Effects of Production and Operating Costs on Net Profit on Manufacturing Companies Registered in JII

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Abstract: This research aims to determine the influence of production costs and operational costs on net profit in manufacturing companies listed on the Jakarta Islamix Index (JII) for the 2018-2022 period by classifying sharia stock index companies that operate in the consumption sector. Quantitative research methods are descriptive and verification approaches that describe a variable based on quantitative data analysis with statistical procedures to test a research data hypothesis. The data analysis technique used is panel data regression analysis. Hypothesis tests used include the T test, F test, and coefficient of determination. And data processing is assisted with the E Views for Windows Version 12.00 device. The samples studied were 7 manufacturing companies at JII in the last 5 years (2018-2022). The research results are based on an analysis of manufacturing companies listed on the Jakarta Islamic Index (JII) in 2018 - 2022. Production costs (X1) partially have no significant negative effect on Net Profit (Y) and operational costs (X2) partially have a significant positive effect on Net Profit (Y). Production costs (X1) and operational costs (X2) simultaneously do not have a significant effect on Net Profit (Y).

Keyword: Production Costs; Operating Costs

INTRODUCTION

Good corporate management comes from leaders who understand and are capable of how to build relevant corporate governance that is capable of raising the corporate image and capable of increasing the revenue earned by the company.(Sugianto et al., 2022) Not only large-scale companies but also small and medium-sized. Each company will pay attention to its business movements in order to meet the company's operations in production routine activities so that it is required to obtain profit / profit or maximum profit to the target of the company so that the company is considered healthy and able to compete competitively to maintain its business activities. (Ariq et al., 2023)Competition between companies requires every business sector to improve the quality or quality of products/services as well as efficiency in determining the cost of production so that the sale of products can compete because it can be reached by the community. (Rostianti & Ferliyanti, 2019) So every company has to build a continuous corporate management by planning the direction of the

business and creating a targeted organization. Supported by technological advances that make it easier for us to access a wide range of information that makes it easier to work in many aspects. (Nurbaiti et al., 2023) According to data obtained since the beginning of 2019, the performance of the consumer goods industry sector at the Indonesian Stock Exchange (BEI) fell by almost 20% to exactly 19.31%. The Central Statistical Agency noted that household consumption in the third quarter of 2019 grew only 5.01% annually. In accordance with the theory of comparative superiority initiated by David Ricardo. As a perfection of Adam Smith's absolute superiority theory that the production of goods has comparative advantages. A company can increase efficiency, profit margins and earn higher material returns.

A comparative advantage in its implementation, for example, a company must compete with other competitors or other companies to increase the sales capacity of its product by setting a lower price in comparison with another competitor without reducing the quality of the product. (Rohmat & Suhono, 2021) One type of company that is listed on the Indonesian Stock Exchange (BEI) is a manufacturing company, which is a company that converts raw materials into finished materials. The finished product can be sold directly to consumers or other producers to be produced into more complex goods or sold to wholesalers who distribute the goods to retailers. As in general, the purpose of a company is to make a profit or profit. According to the Indonesian Association of Accountants, (2022) profit is the net income of a company that uses a standard or base measure for other measures, or according to Charles Thomas Horngren, (2022), profit is a surplus gain obtained from the total income deducted by the total burden referred to as net profit. An assessment of the financial performance of a company needs to be done to find out how much profit the company achieved by comparing the profit in a given year with the profit before and after. Thus it will know the financial performance of a company if its financial situation is difficult to decide to improve the performance of the company in order to increase future profits. (Rohmat & Suhono, 2021) The company's profits are influenced by several factors, namely the internal conditions of the company such as financial ratio, then the external conditions of a company, such as the rate of inflation and economic growth.(Users et al., 2021) If the size of a company grows, there will be more resources available that managers can use, thus helping the company to make greater profits. Next is the rate of sales, leverage, changes in past profits, the age of the company, working capital, sales, and total debt.(Lathief Ilhamy Nasution, 2022) However, the factors that influence the growth of a company's profits may vary depending on the research carried out. Thus, it is necessary to conduct a more in-depth analysis to identify the factors that influence the growth of profits in a particular company. (Junardi, 2023)

