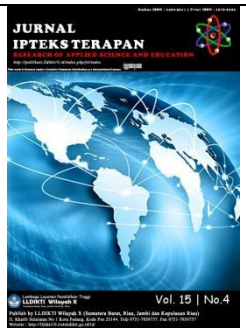

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EFFECT OF PRODUCTION COSTS, PROMOTIONAL COSTS, AND SALES VOLUME ON NET PROFIT IN MANUFACTURING COMPANIES

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Abstract

Background : The purpose of this research is to find out whether there is an influence between the variables of sales volume, promotional costs, and production costs on net income in food and beverage sub-sector manufacturing companies that have been registered on the IDX for the 2016-2019 period. **Method :** This research was carried out using a quantitative approach. The annual financial report data used comes from the website www.idx.co.id. The population used for this is 26 companies and the total sample is 44 companies. **Result :** This study shows the results that, partially production costs do not have a significant effect on net income, partial promotion costs do not have a significant effect on net income, sales volume partially has a significant effect on net income, sales volume, production costs , promotion costs simultaneously have a significant effect on net profit in food and beverage sub-sector manufacturing companies that have been registered on the IDX for the 2016-2019 period. **Conclusion :** The coefficient of determination is 0.888, which means that the influence of production costs, promotion costs, and sales volume on net income variable is 88.8%. Having a remaining 11.2% is caused by variables outside of this study

Keywords: Production Costs, Promotional Costs, Sales Volume

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INTRODUCTION

In essence, the company was formed with the aim of obtaining maximum profit so as to ensure the completeness and success of the company, in order to strive for the development of the company(Masdupi et al., 2018). So that the profits obtained are used as a measure of the company's success in the process of activities according to standard operations, then the company will be able to maintain and be able to compete with other companies. Profit is a profit obtained by the company because it has sold products in the form of goods or services and the difference between income and outgoing costs when making a product. With the profit, a company can continue to run and carry out its activities smoothly and even avoid bankruptcy. The costs are obtained from the activities of managing the product to influence sales turnover which will affect the company's profit(Amalia, 2021). An important factor that needs to be considered when a company will produce goods, namely production costs(Islami & Rio, 2019). Costs obtained at the time of production which are composed of overhead costs, raw materials, and labor. This is influenced by each company expecting a large enough profit because at the time of production which results in costs incurred will be used to measure company profits. Production costs can also be used in determining the level of selling price which can affect the amount of profit that will be obtained by the company(Luthfiah & Suherman, 2018).

One of the purposes of building a company is to make a profit. So in order to get and maximize profits, activities need to be carried out promotion. Because promotional activities in addition to disseminating information, introducing products or services to other parties, persuading/influencing others to buy products or services from the company are also able to increase sales volume, which means it can increase company profits. Promotional activities for goods/services This can be done in various ways, such as discounting certain products, making billboards, through social media such as Facebook, print media such as newspapers or magazines, radio, or through advertisements on television, etc(Izzalqurny et al., 2019). Some of these promotional activities must have costs. Promotional costs are needed so that advertising can be carried out as well as possible and effectively so that it is successful in attracting potential buyers and making purchases of services and products being promoted(Fadah et al., 2020).

RESEARCH METHODS

The implementation of this research uses a quantitative approach. Judging from Sugiyono's opinion (2017:14) that quantitative research means research that has a foundation in the philosophy of positivism, is used in conducting research into a sample or population, usually random sampling technique is often used as a sampling technique, data is obtained with research instruments, the nature of the analysis quantitative/statistical data aims to carry out the process of testing the selected hypothesis. The data used is secondary data. Defined by V. Wiratna Sujarweni (2014:74) as data derived from

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books, records, articles, magazines in the form of corporate financial reports, government reports, and others(Michael, 2019). Data from this source does not require reprocessing. This source can be data to collect data indirectly. The dependent variable for this study is net income (Y) while the independent variables are production costs (X1), promotion costs (X2) and sales volume (X3).

