The Effect Of Production Costs and Sales Volume (Nett) On Nett Profit In Manufacturing Companies In The Primary Consumer Goods Sector Listed On The Indonesia Stock Exchange For The 2017-2021 Period

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Abstract: The purpose of this research are to analyze: 1) to test the effect of production costs on nett profit; 2) to test the effect of sales volume (nett) on nett profit; 3) to test the effect of production cost and sales volume (nett) on nett profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period. The populations in this research is manufacturing companies in the primary consumer goods sector for the 2017-2021 period. The technique used in selecting the sample was purposive sampling and obtained 44 manufacturing companies in the primary consumer goods sector with a research periode of 5 five years so that 220 samples were obtained in this research. The data analysis method in this research was panel data regression analysis using Eviews software version 10. The results of this research indicate that: 1) production costs have a positive and significant effect on nett profit; 2) sales volume (nett) has a positive and significant effect on nett profit; 3) it is then known that there is a jointly significant effect between the variables of production costs and sales volume (nett) to nett profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period.

Keywords: Production Costs, Sales Volume, Nett Profit

INTRODUCTION

Industry is an economic activity that processes raw materials, raw materials and or semi-finished goods into goods with a higher value for their use, including industrial design and engineering activities (Law No. 5 of 1984 Article 1). In the current era of the industrial revolution, the level of competition in the business world is increasingly competitive and only business entities that have the best performance or performance will survive. Economic development will involve economic actors, where one of the economic actors in Indonesia is a company, the results of this economic development are expected to be felt by all levels of society (Jessica et al, 2017). The primary consumer goods sector is the corporate sector that
produces or distributes products and services that are generally sold to consumers. The demand for goods and services that are anti-cyclical or primary/basic goods is not affected by economic growth. The sub-sectors of companies included in the primary consumer goods sector are retail trade of primary goods – food stores, drugstores, supermarkets, beverage manufacturers, packaged foods, sellers of agricultural products, cigarette manufacturers, household goods, and personal care goods (Indonesia Stock Exchange, 2021). The success of a company is generally judged by its ability in obtaining profit, this profit will be used for sustainability company (Jannah, 2018). Profits in the company are wrong one indicators in achieving success in which the increase in company profits can be identified by the level of product sales in the market (Jessica et al, 2017). According to Law Number 40 of 2007 concerning Companies Limited, stating that net profit is the current year's profit after deducting taxes. Manufacturing companies are required to do production activities effectively and efficiently to obtain net profit company. It is important for companies to use net profit as a means of competing with their competitors, according to Tadaharu Taguchi who is the Vice President Director of PT Panasonic Gobel Indonesia (PGI). As well as being able to spur in obtaining the maximum profit so that it can further develop (Tempo, 2017). There are several factors that determine profit including costs, selling prices, and sales volume (nett) (Mulyadi, 2018).

Table 1. Phenomena of Problems in Several Companies in the Primary Consumer Goods Sector for the 2017-2021 Period

