THE INFLUENCE OF OPERATIONAL COSTS, INCOME AND INVENTORY ON PROFITS AT PT. PAPADAAN PERDANA

Angga Hapsila¹*, Budiyanto²

¹² Management, Indonesian School of Economics (STIESIA) Surabaya, Surabaya, Indonesia

*Corresponding Author: anggahapsila@stieindragiri.ac.id

Abstract: The research was carried out to test and analyze the influence of operational costs, income and inventory on profits, both simultaneously and partially at PT. Papadaan Perdana. The research uses a quantitative approach using secondary data, the author processes the data using an application Statistical Page for the Social Sciences (SPSS) version 24. The analysis used in this research is multiple linear regression and simultaneous and partial hypotheses testing. The research results show that operational costs, income and inventory simultaneously influence profits. Partially, operational costs have no effect on profits, income partially has an effect on profits and inventory partially has an effect on profits.

Keywords: Operational Costs, Income, Inventory and Profit

1. Introduction

Establishing and running a company is an economic activity that is filled with various risks. There is no guarantee that a business will be successful, every year many new companies emerge, but many companies also go out of business (Sukirno, 2016:384). Sujarweni (2016:51) states that the success or failure of a company is marked by management's ability to see future possibilities and opportunities, both short and long term. The main management activity in planning is deciding on various alternatives in formulating policies that will be implemented in the future. The profit earned by a company is a measure that is often used to assess the success or failure of company management. Profit is the main goal of profit-oriented companies.

PT. Papadaan Perdana is a profit-oriented company that prioritizes increasing profits and controlling existing markets. However, in recent years, the net profit obtained by the company has tended to decline. In 2019 there was the highest decline in profit, namely -65.92% compared to 2018. Furthermore, profit in 2020 decreased again by -24.24% and the same thing happened again in 2021 with a decline in profit of -9.50%. In 2022, the company will only experience profit growth compared to the previous year, namely growth of 27.32%.

Savitri (2016:35) states that operational costs are costs that have a big influence on the company's success in achieving its goals, namely obtaining operating profits. Because the products that the company has produced through a long production process must be delivered to consumers through a series of mutually supporting activities. Without directed operational activities, all the products produced will not have any benefits for the company. Research on the effect of operational costs on profits was conducted by Puspitasa and Ruchjana (2022); Fau et al. (2022) and Prasetya et al. (2022) with the results of research on operational costs...
affecting profits. Different results were presented by Anjarwati and Safri (2022) with the results that operational costs had no effect on profits.

According to Ervina, et al., (2020:175) the elements that form profits are income and costs. The income obtained by the company can come from production, marketing, receivables collection or other activities. Income is a company's priority because if the income obtained is large then the profit that will be received will also be large, conversely if the income received is small then the profit obtained by the company will also be small. Research on income versus profit was conducted by Ananda and Ibrahim (2022); Kuswindi, et., al (2023) and Marismiati and Aminah (2023) by obtaining research results on the influence of income on profits. Different research results presented by Nursopyan and Gunardi, (2022) reveal that income has no effect on profits.

Ferawati, et al., (2020) stated that in principle inventory makes the company's profit-making process easier. Because inventory is one of the important requirements for the operation of companies engaged in the sale of basic commodities. Companies must be able to control the amount of inventory requested by consumers. Trading companies and manufacturing companies always have inventory in stores and in the company warehouse. This inventory can be in the form of raw materials, goods in process, or finished goods. Inventory must be owned because it is a company product that must be sold as a source of income (Harmain, et al., 2019). Inventory research on profits was conducted by Lubis, et., al (2023); Lestari, et., al (2022) and Akla and Maretha (2022) with the results of research on the effect of inventory on profits. Different research was put forward by Fauziah and Sugijanto (2022) with research results that inventory turnover had no impact on profits.