According to (Maryati, 2022) profits on a company in part to be some kind, among them the gross profits obtained from the total sales income minus the price of the sales commodity as a whole or the profits from the reduction of income received with the cost of production. Production costs can be used as a tool to increase the profits enabled by the company. Using the cost of production effectively can be done by the company so that there is no waste and keep an eye on the quality of the products produced. Net profit is the profit obtained by a company after it is deducted by the cost-expenditure burden that includes operating costs, employee salaries, taxes, depression or reduction burdens, and administrative burdens. This suggests that the higher the net profit generated, the greater the likelihood that the company will distribute dividends to shareholders.(Harahap et al., 2021) Similarly, if the cost burden such as the operating costs incurred by a company is greater, it will reduce a company's net profit. Operating expenses are the expenses paid by the company to carry out its business activities. Operational expenses include equipment costs, repairs, commissions, benefits, raw materials, wages, transportation, travel, depression, rent, repair and taxes.(Regina, Irwandi, 2023) Manufacturing companies are required to manage their

production and operating costs effectively to maximize their net profits. Based on case studies related to the cost and profit or profit theory suggests that companies should pay attention to the quality of a product they accompany by managing their production costs, as this should lead to increased sales and net profit. In addition, companies should also consider the impact of operating costs on net profits and find relevant ways to reduce such costs without compromising quality of products or services they provide.(Desi, 2023) On the study (Dessi, 2023), that production costs and operating costs have an impact on net profit, production cost and operational costs together have an effect on the net profit of manufacturing companies listed in the JII period 2015-2019. So if production costs and operating costs increase significantly then it will have a good impact on the increase in net profits. The research (Diana et al., 2020) found that operating costs and production costs have a significant impact on the net profit of manufacturing companies in the basic industrial and chemical sectors listed in the BEI for the period 2015-2019. Research (Prasetya & Meilia Puspitasari, 2022) showed that production costs did not influence or have a positive influence on the results of this research because the study used non-cyclical consumer companies or primary consumer goods companies that are anti-cyclic in nature, where demand for goods and services is not affected by fluctuations in economic growth. In this study, operating costs also have a positive impact on net profits. When the operating cost increases, then the net profit will increase.

Research phenomena based on the theory that there are operating costs and production costs affecting the net profit of a company. Therefore, if a company wants to increase its net profit, it must pay attention and manage its production and operating costs properly. There is an indicator of profit through the profit formula obtained from the company's profit data, where profit is equal to income on less burdens. The burden of production costs is the total value of the input into the production activity to produce a product, which can be a commodity or a service at a given cost. (Pasaribu & Hasanuh, 2021) Profit and cost data of a company are two different things. Profit data is information about income and profit or loss produced by the company during a certain period. In the financial statements of a manufacturing company, there is a loss report that records the earnings obtained or received by the manufacturing enterprise in a period. This loss report consists of the elements of the company's income and burden so that it produces a net profit or loss. (Dadan Ramdhani, Merida, Ai Hendrani, 2020).

Other findings also show that operating costs have a positive impact on net profits. However, there is also research that shows that operational costs do not have a significant effect on net profit. Therefore, the impact of operating costs on net profits can vary depending on the company and existing conditions. According to (Susilawati & Mulyana, 2019) From the influences that have been revealed above it can be concluded that net profit has an important role in the performance of a company. The higher the net profit generated, the better the company's performance. Research (Ernayani et al., 2022) shows that operating costs have a positive impact on net profit. (Abror, Ahmad, 2016) Production costs have a significant impact on the net profit of PT Indorama Synthetics Tbk. Research (Suzan & R, 2020) Production and operating costs have significant positive impact on net profit and sales have no effect on net profits. The difference between this research and previous research is seen from the research object, data analysis techniques, and the period used. Where this penalty uses data of manufacturing companies listed on the Indonesian Stock Exchange (BEI) and is qualified based on data listed in the Shariah stock index, the Jakarta Islamic Index (JII) for the period 2018-2022, by selecting companies active in the last 10 years. According to the theory of partial and simultaneous production costs, operating costs affect net profits (Rohmah & Suselo, 2019).