<table>
<thead>
<tr>
<th>No.</th>
<th>Company Name and Year</th>
<th>Production Costs</th>
<th>Sales Volume</th>
<th>Nett Profit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HM Sampoerna Tbk (HMSP), Year 2021</td>
<td>-2.26%</td>
<td>6.98%</td>
<td>-16.83%</td>
<td>(Theiconomics, 2021)</td>
</tr>
<tr>
<td>2</td>
<td>Bentoel Internasional Tbk (RMBA), Year 2021</td>
<td>-40.29</td>
<td>-39.47%</td>
<td>100.3%</td>
<td>(Kontan, 2022)</td>
</tr>
<tr>
<td>3</td>
<td>Gudang Garam Tbk (GGRM), Year 2021</td>
<td>3.86%</td>
<td>9.08%</td>
<td>-26.71%</td>
<td>(Kontan, 2021)</td>
</tr>
<tr>
<td>4</td>
<td>Mayora Indah Tbk (MYOR), Year 2021</td>
<td>25.20%</td>
<td>14.00%</td>
<td>-42.28%</td>
<td>(Trenasias, 2021)</td>
</tr>
<tr>
<td>5</td>
<td>Multi Agro Gemilang Plantation Tbk (MAGP), Year 2017</td>
<td>60.48%</td>
<td>127.2%</td>
<td>-288.09%</td>
<td>(Pasardana, 2018)</td>
</tr>
<tr>
<td>6</td>
<td>Eagle High Plantations Tbk (BWPT), Year 2017</td>
<td>9.51%</td>
<td>33.64%</td>
<td>-27.86%</td>
<td>(Liputan6, 2022)</td>
</tr>
<tr>
<td>7</td>
<td>Akasha Wira International Tbk (ADES), Year 2018</td>
<td>15.83%</td>
<td>-1.25%</td>
<td>38.48%</td>
<td>(Cnbcindonesia, 2019)</td>
</tr>
<tr>
<td>8</td>
<td>Tiga Pilar Sejahtera Food Tbk (AISA), Year 2019</td>
<td>-4.71%</td>
<td>-4.60%</td>
<td>1018.75%</td>
<td>(Cnbcindonesia, 2020)</td>
</tr>
<tr>
<td>9</td>
<td>Tiga Pilar Sejahtera Food Tbk (AISA), Year 2020</td>
<td>-10.27%</td>
<td>-15.03%</td>
<td>6.18%</td>
<td>(Kontan, 2021)</td>
</tr>
<tr>
<td>10</td>
<td>Wilmar Cahaya Indonesia Tbk (CEKA), Year 2019</td>
<td>-17.90%</td>
<td>-14.00%</td>
<td>132.55%</td>
<td>(Katadata, 2019)</td>
</tr>
<tr>
<td>11</td>
<td>Ultra Jaya Milk Industry &amp; Trading Company Tbk (ULTJ), Year 2020</td>
<td>-6.60%</td>
<td>-4.39%</td>
<td>7.12%</td>
<td>(Cnbcindonesia, 2021)</td>
</tr>
<tr>
<td>12</td>
<td>Mandom Indonesia Tbk (TICD), Year 2019</td>
<td>7.09%</td>
<td>5.86%</td>
<td>-16.12%</td>
<td>(Idnfinancials, 2020)</td>
</tr>
<tr>
<td>13</td>
<td>Mustika Ratu Tbk (MRAT), Year 2020</td>
<td>5.53%</td>
<td>4.32%</td>
<td>-5226.52%</td>
<td>(Beritasatu, 2021)</td>
</tr>
</tbody>
</table>

Source: Indonesia Stock Exchange, 2021

The company's production costs and sales volume (nett) are not proportional to the company's net profit. Some of them experienced an increase in production costs and sales volume (nett), but this was not accompanied by an increase in net profit. There are several factors that determine profit including costs, selling prices, and sales volume (nett) (Mulyadi, 2018). Production costs are costs inherent in products, including costs, both direct and indirect, that can be identified with the activities of processing raw materials into finished products (Harnanto, 2017). The level of profit that the company gets can be determined by the amount
of production volume produced, the more production volume produced, the higher the profit the company will get (Carter, 2017). Based on this theory, when production costs are increased it will increase production volume which will affect the level of profit earned by the company (Mulyadi, 2018).

LITERATURE REVIEW
Signaling Theory
Signaling theory explains how companies take actions to be taken in giving instructions to external parties about the company's prospects (Brigham and Houston, 2018). The signal theory shows that there is an imbalance of information obtained by company management with external parties. Information issued by the company is important for external parties, because it has an influence on the investment decisions of external parties (Brigham and Houston, 2018). The thing that encourages companies to provide information to external parties is due to an imbalance of information obtained by company management and external parties. Signaling theory explains that signaling by company management reduces information asymmetry. Informative goals (Signalling) can have a good impact on the company, where company managers try to inform opportunities that can be achieved by the company in the future (Lusiana, 2018).

Signaling theory has been studied by previous researchers, namely: (Larasati et al., 2018), (Maharani & Saputra, 2021), (Sudiantini & Saputra, 2022).

Production Costs
Production costs are costs incurred in the process of processing raw materials into finished products ready for sale. Broadly speaking, production costs are divided into raw material costs, direct labor costs and factory overhead costs (Mulyadi, 2018). Production costs are costs inherent in products, including costs, both direct and indirect, that can be identified with the activities of processing raw materials into finished products (Harnanto, 2017).