RESULTS AND DISCUSSION

Descriptive Statistical Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Biaya Produksi	44	91452	52470847	9165715,07	14687807,064
Biaya Promosi	44	43	3393231	587071,61	787548,193
LN_Volume_Penjualan	44	11,55	18,15	15,2567	1,75090
LN_Laba_Bersih	44	6,49	15,59	12,5977	2,13161
Valid N (listwise)	44				

Dalam jutaan rupiah

Figure 1. Descriptive Statistic

Judging from the results of the descriptive statistical test, the explanation can be obtained as follows:

1. From a total of 44 samples of Production Cost variable data, the minimum value obtained is 91452 and the maximum value obtained is 52470847, then the mean obtained is 9165715.07 with the standard deviation obtained is 14687807,064.

2. From a total of 44 samples of Promotional Cost variable data, the minimum value obtained is 43 and the maximum value obtained is 3393231, then the mean obtained is 587071.61 with the standard deviation obtained is 787548,193.

3. From a total of 44 data samples for the LN_Volume_Penjualan variable, the minimum value obtained is 11.5 and the maximum value obtained is 18.5, while the mean obtained is 15.2567 with the standard deviation obtained is 1.75090.

4. From a total of 44 data samples for the LN_Laba_Bersih variable which has a minimum value obtained which is 6.49 and the maximum value obtained is 15.59, then the mean obtained is 12.5977 with a standard deviation obtained is 2.13161.

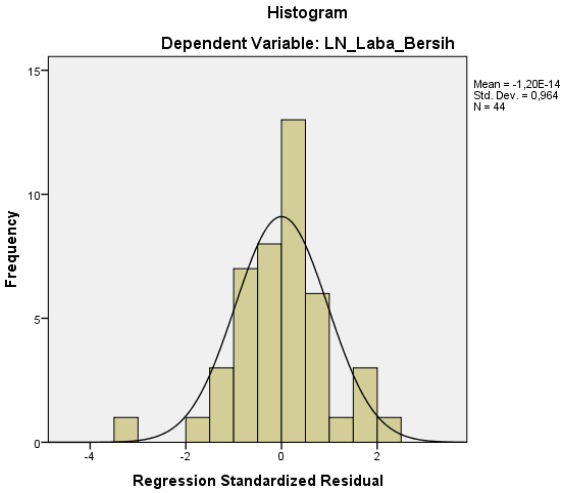

Figure 2. Graph Analisis

In the graph it can be seen that the data has been distributed normally, not skewed to the right or to the left, which means that the data under study has met the requirements of the normality test.

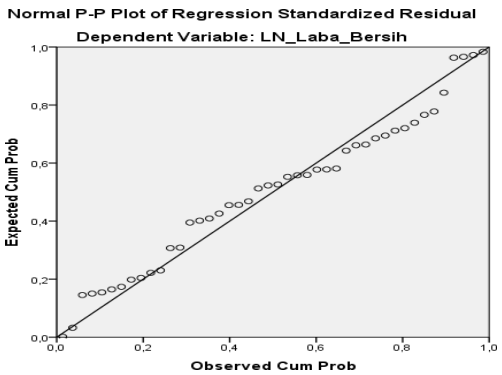

Figure 3. Normal P-P Plot Plot Analysis

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From the Normal P-P Plot graph, it can be seen that the points approach the diagonal line, which means that the data is normal and meets the normality test requirements.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		44
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	,68896054
Most Extreme Differences	Absolute	,100
	Positive	,100
	Negative	-,096
Kolmogorov-Smirnov Z		,665
Asymp. Sig. (2-tailed)		,768

a. Test distribution is Normal.

b. Calculated from data.

Figure 4. One-Sampe Kolmogorv-Smirnov Test

The table above shows the asymp value. Sig. (2-tailed) which is 0.768 which means the value of Sig. (2-tailed) above the sig. 5% (0.05), until the use of the data has been distributed normally and meets the requirements of the normality test.

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	Biaya Produksi	,335	2,986
	Biaya Promosi	,358	2,790
	LN_Volume_Penjualan	,307	3,258

a. Dependent Variable: LN_Laba_Bersih

Figure 5. Multicollinearity

There is a problem in the multicollinearity test, namely the X1 and X3 variables have a tolerance value < 0.10 and a VIF value > 10 until the data is treated by transforming the X3 and Y variables into the forms.