METHOD

These research methods use quantitative methods to explain the relationship between research variables, test hypotheses or theories, and generalize the social phenomena studied. The independent variables in this study are the Production Cost (X1) and Operating Costs (X2). And the dependent variables are the Net Profit. (Y) The data source in this research is a secondary data source taken from the website idx.co.id in the form of financial reports of companies in the manufacturing sector. The data used is data panel which is a combination of time series and cross section data. This research uses time series data for 5 years namely from 2018 to 2022, while the data cross section in this study is 7 companies of 30 manufacturing companies listed in Jakarta Islamic Index (JII) namely PT Indofood CBP Sukses Makmur, PT Kalbe Farma, PT Unilever Indonesia, PT Adaro Energy, PT AKR Corporindo, PT Telkom Indonesia and PT United Tractors. So the amount of data that will be investigated is 25 observation data.

The method of data collection in this study is a documentary study. From the financial statements of 7 manufacturing companies listed in the Jakarta Islamic Index (JII) based on 2 criteria namely the first Shares that have never been absent in the JII in the last 10 years, both shares have high liquidity. Data analysis in this study uses panel data regression method. And data processing is assisted with the E-Views for Windows Version 12.00 device. The phase of data analysis of this study begins with an estimate test of the regression model of the data panel consisting of the Chow, Hausman, and Langrange Multiplier (LM) tests to determine the selected regression models. Then the Panel Data Regression Analysis Test to find out the relationship of the free variable (X) to the bound Variable (Y). Then the hypothesis test includes the Individual Parameter Significance Test (statistical test t), and the Simultaneous Test (statistic test F) and the Regressive Coefficient Test. (R2). Then the analysis model is common effect, fixed effect, and random effect. The research regression equation used, namely:

$$LB= a+b1.BO + b2.BP + e$$

Keterangan:

LB	: Net Profit
a	: Constant
BO	: Operational Costs
BP	: Production Costs
b1; b2	: Regression Coefficeint
e	: Nuisance Variable

RESULTS AND DISCUSSION

Description of Research Objects

The data in this research was obtained through IDX Islamic, namely the Jakarta Islamic Index (JII), which is a sharia stock consisting of the 30 most liquid sharia stocks listed on the Indonesia Stock Exchange (BEI). Reviews of sharia shares that are JII constituents are carried out twice a year, namely in May and November, following the OJK's Sharia Securities List (DES) review schedule. Through JII's 30 constituents, there are several shares that enter and exit the sharia stock index each period because they do not pass the JII liquidity selection or leave the DES. The criteria for this research data are selecting and selecting data based on stocks that have never been absent from JII for the last 10 years.

Based on information from the official IDX Syariah website based on the selection of JII constituent shares which prioritizes high liquidity sharia shares due to stable financial reports, there are 7 registered companies, namely PT Adaro Energy Tbk (ADRO) , PT AKR Corporindo Tbk (AKRA), PT Indofood CBP Sukses Makmur Tbk (ICBP) , PT Kalbe Farma

Tbk (KLBF), PT Telkom Indonesia (Persero) Tbk (TLKM), PT United Tractors Tbk (UNTR), and PT Unilever Indonesia Tbk (UNVR) .

Based on the manufacturing companies attached in Table 1. Data obtained from *the Annual Report* of the relevant company. Researchers will explain it more complexly by sharing company data based on year, profits obtained, and operational costs and production costs obtained by the company. In order to see the size or difference obtained by each company in the results of their operational costs and production costs each year.

Table 1. Manufacturing Companies 2018-2022 (Rp)