Production costs has been studied by previous researchers, namely: (Widodo et al., 2020), (Bimaruci et al., 2020), (Maida et al., 2017).

Sales Volume (Nett)
One of the goals of establishing a company is to increase sales volume (net), which is expected to increase the company's net profit. Sales volume (net) is the activity carried out by the seller when selling goods or services which are expected to benefit from the transaction (Mulyadi, 2018). Sales volume (net) are goods sold in the form of money for a certain period of time in which they have a good service strategy (Philip Kotler and Armstrong, 2018). Sales volume (nett) is the peak of the company's activity in achieving the target the company wants, this peak means the point where the company is at the point of sales volume (nett) which matches the target the company wants (Tjiptono, 2019).

Sales Volume has been studied by previous researchers, namely: (Sivaram et al., 2019), (Ridwan et al., 2020), (Yeni et al., 2019).

Nett Profit
Nett profit is gross profit that has been deducted by costs which are a burden on the company in a certain period including tax expenses (Kasmir, 2019). According to (Hery, 2018) net profit is profit before profit tax which is deducted by profit tax, profit before profit tax represents operating profit plus operating results and deducting expenses other than ordinary operations. Nett profit is the final value of calculating profit and loss, by adding operating profit to revenue and then deducting other costs (Wiratna Sujawerni, 2017). According to (Carl S. Warren et al, 2017) argues that net profit is greater profit than costs.
Nett Profit has been studied by previous researchers, namely: (Saputra, 2022), (Mulyani et al., 2020).

**RESEARCH METHODS**

**Research Methods**

The research method is a scientific way to obtain data with specific purposes and uses. The scientific method of research activities is based on scientific characteristics, namely rational, empirical and systematic (Sugiyono, 2017). The method used in this research is a quantitative method. This type of research is causal associative research, namely research that asks a relationship between two or more variables, a causal relationship is a causal relationship (Sugiyono, 2017). In this study there are independent variables (those that influence) and dependent variables (those that are influenced). Associative clauses in this study are used to determine the extent of the causal relationship between the influence of production costs and sales volume on net profit. Where production costs as variable X1, sales volume as variable X2 and net profit as variable Y (Ali, H., & Limakrisna, 2013).

**Data Analysis Methods**

**Panel Data Regression Model Test**

This analysis is used to discuss the effect of production costs and sales volume on net profit in the form of a combination of time series and cross section data. Prior to the analysis, the Common Effect, Fixed Effect, and Random Effect models were first selected.

1. **Common Effect Model (CE)**

   The panel data model approach is the simplest because it only combines time series and cross section data. This model does not pay attention to the time or individual dimensions, so it is assumed that the behavior of company data is the same in various time periods. This method can use the Ordinary Least Square (OLS) approach or the least squares technique to estimate the panel data model.

2. **Fixed Effect Model (FE)**

   This model assumes that the differences between individuals can be accommodated from the intercept differences. To estimate the Fixed Effect model panel data using the dummy variable technique to capture differences in intercepts between companies, differences in intercepts can occur due to differences in work culture, managerial and incentives. However, the slope value is the same between companies. This estimation model is often also called the Least Squares Dummy Variable (LSDV) technique.

3. **Random Effect Model (RE)**

   This model will estimate panel data where the disturbance variables may be related to each other over time and between individuals. In the Random Effect model, the difference in intercepts is accommodated by the error terms of each company. The advantage of using the Random Effects model is that it eliminates heteroscedasticity. This model is also called the Error Component Model (ECM) or the Generalized Least Square (GLS) technique.

   Determination of the Panel Data Regression Estimation Method, To select the most appropriate model there are several tests that can be performed, including:
   a. **Chow test**
      The Chow test is a test to determine whether the Common Effect (CE) or Fixed Effect (FE) model is the most appropriate to use in estimating panel data.
   b. **Hausman test**
      Hausman test is a statistical test to choose whether the Fixed Effect or Random Effect model
is the most appropriate to use.

c. Lagrange Multiplier Test
The Lagrange Multiplier (LM) test is a test to find out whether the Random Effect model is better than the Common Effect method used.