After the data transformation is carried out, Table 5, the tolerance value for the variable production costs, promotion costs, sales volume has a tolerance value > 0.10 and the VIF value for the variables sales volume, promotion costs, production costs has a value below 10. So it can be concluded that the tolerance value and VIF does not experience multicollinearity.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,919[a]	,845	,833	,56627	2,036

a. Predictors: (Constant), Lag_X3, Lag_X2, Lag_X1

b. Dependent Variable: Lag_Y

Figure 6. Autocorrelation

In the autocorrelation test, there was autocorrelation, so improvements were made using the Cochrane-Orcutt technique. In table III.4, it shows that the D-W value is 2.036. This value will be compared with the D-W value of the sig table. 0.05 with n = 44 and k = 3, then the value of Du is 1.6647. Therefore, from the provision du<dw<4-du, 1.6647<2.036<4-1.6647, 1.6647<2.036<2.3353. It means that there is no autocorrelation.

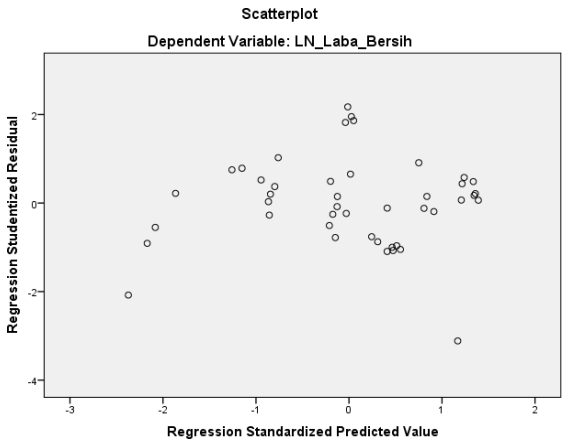

Figure 7. Scatterplot Graph

In the scatterplot graphic above, the dots spread randomly and do not create a pattern so that it does not show any heteroscedasticity.

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Uji Glejser

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,205	1,060		-,193	,848
	Biaya Produksi	-0,00000001073	,000	-,335	-1,264	,214
	Biaya Promosi	-0,00000003246	,000	-,054	-,212	,833
	LN_Volume_Penjualan	,054	,074	,200	,722	,475

a. Dependent Variable: ABRESID

Figure 8. Glejser

The table above shows that the significant value of Production Costs is 0.214 > 0.05, Promotional Costs 0.833 > 0.05, LN_Volume_Penjualan 0.475 > 0.05, meaning that in this study the regression model does not occur heteroscedasticity problems.

Results of Data Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8,260	1,600		-5,163	,000
	Biaya Produksi	-0,00000002378	,000	-,164	-1,856	,071
	Biaya Promosi	-0,000000277	,000	-,102	-1,199	,238
	LN_Volume_Penjualan	1,392	,112	1,143	12,396	,000

a. Dependent Variable: LN_Laba_Bersih

Figure 9. Multiple Linear Regression Equation

Judging from the table, it can be written a multiple linear equation as below:

1. Judging from the table, the value of the constant a is -8.260, meaning that if the sales volume, production costs, promotion costs are set. Constant, then the net income variable can decrease as much as - 8,260.

2. Production costs have a coefficient value of -0.00000002378. Means if production costs increase by 1%, then net income decreases by 0.00000002378.

3. Promotion costs have a coefficient value of -0.000000277. Means if promotion costs have increased 1%, then the net profit according to as much as 0.000000277.

4. The sales volume has a coefficient value of 1.392. Means if the sales volume increases by 1%, then the net profit increases by 1.392.

Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,946[a]	,896	,888	,71433

a. Predictors: (Constant), LN_Volume_Penjualan, Biaya Promosi, Biaya Produksi

b. Dependent Variable: LN_Laba_Bersih

Figure 10. Coefficient of Determination

In table above, the adjusted R Square value is 0.888, which means that the effect of X1, X2, X3 on variable Y is 88.8%. And the remaining 11.2% is influenced by variables outside of this study.