NO	MANUFACTURING COMPANY	YEAR	NET PROFIT	PRODUCTION COST	OPERATING COSTS
1.	ICBP	2018	4,575,799,000	26,147,857	6,493,793
		2019	5,038,789,000	27,892,690	7,125,871
		2020	6,586,907,000	29,416,673	8,106,983
		2021	6,399,431,000	36,516,449	8,737,631
		2022	4,587,367,000	43,005,230	9,378,241
2.	KLBF	2018	2,457,129,032	16,325,204	1,191,705
		2019	2,506,764,572	17,880,745	1,288,558
		2020	2,733,259,864	17,748,041	1,391,608
		2021	3,183,621,310	20,527,062	1,421,999
		2022	3,382,209,769	22,978,382	1,421,999
3.	UNVR	2018	9,109,445,000	20,709,800	11,636,259
		2019	7,392,837,000	20,893,870	11,910,869
		2020	7,163,536,000	20,515,484	12,985,856
		2021	7,679,451,000	19,919,572	11,948,464
		2022	7,068,808,000	22,153,944	11,995,156
4.	churchyard	2018	6,544,419,240	37,750,325	3,039,366
		2019	6,332,444,730	39,050,984	3,643,909
		2020	2,301,905,309	30,677,756	2,591,024
		2021	14,625,019	34,827,302	2,899,100
		2022	39,059,084	54,042,172	5,882,801
5.	ACRA	2018	711,522,043	2,199,357	639,117,863
		2019	713,623,441	1,981,051	639,117,863
		2020	924,918,465	1,566,800	788,640,226
		2021	1,111,613,585	2,341,390	776,009,675
		2022	2,403,334,889	4,328,757	975,279,769
6.	TLKM	2018	18,032,000	43,791,000	13,178,000
		2019	18,663,000	42,226,000	13,012,000
		2020	20,804,000	34,593,000	14,390,000
		2021	24,760,000	38,133,000	15,524,000
		2022	20,753,000	38,184,000	14,907,000
7.	UNTR	2018	11,125,626	2,300,081	3,371,034
		2019	11,312,071	2,031,600	3,585,671
		2020	5,744,288	36,350,262	3,353,253
		2021	10,279,683	41,615,888	3,663,613
		2022	21,005,105	62,348,518	4,561,392

Source: Annual Report of Manufacturing Companies at JII to be processed in 2024

Based on the table of manufacturing companies listed on the Indonesian Stock Exchange and active on the Jakarta Islamic Index for the 2018-2022 period, it can be concluded that net profit has increased and decreased from time to time. Where it can be seen from the data described above that if net profit increases, this is followed by an increase in

production costs, because net profit increases due to market demand which also increases so that an increase in production costs will increase the costs extended to produce goods or services, which will ultimately reduce profits earned by the company. Examples of production costs include direct material costs, direct labor costs, and factory overhead costs.

However, under different conditions it is possible that net profit does not affect production costs because net profit is the result of revenue minus production costs and operational costs. In previous research, the amount of production costs can influence net profit, but not vice versa. So, the greater the production costs incurred, the company's net profit will increase because the company has incurred production or operational costs to generate income.

It can be seen that operational costs are not tied to net profit, an increase or decrease in net profit obtained by the company has no effect on the operational costs incurred by the company, because operational costs are not pegged to always being based on the operational costs that have been detailed at the beginning, you can only exceed or experience a decrease in cost burden.

Regression Model Estimation Test

This research uses panel data, namely data from several manufacturing companies in the consumption sector in the last 5 years. Panel data regression is used to find the estimation results for each individual characteristic separately. To determine the regression model that will be selected, the panel data regression model estimation tester is determined as follows:

a. Test Chow

The Chow test is used to select the best regression model between *the Common Effect Model* (CEM) and *the Fixed Effect Model* (FEM). To test this, you can use the F test with the hypothesis: H0 = *Common Effect Model,* H1 = *Fixed Effect Model.* If the probability value is <0.05 then H0 is rejected, meaning that the appropriate panel data regression model to use is the *Fixed Effect Model,* conversely if the probability value is > 0.05 then H0 is accepted, meaning that the appropriate panel data regression model to use is *the Common Effect Model.* From the results of calculations using the *Pooled Least Square* estimation method , using *the E Views for Windows Version 12.00* software , the following results were obtained.