**Hypothesis**

Research

a. $H_1$: Production costs have a positive and significant impact on nett profit

b. $H_2$: Sales volume (nett) have a positive and significant impact on nett profit

c. $H_3$: Production costs and sales volume (nett) have a significant impact on nett profit

**FINDINGS AND DISCUSSION**

**Analysis Design**

1. **Descriptive Statistical Analysis**

<table>
<thead>
<tr>
<th></th>
<th>X1 (in units of millions of rupiah)</th>
<th>X2 (in units of millions of rupiah)</th>
<th>Y (in units of millions of rupiah)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
<td>7.849.833</td>
<td>14.827.499</td>
<td>1.143.977</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>2.167.454</td>
<td>3.140.787</td>
<td>135.576,5</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>65.676.408</td>
<td>124.881.266</td>
<td>13.721.513</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>7.395</td>
<td>146.942</td>
<td>-5.234.288</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>X1 (in one units)</th>
<th>X2 (in one units)</th>
<th>Y (in one units)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skewness</strong></td>
<td>2.106402</td>
<td>2.353423</td>
<td>2.374626</td>
</tr>
<tr>
<td><strong>kurtosis</strong></td>
<td>7.487629</td>
<td>8.001620</td>
<td>9.335232</td>
</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

The minimum value of production costs is Rp. 7.395 and a maximum value of Rp. 65.676.408. The average value is smaller than the standard deviation of Rp. 7.849.833 < Rp. 12.002.810. This shows that the data on the production cost variable varies or has a large degree of deviation, because the difference between one data and another is greater than the average value. The highest production costs occurred at PT. Indofood Sukses Makmur Tbk (INDF) in 2021 is Rp. 65.676.408, while the lowest production costs occurred at PT. Wahana Pronatural Tbk (WAPO) in 2018 is Rp7.395. These results indicate that the cost of production in manufacturing companies in the primary consumer goods sector for the 2017-2021 period is around Rp. 7.395 to Rp. 65.676.

2. **Panel Data Regression Estimation Method Selection**

**Chow Test**

The Chow test is used to determine whether the model is a common effects model or a fixed effects model. The hypothesis tested is as follows:

**H0**: Models follow Common Effects

**H1**: Models follow Fixed Effects

If the value of the F-statistic < (0.05), then reject H0 and accept H1, so the fixed effects model is better used than the common effects model. However, if the F-statistic > (0.05), then accept H0 and reject H1, so the common effects model is better used than the fixed effects model. The results of the chow test in this study are as follows:
Table 3. Chow Test

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>11,743712</td>
<td>(43,174)</td>
<td>0,0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>299,537876</td>
<td>43</td>
<td>0,0000</td>
</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

The probability value of the cross-section F of 0.000 is obtained, indicating that the probability value of the F-statistic is < 0.05, so according to the decision-making provisions, namely rejecting H0 and accepting H1, the model that can be used is the fixed effects model, but the decision the use of this model is not the final result, because there is still one more test between the fixed effects model and the random effects model, namely testing using the Hausman test.

Hausman Test

To find out which model among the models random effects or the fixed effects model that will be used in this study, it is necessary to test it with the Hausman test. The hypothesis tested is as follows: $H_0$ : Models follow Random Effects

$H_1$ : Models follow Fixed Effects

If the Chi Square probability value is < (0.05), then H0 is rejected and H1 is accepted, so the fixed effects model is better used than the random effects model. However, if the probability value of Chi Square > (0.05), then accept H0 and reject H1, so the random effects model is better used than the fixed effects model. The results of the Hausman test in this study are as follows:

Table 4. Hausman Test

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>6,905021</td>
<td>2</td>
<td>0,04609</td>
</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

Based on the results of the Hausman test in table 4.3, a random cross-section probability value of 0.04609 is obtained indicating that the Chi Square probability value < (0.05), then according to the provisions of decision making, namely rejecting H0 and accepting H1, so the model that can be used is the fixed effects model.