Simultaneous Test (F Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174,972	3	58,324	114,301	,000[b]
	Residual	20,411	40	,510		
	Total	195,382	43			

a. Dependent Variable: LN_Laba_Bersih

b. Predictors: (Constant), LN_Volume_Penjualan, Biaya Promosi, Biaya Produksi

Figure 11. F-Test

From table above, it shows the value of sig. as much as 0.000 < 0.05. And the calculated F value is 114.301, at degrees of freedom 1 (Df1) = k – 1 = 4 – 1 = 3 and degrees of freedom 2 (Df2) = n - k = 44 - 4 = 40, ie n = number of samples and k = number of variables. So Ftable = 2.84. It means 114.301 > 2.84, then the independent variable produces a simultaneous effect on the dependent variable.

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8,260	1,600		-5,163	,000
	Biaya Produksi	-0,00000002378	,000	-,164	-1,856	,071
	Biaya Promosi	-0,000000277	,000	-,102	-1,199	,238
	LN_Volume_Penjualan	1,392	,112	1,143	12,396	,000

a. Dependent Variable: LN_Laba_Bersih

Figure 12. T-Test

Judging from table above, the results of the analysis are as follows:

1. For production costs, the value of tcount is -1.856, while the value of ttable is 2.02108, then the value of tcount < ttable or -1.856 <2.02108. and the value of sig. tcount is 0.71, meaning 0.71 > 0.05, then partially production costs do not have a significant effect on net income.

2. For promotion costs, the value of tcount is -1.199, then the value of ttable is 2.02108, then the value of tcount < ttable or -1.899 <2.02108. and the value of sig. tcount is 0.238, meaning 0.71 > 0.05, then partially promotion costs do not have a significant effect on net income.

3. In sales volume, the value of tcount is 12,396, while the value of ttable is 2,02108, then the value of tcount > ttable or 12,396 > 2,02108. and the value of sig. tcount is 0.000, or means 0.000 <0.05, then partially sales volume has a significant effect on net income.

Discussion of Research Results

The implementation of this research, partially the production cost does not produce a significant effect on net income. These findings are not in line with the findings of I Made Ari Yuda and I Ketut Puja Wirya Sanjaya (2020) which state that the production cost variable has a significant positive effect on company profits. This statement means that production costs must be the focus of the company, so that production costs can be carried out effectively and efficiently so that they can have an impact on net profit for the company.

In this study, partially the cost of production does not have a significant effect on net income in the company. The research findings are in line with the research of Ika Noviani and Handra Tipa (2018) which states that the effect of promotional costs is not significant on profits. This means that promotional costs cannot increase the company's net profit, because the promotions carried out do not increase sales.

Pada penelitian ini, secara parsial biaya produksi menghasilkan pengaruh secara signifikan pada laba bersih perusahaan. Hasil temuan ini selaras seperti penelitian Putu Rustami, I Ketut Kirya, Wayan Cipta (2014) yang memiliki temuan kalau ditemukan keterkaitan secara parsial pada pengaruh dari volume penjualan pada laba. Hal ini berarti tingkat volume penjualan berdampak pada peningkatan laba bersih, berarti jika terjadi peningkatan volume penjualan maka juga akan terjadi peningkatan laba bersih yang diterima perusahaan.

CONCLUSION

Judging from the observations, the conclusions that can be drawn are:

1. Production costs do not produce a significant partial effect on net income in food and beverage sub-sector manufacturing companies that have been registered on the IDX for the 2016-2019 period.

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2. Promotional costs do not produce a significant partial effect on net income in food and beverage sub-sector manufacturing companies that have been registered on the IDX for the 2016-2019 period.

3. Sales volume has a significant partial effect on net income for manufacturing companies in the food and beverage sub-sector that have been listed on the Indonesia Stock Exchange for the 2016-2019 period.

4. Promotional costs, sales volume and production costs have a significant partial effect on the net income of food and beverage manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2019 period

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