Based on the background of the problem above, where there are business phenomena and research gaps, the author raised the research title "The Influence of Operational Costs, Income and Inventory on Profit at PT. Papadaan Perdana". Based on this background, the problem formulation can be prepared as follows: (1) Operating Costs, Income and Inventory Simultaneously Affects Profits at PT. Papadaan Perdana; (2) Operating costs Partially Affects Profits at PT. Papadaan Perdana; (3) Income Partially Affect Profit at PT. Papadaan Perdana; (4) Inventory Partially Affect Profit at PT. Papadaan Perdana. Then the aim of this research is to test and analyze: (1) The Effect of Operating Costs, Income and Inventory Simultaneously in Profit at PT. Papadaan Perdana; (2) The Effect of Operating costs Partially Against Profit at PT. Papadaan Perdana; (3) The Effect of Partial Income on Profits at PT. Papadaan Perdana; (4) The Effect of Partial Inventory on Profit at PT. Papadaan Perdana.

2. Literature Review

Profit
According to Suwardjono (2012: 464) profit is the increase in assets in a period due to productive activities which can be shared or distributed to creditors, the government, shareholders (in the form of interest, taxes and dividends) without affecting the integrity of the original shareholders' equity. The general definition of profit according to Ervina, et al., (2020:174) is the difference between income over costs within a certain period of time.

Operating Costs
According to Rudianto (2009: 116) what is meant by operational cost budget is all planned expenditure related to the distribution and sale of company products as well as expenditure to run the organization. Operational budget, namely a budget prepared from the company's
operational activities to determine the estimated profit or loss from operational activities that have been carried out. This operational budget consists of: Sales budget, operating expenses budget, factory costs (raw material costs budget, labor costs budget, factory overhead costs budget), profit and loss report budget. (Suhardi, 2019:11)

**Income**
Income is a gross increase in assets and a gross decrease in liabilities assessed based on accounting principles originating from profit-making activities. (Harahap, 2011:58). According to PSAK No. 23 of 2017 states that income is cash inflow from economic activities or transactions carried out by an entity which causes an increase in the entity's capital that is not caused by additional capital.

**Inventory**
The definition of inventory put forward by Schroeder in Purnomo and Riani (2018: 11) defines inventory as a stock of materials that is deliberately stored with the aim of facilitating the production flow and meeting customer demand. Inventories are materials or goods stored to fulfill a specific purpose, for example for use in the production or assembly process, for resale, or for spare parts for equipment or machines. (Ramdhani, 2014:374)

**Research Framework**
The framework is a description of the research paradigm which is the answer to the research problem. The research framework in this research is as follows:

![Research Framework Diagram](image)

**Research Hypotheses**
The hypotheses in this research are:
1. Allegedly Operational Costs, Income and Inventory Simultaneously Influence Profit at PT. Papadaan Perdana.
2. Allegedly Operational Costs Partially Affect Profit at PT. Papadaan Perdana.
3. Allegedly Income partially influences profits at PT. Papadaan Perdana.
4. Allegedly Inventory Partially Influence Profit at PT. Papadaan Perdana.

**3. Method**
This research was carried out in PT. Papadaan Perdana, with a research period of 5 months using secondary data. In analyzing the data the author used the help of Statistical Page for the Social Sciences (SPSS) version 24.
4. Result and Discussion

Normality Test
Normality test to determine whether the independent, dependent or both variables are normally distributed, close to normal or not. In this research, testing was carried out using a probability plot. The probability plot graph can be seen in the following image:

Based on Figure 2 above, it can be concluded that the data is normally distributed because the residual data distribution follows the direction of the diagonal line. Because the data is normally distributed, the regression model meets the normality assumption.

Multicollinearity Test
The multicollinearity test is carried out to find out whether the independent variables are correlated or not. A good model should have no correlation between independent variables. Multicollinearity testing is carried out by looking at tolerance values and variance inflation factor (VIF), based on:

a) Tolerance value ≤ 0.10 or VIF value ≥ 10, then multicollinearity occurs
b) Tolerance value ≥ 0.10 or VIF value ≤ 10, then multicollinearity does not occur

The following is a table of multicollinearity test results:

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>Q</th>
<th>Sig.</th>
<th>Zero-order</th>
<th>Partial</th>
<th>Part</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-.021</td>
<td>.043</td>
<td>-0.036</td>
<td>-.490</td>
<td>.672</td>
<td>-.031</td>
<td>-.328</td>
<td>-.031</td>
<td>.747</td>
<td>1.338</td>
</tr>
<tr>
<td>X1</td>
<td>-0.040</td>
<td>.004</td>
<td>-0.634</td>
<td>-9.178</td>
<td>.012</td>
<td>-.061</td>
<td>-.988</td>
<td>-.579</td>
<td>.833</td>
<td>1.201</td>
</tr>
<tr>
<td>X2</td>
<td>1.984</td>
<td>.167</td>
<td>.797</td>
<td>11.897</td>
<td>.007</td>
<td>.756</td>
<td>.993</td>
<td>.751</td>
<td>.887</td>
<td>1.127</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

Source: Processed data
From table 1, it can be seen that:

a) The tolerance value for the operational cost variable is $0.747 \geq 0.10$ or the VIF value is $1.338 \leq 10$ so that the operational cost variable is declared to have no symptoms of multicollinearity.

b) The tolerance value for the income variable is $0.833 \geq 0.10$ or the VIF value is $1.201 \leq 10$ so that the income variable is declared to have no symptoms of multicollinearity.

c) The tolerance value for the inventory variable is $0.887 \geq 0.10$ or the VIF value is $1.127 \leq 10$ so that the inventory variable is declared to have no symptoms of multicollinearity.

**Autocorrelation Test**

The way to see whether or not there is autocorrelation in the regression model is to carry out a run test. The basis for determining whether autocorrelation occurs or not is:

a) When Asimp. Sig (2-tailed) < 0.05, then there is autocorrelation between residual values

b) When Asimp. Sig (2-tailed) > 0.05 means there is no autocorrelation between residual values

The following is a table of autocorrelation test results:

<table>
<thead>
<tr>
<th>Test Runs</th>
<th>Unstandardized Residuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Valuea</td>
<td>3.03764</td>
</tr>
<tr>
<td>Cases &lt; Test Value</td>
<td>3</td>
</tr>
<tr>
<td>Cases &gt;= Test Value</td>
<td>3</td>
</tr>
<tr>
<td>Total Cases</td>
<td>6</td>
</tr>
<tr>
<td>Number of Runs</td>
<td>6</td>
</tr>
<tr>
<td>Z</td>
<td>1.369</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.171</td>
</tr>
</tbody>
</table>

a. Median

**Source: Processed data**

From table 2 above, the Asymp value is obtained. Sig (2-tailed) is $0.171 > 0.05$, so the residual is random or there is no autocorrelation.

**Multiple Regression Analysis**

To determine the effect of operational cost, income and inventory variables on the dependent variable profit, the author uses analysis using SPSS version 24. When calculating linear regression, the formula is used:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + e$$

Where a is a constant, b is the regression coefficient and x is the independent variable, then from the data below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-661.837</td>
<td>103.678</td>
<td>-6.384</td>
<td>.024</td>
</tr>
<tr>
<td>X1</td>
<td>-.021</td>
<td>.043</td>
<td>-.036</td>
<td>-.490</td>
</tr>
<tr>
<td>X2</td>
<td>-.040</td>
<td>.004</td>
<td>-.634</td>
<td>-9.178</td>
</tr>
<tr>
<td>X3</td>
<td>1.984</td>
<td>.167</td>
<td>.797</td>
<td>11.897</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

**Source: Processed data**
From the table above we can see that the multiple linear regression becomes:

\[ Y = -661.837 - 0.021X_1 - 0.040X_2 + 1.984X_3 \]

The interpretation of the regression models above are:

a. \( b_0 = -661.837 \)
   If operational costs, Income and inventory are equal to 0 (zero) or constant (not experiencing increases or decreases) then the profit is -661.837.

b. \( b_1 = -0.021 \)
   If operational costs increase by 1 (one unit) while Income and inventory are constant, profits will decrease by -0.021.

b. \( b_2 = -0.040 \)
   If Income increases by 1 (one unit) while operational costs and inventory are constant, profits will decrease by -0.040.

b. \( b_3 = 1.984 \)
   If in inventory increases by 1 (one unit) while operational costs and Income remain fixed, so profits will increase by 1.984

**Correlation and Determination**
To see the correlation and determination of operational cost, Income and inventory variables on profit, you can see the table below:

**Table 4. Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.996</td>
<td>.992</td>
<td>.980</td>
<td>25.85713</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X3, X2, X1

**Source: Processed data**

**Table 5. Guilford Category Standards**

<table>
<thead>
<tr>
<th>Coefficient/Path</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.20</td>
<td>The closeness of the relationship is very low or the influence is very weak</td>
</tr>
<tr>
<td>0.20 &lt; 0.40</td>
<td>Low relationship closeness or weak influence</td>
</tr>
<tr>
<td>0.40 &lt; 0.70</td>
<td>Medium closeness or moderate influence</td>
</tr>
<tr>
<td>0.70 &lt; 0.90</td>
<td>High relationship closeness or high influence</td>
</tr>
<tr>
<td>&gt;0.90</td>
<td>Very high relationship closeness or very high influence</td>
</tr>
</tbody>
</table>

The r value or correlation that can be seen from the Model Summary table is 0.996, meaning that there is a very high relationship between operational costs, Income and inventory and profit.

From the model summary table, it can be seen that the R Square value is 0.992. So, the contribution of influence from the independent variable is 99.20%, while the remaining 0.80% is influenced by other factors not examined in this research.

**Hypotheses Testing**

**F test**
Testing the influence of variables operational costs, Income and inventory to profit can be seen in the table below.
Table 6. ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>166674.151</td>
<td>3</td>
<td>55558.050</td>
<td>83.097</td>
<td>.012b</td>
</tr>
<tr>
<td>Residual</td>
<td>1337.183</td>
<td>2</td>
<td>668,591</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168011.333</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y  
b. Predictors: (Constant), X3, X2, X1

Source: Processed data

In table Simultaneous Test Results above, the calculated F value is 83.097, while the table F value is 19.16. Apart from that, the significance value is 0.012, which is smaller than the significance level (α) of 0.05. Because the calculated F value > F table (83.097 > 19.16), then operational costs, income and inventory simultaneously have a significant effect to profits.

**t Test**

Testing the influence of variables operational costs, income and inventory partially towards profit can be seen in the table below:

Table 7. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-661,837</td>
<td>103,678</td>
<td>-.384</td>
<td>.024</td>
</tr>
<tr>
<td>X1</td>
<td>-.021</td>
<td>.043</td>
<td>-.036</td>
<td>.490 .672</td>
</tr>
<tr>
<td>X2</td>
<td>-.040</td>
<td>.004</td>
<td>-.634</td>
<td>-9.178 .012</td>
</tr>
<tr>
<td>X3</td>
<td>1.984</td>
<td>.167</td>
<td>.797</td>
<td>11.897 .007</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

Source: Processed data

1. Partial test of the influence of operational costs on profits  
   Based on the results of the SPSS analysis above, it shows that the t value<sub>count</sub> for variable operational costs it is -0.490. Because the value of t<sub>count</sub> > t<sub>table</sub> (-0.490 > -2.776) then partial income has no effect on profit.

2. Partial test of the effect of income on profits  
   Based on the results of the SPSS analysis above, it shows that the t value<sub>count</sub> for the income variable it is -9.178. Because the value of t<sub>count</sub> < t<sub>table</sub> (-9.178 < -2.776) then income partially influences profits.

3. Partial test of the effect of inventory on profits  
   Based on the results of the SPSS analysis above, it shows that the t value<sub>count</sub> for the inventory variable is 11,897. Because the value of t<sub>count</sub> > t<sub>table</sub> (11,897 > 2,776) then inventory partially influences profits.

5. Conclusions

Based on the results of the research carried out, conclusions were drawn:

a. Variable operational costs, income and inventory influence profits at PT. Papadaan Perdana. The hypothesis states that it is assumed that operational costs, income and inventory simultaneously influence profits declared accepted.

b. Variable operational costs have no effect on profits at PT. Papadaan Perdana. The
hypothesis states that operational costs partially influence profits declared rejected.
c. The income variable influences profits at PT. Papadaan Perdana. The hypothesis states that it is assumed that income partially influences profits declared accepted.
d. Inventory variables influence profits at PT. Papadaan Perdana. The hypothesis states that it is suspected that inventory partially influences profits declared accepted.

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References