3. Panel Data Regression Equation

Based on the results of model testing that has been done before, it can be concluded that the best regression model to be used in this study is the fixed effects model. The following is a table of test results using fixed effects.
Table 5. Panel Data Regression Equation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-684241,8</td>
<td>176158,5</td>
<td>-3,884239</td>
<td>0,0001</td>
</tr>
<tr>
<td>X1</td>
<td>0,154242</td>
<td>0,010262</td>
<td>15,03103</td>
<td>0,0000</td>
</tr>
<tr>
<td>X2</td>
<td>0,053401</td>
<td>0,011697</td>
<td>4,565556</td>
<td>0,0000</td>
</tr>
</tbody>
</table>

Effects Specification

Table 6. Partial Hypothesis Test (T Test)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

The panel data regression equation can be formed as follows:

\[
Y = (-684241,8) + 0,154242X1 + 0,053401X2
\]

After processing the data, the panel data regression equation is obtained, as follows: 

1. \(-684241,8\) means that even though the independent variable is zero, the net profit value is still \(-684241,8\).
2. \(0,154242\) means that if production costs (\(X_1\)) has increased by one unit, and the value of other variables is constant or equal to zero, so the net profit variable value will be predicted to increase by \(0,154242\).
3. \(0,053401\) means that if the sales volume (net) (\(X_2\)) has increased by one unit, and the value of other variables is constant or equal to zero, then the value of the net profit variable is predicted to increase by \(0,053401\).

4. Hypothesis Test

Partial Hypothesis Test (T Test)

The test steps in using the t test are as follows:

1. If probability < 0.05 then variable X partially has a significant influence on variable Y.
2. If probability > 0.05 then variable X partially has no significant effect on variable Y.

With testing criteria:

a. H0 is rejected and Ha is not successfully rejected, if \(t_{\text{count}} > t_{\text{table}}\)

b. H0 was not successfully rejected and Ha was rejected, if the value of \(t_{\text{count}} < t_{\text{table}}\)

Based on the output results on table, it can be concluded as follows:

a. Based on the data in table, a \(t_{\text{count}}\) value of 15,03103 is obtained by taking the significance
level = 0.05, then the value of \( t_{\text{table}} \) or \( t_{0.5;43} \)= 1.681 or by looking at the significance level of 0.0000 which is less than 0.05 then \( H_0 \) is rejected or in other words production costs have a positive and significant effect on net profit.

b. Based on the data in table, a \( t_{\text{count}} \) value of 4.565556 is obtained by taking the significance level = 0.05, then the value of \( t_{\text{table}} \) or \( t_{0.5;43} \)= 1.681 or by looking at the significance level of 0.0000 which is less than 0.05 then \( H_0 \) is rejected or in other words sales volume (nett) has a positive and significant effect on net profit.

**Simultaneous Hypothesis Test (Test F)**

The hypothesis in this study is formulated as follows:

1. If the value of \( F_{\text{count}} > F_{\text{table}} \), then variable X simultaneously (simultaneously) has a significant influence on variable Y.
2. If the value of \( F_{\text{count}} < F_{\text{table}} \), then variable X simultaneously (simultaneously) has no significant effect on variable Y.

By making the following decisions:

1. If the sig. greater or equal to the Prob value. \( (\text{Sig} \geq 0.05 \) or \( F_{\text{count}} < F_{\text{table}} \), then \( H_0 \) was not successfully rejected and \( H_a \) was rejected, which means it has no significant effect.
2. If the sig. smaller or equal to the Prob value. \( (\text{Sig} \leq 0.05 \) or \( F_{\text{count}} < F_{\text{table}} \), then \( H_0 \) is rejected and \( H_a \) is not successfully rejected, which means it has a significant effect.

**Table 7. Simultaneous Hypothesis Test (Test F)**

<table>
<thead>
<tr>
<th>R-squared</th>
<th>0.960026</th>
<th>Mean dependent var</th>
<th>1245844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.949688</td>
<td>S.D. dependent var</td>
<td>2707514</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>607305.8</td>
<td>Akaike info criterion</td>
<td>29,65506</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>6,42E+13</td>
<td>Schwarz criterion</td>
<td>30,36464</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-3216,057</td>
<td>Hannan-Quinn criter.</td>
<td>29,94161</td>
</tr>
<tr>
<td>F-statistic</td>
<td>92.86270</td>
<td>Durbin-Watson stat</td>
<td>2,200205</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

Based on the output results in the table, shows an \( F_{\text{count}} \) value of 92.86270 where the criteria for rejection are \( H_0 \) if \( F_{\text{count}} \) greater than \( F_{\text{table}} \) or \( F_0 \) greater than \( , n-1 \) by taking a significance level = 0.05, then from the F distribution table we get the \( F_{\text{table}} \) value for \( F_{0.05;2;41} \) = 3.226. Because 92.86270 > 3.226 and the significance of F is 0.0000, \( H_0 \) is rejected. It can be concluded that there is a significant influence between production costs and sales volume on net profit.

