W. Abdullah. Cost Accounting. vol. 7. no. 2. 2012.

[4] F. D. Alfiansyah. R. Pratama. and R. B. Jakaria. "The Application of Cost Plus Pricing in the Decision to Determine Selling Prices for Special Orders at Ud. "A perfect bakery." Management Balance. Ekon.. vol. 3. no. 8. 2024.

[5] N. Richsandiant. Sunanto. and K. Rachma Sari. "Special Order Decision Making Based on Relevant Cost Calculation." J. Ekon. Business. Accountant. and Sist. Inf.. vol. 10. no. 1. pp. 2085–2401. 2021. [Online]. Available: https://jurnal.polsri.ac.id/index.php/eksistansi

[6] Aripin and E. Aziz. "Production Costs and Operational Costs Affecting Net Profit (Survey on Manufacturing Companies in the Basic Industry & Chemical Sector Listed on the IDX for the 2015-2018 Period)." Elibrary UNIKOMPp. 14–21. 2019.

[7] M. Alfaried. Achmad Fauzi. P. Syahirah. R. Eka Suci. and S. A. Pamungkas. "The Role and Function of Relevant Costs in Making Special Order Decisions." J. Akunt. and Manaj. Business. vol. 3. no. 1. pp. 134–143. 2023. doi: 10.56127/jaman.v3i1.682.

[8] O. Macpal and I. Ventje. "Cost analysis is relevant to accepting or rejecting a special order on ud. "A Ray of Magic." J. EMBA. vol. 2. no. 3. pp. 236–244. 2020.

[9] R. S. Ika and S. Siti. "Analysis of Relevant Cost Calculations for Special Orders to Increase the Profit of the 'Ud. Afina Rizki.'" Ris. Mhs. Ekon.. vol. 3. no. 3. pp. 229–247. 2016.

[10] C. F. Emor. "The Analysis of Relevant Cost in Decision Making Whether to Buy or Maintain Fixed Assets in PT. "A Man Who Was Born To Be A Priest." J. EMBA J. Ris. Ekon. Management. Business and Accounting.. vol. 7. no. 1. pp. 911–920. 2019.

[11] K. B. Tani. "Analysis of the application of relevant costs in making decisions to accept or reject special orders in the cassava business peeling farmers' blessings." 2023.

[12] L. Kalangi. J. Morasa. and F. Tumilantouw. "The Application of Relevant Costs in Deciding to Accept or Reject Special Orders on Cv. Pyramid." J. Ris. Ekon. Management. Business and Accounting.. vol. 2. no. 1. pp. 677–685. 2021.

[13] S. A. Putri. S. W. Alexander. and N. Y. T. Gerungai. "The Application of Relevant Costs in Deciding to Accept or Reject Special Orders to Increase Profits in the Manado Cone Blessing Business." 2166 J. EMBA. vol. 10. no. 4. pp. 2166–2175. 2022.

[14] T. T. Gelu. ; Pius. B. Kellen. E. Gie. and D. M. Ahmad. "Analysis of Selling Price Determination Decision Using the Cost Plus Pricing Method in Joy Bakery Business in Naikolan. Maulafa District. Kupang City." J. Business Management.. vol. 15. no. 2. pp. 303–316. 2023.

[15] B. F. . Taroreh. S. S. Pangemanan. and I. G. Suwetja. "Analysis of Selling Price Determination Using the Cost Plus Pricing Method with a Full Costing Approach on CV. Verel Tri Putra Mandiri." J. EMBA. vol. 9. no. 3. pp. 607–618. 2021.

[16] A. Arizah. "Relevant Cost Analysis: Accepting or Rejecting Special Orders at Pt . Aquamas Indah." AkMen J. Ilm.Pp. 83–93. 2019. [Online]. Available: https://garuda.kemdikbud.go.id/documents/detail/2169340