Tabel 2. Uji Chow

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.538419	(6,26)	0.0008
Cross-section Chi-square	28.816912	6	0.0766

Sumber : Hasil Pengolahan Eviews 12 (2024)

Based on the table above, it can be seen that the *Chi-Square Cross Section Probability value* is 0.0766 > 0.05, so the appropriate panel data regression model to use is *the Common Effect Model* . Because the results of the Chow Test were to choose *the Common Effect Model,* therefore the Hausman test was continued.

b. Hausman test

The Hausman test is the next stage in validating the panel data regression model. To make a data-based choice on which regression model to use between *the Fixed Effect*

Model and *the Random Effect Model.* This specification will offer a *Chi-Square assessment* with degrees of freedom (df) equal to the number of independent variables . If the probability value α < 0.05 then H0 is rejected and Ha is accepted, meaning that the appropriate panel data regression model to use is the *Fixed Effect Model.* On the other hand, if H0 is accepted and Ha is rejected or the probability value is > 0.05, then the appropriate panel data regression model to use is the *Random Effect Model.*

Table 3. Hausman Test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.215254	2	0.2004
Cross-section random effects test comparisons:			
Variable	Fixed	Random	Var(Diff.)	Prob.
BP_X1	0.035690	0.004855	0.000305	0.0776
BO_X2	-0.407812	0.049084	0.116218	0.1802

Source: Eviews 12 Processing Results (2024)

Based on Table 4, it can be seen that the P value from *the Hausman Test* is 0.2004. Because the P value is 0.2004 > 0.05, the best method that must be used based on the Hausman test is *the Random Effect Model.* Therefore, it was then tested with the Lagrange Multiplier (LM) Test.

c. Lagrange Multiplier (LM) Test

The Lagrange Multiplier Test is a test to determine whether the model used is *a Common Effect Model* or *a Random Effect Model.* The LM test is based on Breusch-Pagan profitability, if the Breusch-Pagan profitability value is less than the alpha value then H0 is rejected, which means that the correct estimate for the panel data regression used is the *Random Effect Model* and vice versa.

Table 4. Langrange Multiplier Test

Lagrange Multiplier Tests for Random Effects			
Null hypothesis: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	8.526897	0.914526	9.441423
	(0.0584)	(0.3389)	(0.0021)

Source: Eviews 12 Processing Results (2024)

After obtaining the LM value, the next step is to compare the LM value with the Chi Square table value with as many degrees of freedom as the number of independent variables and α or Sig level. By 5% (0.05). The conditions are, if the calculated LM value is < Chi Square then the regression model chosen is *the Random Effect Model,* and if the LM value is > Chi Square then the model chosen is *the Common Effect Model.*

The LM test results in this study show that the LM value is 0.0584. So we can conclude that the value 0.0584 > 0.05, so the most appropriate regression model to use in this research is *the Common Effect Model.*

Panel Data Regression Analysis

Panel Data Regression Analysis is by combining *Cross-Section* and *Time Series* data types. Panel data is data from several of the same individuals observed over a certain period of time. Data regression models are divided into 3 types, namely *the Common Effect Model* (CEM) is a panel data regression model that combines *time series* and *cross section data* with a least squares approach and can use the *pooled least squares method* . *Fixed Effect Model* (FEM) is a panel data regression model that has different effects between individuals and individuals are unknown parameters and can be estimated using the *least square dummy* technique . And *the Random Effect Model* (REM) is a panel data regression model which is different from the *Fixed Effect Model* , the use of *the Random Effect Model* is able to save on the use of degrees of freedom so that estimates are more efficient. The panel data equation model in this research uses the *Common Effect Model* (CEM) because based on the panel data model estimation analysis in the Chow test and Lagrange Multiplier (LM) test, it is found that the *Cross Section* significance probability value is >0.05 $_{H0}$ is accepted and Ha is rejected. Where in the LM test if H_0 is accepted then the appropriate panel data regression model to use is *the Common Effect Model.*

The Common Effect Model is used to validate the panel data regression model. The CEM model is very simple and easy to compare with the other two models, because it only requires *time series* and *cross section data* . This model imagines all company data as if it were consistent over a period of time, because it ignores the influence of individual factors. This strategy can estimate panel data models using the *Ordinary Least Squares (OLS) method* or least squares technique.

$$Yit = \beta 0i + \beta Xit + \varepsilon it$$

So the model equation used is:

$$LBit = \alpha + \beta 0i + \beta_1 BOit + \beta_2 BPit + \varepsilon it$$

Information :

     Yit   : Dependent variable at the ith observation unit and time t
                 (Y: Net Profit)
     $\beta 0i$: Independent variable at the ith observation unit and time t
     $\beta 1_, \beta 2$: Slope coefficient or direction coefficient (Independent Variable Coefficient)
     Xit   : Intercept of regression model (X1: Operational Costs, X2: Production Costs)
     εit : Error component at the ith observation unit and time t

The testing hypothesis is:
     H_0 : There is no significant relationship between the independent variables and
          dependent variable.