**Determination Coefficient Test**

**Table 8. Determination Coefficient Test**

<table>
<thead>
<tr>
<th>R-squared</th>
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<td>F-statistic</td>
<td>92.86270</td>
<td>Durbin-Watson stat</td>
<td>2,200205</td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research data processing output from the eviews 10 application

Based on the output results in the table, then the coefficient of determination is positive 0.960026. That is, from the analysis above it can be seen that production costs and sales volume contributed 96% to net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period, while the remaining 4% was contributed by
other variables not examined in this study.

Discussion

1. Effect of Production Costs on Net Profit

Based on the value of the regression coefficient between the variable production costs and net profit, which is equal to +0.154242, the + sign indicates that production costs are directly proportional to net profit, so when production costs increase, net profit will increase, and vice versa. An increase in production costs by one unit will increase net profit by 0.154242. At this production cost, a t-count value of 15.03103 is obtained by taking the significance level = 0.05 then the value of t-table or t₀.5;43 = 1.681 or by looking at a significance level of 0.0000, which is less than 0.05, it can be concluded that production costs have a positive and significant effect on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period. The results of this study prove empirical evidence that companies with high production costs tend to have higher net profit. Production costs have a positive and significant effect on net profit because if production costs are increased it will increase production volume which will affect the level of profit earned by the company.

2. Effect of Sales Volume (Nett) on Net Profit

Based on the value of the regression coefficient between the variable production costs and net profit of 0.053401, it means that an increase in sales volume (nett) by one unit will increase net profit by 0.053401. At the sales volume (nett), the t-count value is 4.565556 by taking the significance level = 0.05 then the value of t-table or t₀.5;43 = 1.681 or by looking at a significance level of 0.0000, which is less than 0.05, it can be concluded that sales volume (net) has a positive and significant effect on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period. The results of this study prove empirical evidence that companies with high (nett) sales volume tend to have higher net profit. Sales volume (nett) has a positive and significant effect on net profit because if sales volume (nett) is increased, it will affect the level of net profit earned by the company.

3. Effect of Production Costs and Sales Volume on Net Profit

Based on the results of simultaneous hypothesis testing, it shows an F-count value of 92.86270 where the criteria for rejecting H₀ if F-count greater than F-table or F₀ greater than , n-1 by taking a significance level = 0.05, then from the F distribution table we get the F-table value for F₀.05;2;41 = 3.226. Because 92.86270 > 3.226 and the significance of F is 0.0000, H₀ is rejected. It can be concluded that there is a simultaneous significant effect between production costs and sales volume on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period. Based on the results of the determination coefficient test, the determination coefficient value is positive 0.960026. That is, from the analysis above it can be seen that the magnitude of production costs and sales volume to net profit is 96% while the remaining 4% is influenced by other factors not examined in this study.

CONCLUSION AND RECOMMENDATION

Conclusion

The Fixed Effects model is the most appropriate panel data regression model used in this study. Based on the tests that have been done before, the results of this study can be concluded as follows:

1. Based on the results of the partial test (t statistical test) using panel data regression with the fixed effects panel data regression model, the production cost variable has a positive and significant effect on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period.
2. Based on the results of the partial test (t statistical test) using panel data regression with the fixed effects panel data regression model, the sales volume variable (nett) has a positive and significant effect on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period.

3. Based on the results of the simultaneous test (test statistic f) using panel data regression with the fixed effects panel data regression model, the variables of production costs and sales volume have a significant effect on net profit in manufacturing companies in the primary consumer goods sector for the 2017-2021 period.

4. Based on the results of the analysis of the coefficient of determination states that production costs and sales volume (nett) have a positive effect on net profit 0.960026 or 96% in manufacturing companies in the primary consumer goods sector for the 2017-2021 period. The remaining 4% is the contribution of other variables not examined in this study.

REFERENCES