H_1 : There is a significant relationship between the independent variable and the dependent variable.

If the probability value $< \alpha = 0.05$ then H_0 is rejected, meaning there is a significant relationship between the independent variable and the dependent variable.

Figure 1. Research Model
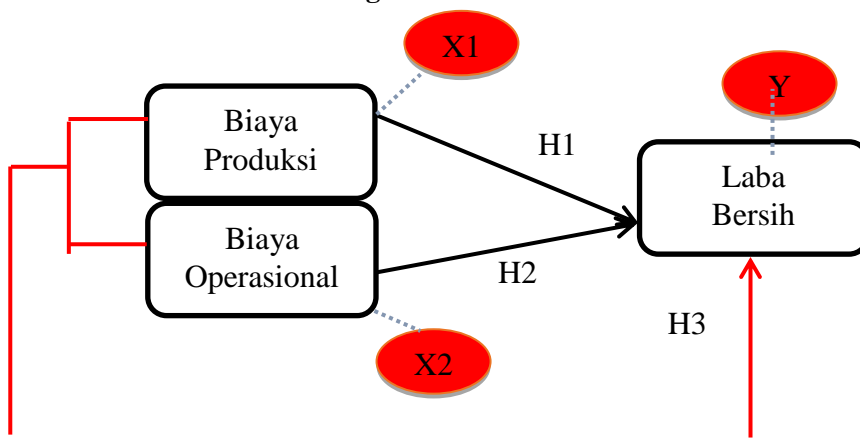
Based on the framework above, the hypothesis determined in this research is as follows:

      H1: Production costs have a significant effect on net profit.

      H2: Operational costs have a significant effect on net profit.

      H3: Production costs and operational costs have a significant effect on
         net profit.

Table 6. Panel Data Regression With *Common Effect Model* Test

Dependent Variable: LB_Y				
Method: Least Squares Panel				
Date: 01/23/24 Time: 20:43				
Sample: 2018 2022				
Periods included: 5				
Cross-sections included: 7				
Total panel (balanced) observations: 35				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.132938	1.012717	4.081041	0.0003
BP_X1	-0.034479	0.027289	1.763465	0.2156
BO_X2	0.141132	0.095829	1.472743	0.1506
Root MSE	2.387727	R-squared		0.093752
Mean dependent var	4.252257	Adjusted R-squared		0.037112
S.D. dependent var	2.544813	S.E. of regression		2.497145
Akaike info criterion	4.749990	Sum squared resid		199.5435
Schwarz criterion	4.883305	Log likelihood		-80.12482
Hannan-Quinn criter.	4.796010	F-statistic		1.655216
Durbin-Watson stat	0.984034	Prob(F-statistic)		0.206991

Source: Eviews 12 Processing Results (2024)

Based on the output in Table 6, it can be seen that the independent variable does not have a significant relationship with Net Profit (dependent variable). Because the probability value of Production Costs (X1) and Operational Costs (X2) is greater than the significant level value. Namely X1 0.2156 > 0.05 and X2 0.1506 > 0.05.

The interpretation of the panel data regression equation is as follows:

$$LB = 4{,}132938 - 0{,}034479\ BO_1 it + 0{,}141132 BP_2 it + \varepsilon it$$

a. If everything in the independent variable is considered zero or the value of the independent variable is constant, then the coefficient value measured by Net Profit (Y) is 4.132938.
b. If there is an increase in Production Costs (X1) by one, then Net Profit (Y) will increase by 0.034479 times, and conversely if there is a decrease in Production Costs (X1) by one, then Net Profit (Y) will decrease by 0.034479 time.
c. If there is an increase in Operational Costs (X2) by one, then Net Profit (Y) will increase by 0.141132 times, and conversely if there is a decrease in Operational Costs (X2) by one, then Net Profit (Y) will decrease by 0.141132 time.

Hypothesis testing
a. Partial Significance Test (t Test)

The T statistical test is carried out to determine the influence of one independent variable individually in explaining variations in the dependent variable. This was done using a significance of 0.05 (a=5%). If the probability $\alpha > 0.05$ the independent variable (X) is not significant or has no influence on the dependent variable or Y (H_0 is accepted, H_1 rejected). If the probability $\alpha < 0.05$ the independent variable (X) is significant or there is an influence on the dependent variable or Y (H_0 is rejected, H_1 is accepted). Acceptance or rejection of the hypothesis is carried out using the following criteria.

H_0 : Partially the independent variable has no significant effect on the dependent variable.

H_1 : Partially the independent variable has a significant effect on the dependent variable

Table 7. Partial Test (T Test)

Dependent Variable: LB_Y				
Method: Least Squares Panel				
Date: 01/23/24 Time: 21:20				
Sample: 2018 2022				
Periods included: 5				
Cross-sections included: 7				
Total panel (balanced) observations: 35				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	4.132938	1.012717	4.081041	0.0003
BP_X1	-0.034479	0.027289	1.763465	0.2156
BO_X2	0.141132	0.095829	1.472743	0.1506

Source: Eviews 12 Processing Results (2024)

Based on the table above it can be seen that:
1) The Effect of Production Costs on Net Profit
    The results show that tcount is 1.7634 while ttable is 1.6895 and the probability value is 0.2156 > 0.05, with tcount 1.7634 > ttable 1.6895 then H0 is accepted and H1 is rejected, which partially states that Production Costs have no significant effect to Net Profit. From the research results it can be concluded that if the Production Cost ratio increases, Net Profit decreases and vice versa.
2) The Effect of Operational Costs on Net Profit
    The results show that tcount is 1.4727 while ttable is 1.6895 and the probability value is 0.1506 < 0.05, with tcount 1.4727 <ttable 1.6895, then H0 is rejected and H1 is accepted, which states partially that Operational Costs have a significant effect on Net profit. From the research results, it can be concluded that if the Operational Cost ratio increases, net profit will increase and vice versa.

b. Simultaneous Significance Test (F Test)

The F statistical test is carried out to see the influence of the independent variable on the dependent variable simultaneously. The method used is to look at *the level of significance*, namely 0.05. If the significance value is smaller than 0.05 then H0 is rejected and Ha is accepted and if vice versa then H0 is acceptedS and Ha is rejected. Meanwhile, the Ho and Ha formulas are as follows. The simultaneous F test is used to determine the influence of the independent variables on the dependent variable. The provisions of the F test are as follows:
1) If the probability value $F < 0.05$ then H_0 rejected and H_1 accepted. This means that the independent variable has a significant influence on the dependent variable.
2) If the probability value $F > 0.05$ then H_0 is accepted and H_1 is rejected. This means that the independent variable does not have a significant influence on the dependent variable.

Table 8. Simultaneous Test (F Test)

MSE Root	2.387727	R-squared	0.093752
Mean dependent var	4.252257	Adjusted R-squared	0.037112
SD dependent var	2.544813	SE of regression	2.497145
Akaike info criterion	4.749990	Sum squared resid	199.5435
Schwarz criterion	4.883305	Log likelihood	-80.12482
Hannan-Quinn Criter.	4.796010	F-statistic	1.655216
Durbin-Watson stat	0.984034	Prob(F-statistic)	0.206991

Source: Eviews 12 Processing Results (2024)

Based on table 8 Simultaneous Test (F Test). above it can be seen that the $_{\text{calculated F}}$ is 1.6552 while $_{\text{the table F}}$ is 4.139 which can be seen at α = 0.05 (see attached table F) where df1 = (k/X-1) and df2 = N-2 = 35-2 = 33. So it can be seen that the significant probability of F is greater than 0.05, namely 0.2069 > 0.05, then H_0 is accepted and H_1 is rejected , which states that simultaneously Production Costs (X1) and Operational Costs (X2) are not has a significant effect on Net Profit (Y).

c. Determination Coefficient (R^2)

This coefficient of determination analysis is used to determine the percentage of variation in the influence of the independent variable on the dependent variable. This test aims to measure the percentage of total variation in the independent variables that can be explained by the regression model. Calculations are carried out to determine good

accuracy in the analysis as indicated by the magnitude of the coefficient of determination R2.

The value of the coefficient of determination R2 is between 0 and 1. If the value is close to 1, then the independent variable or independent variable provides almost all the information needed to predict the dependent or dependent variable. However, if the value of the coefficient of determination The smaller it is, the ability of the independent variable to explain the dependent variable is quite limited.

Table 9. Coefficient of Determination (R2)

Dependent Variable: LB_Y				
Method: Panel Least Squares				
Date: 01/23/24 Time: 21:20				
Sample: 2018 2022				
Periods included: 5				
Cross-sections included: 7				
Total panel (balanced) observations: 35				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.132938	1.012717	4.081041	0.0003
BP_X1	-0.034479	0.027289	1.763465	0.2156
BO_X2	0.141132	0.095829	1.472743	0.1506
Root MSE	2.387727	R-squared		0.093752
Mean dependent var	4.252257	Adjusted R-squared		0.037112
S.D. dependent var	2.544813	S.E. of regression		2.497145
Akaike info criterion	4.749990	Sum squared resid		199.5435
Schwarz criterion	4.883305	Log likelihood		-80.12482
Hannan-Quinn criter.	4.796010	F-statistic		1.655216
Durbin-Watson stat	0.984034	Prob(F-statistic)		0.206991

Source: Eviews 12 Processing Results (2024)

Based on Table 9. Coefficient of Determination Test above, it can be seen that the *R Square number* is 0.09375 which can be called the coefficient of determination, which in this case means 93.7% of Net Profit can be obtained and explained by Production Costs and Operational Costs. Meanwhile, the remaining 6.3% is explained by other factors or variables outside the model.

The Effect of Production Costs on Net Profit

The results of this research are significant in showing that the analysis carried out on production costs (X1) of manufacturing companies registered on the Jakarta Islamic Index (JII) which have been active in the last ten years in the 2018-2022 period has not had a significant negative effect on net profit. (Y), the probability value is $0.2156 > 0.05$, with tcount $1.7634 > $ ttable 1.6895. Factors that influence production costs are the number of goods the company will produce and also the amount of capital the company has. So the greater the capital used, the greater the possibility of producing goods produced. Production costs have no influence in this research because primary consumer goods companies are anti-cyclical or the products offered are not influenced by fluctuations in economic growth. So that when production costs increase or decrease, company profits will not be affected. Because when production costs increase, selling prices will increase, and demand for goods

will not decrease because people will continue to need them, so company profits will not be affected.

The research results are in line with research (Fathony & Wulandari, 2020) which shows that production costs have no effect on net profit, every increase or decrease in production costs does not affect the rise and fall of net profit. And this research is not in line with research (Rohmat & Suhono, 2021) which shows that production costs affect net profit, so that the greater the production costs, the higher the company's net profit because the company has incurred production costs and managed them effectively.

The Effect of Operational Costs on Net Profit

The results in this research which means that the analysis carried out on operational costs (X2) of manufacturing companies registered on the Jakarta Islamic Index (JII) which have been active in the last ten years in the 2018-2022 period partially have a significant positive effect on net profit (Y), the probability value is $0.1506 < 0.05$, with tcount $1.4727 <$ ttable 1.6895. Factors that influence operational costs are costs that are not related to the product but are related to the company's operational activities. Where operational costs are influenced by company activities, so that the higher the company's activities will increase operational costs and increasing company activities will result in costs incurred for company operations will increase. So if operational costs increase it will have an impact on reducing the company's net profit. Operational costs in this study are in the same direction as net profit.

The development of operational costs in manufacturing companies in 2018-2022 which are included in the list of Jakarta Islamic Index (JII) companies, namely PT Adaro Energy Tbk (ADRO) , PT AKR Corporindo Tbk (AKRA), PT Indofood CBP Sukses Makmur Tbk (ICBP) , PT Kalbe Farma Tbk (KLBF) , PT Telkom Indonesia (Persero) Tbk (TLKM) , PT United Tractors Tbk (UNTR) , and PT Unilever Indonesia Tbk (UNVR) . experiences fluctuations, meaning there are increases and decreases in operational costs. Usually this is caused by the price of production goods increasing so that some operational expenses are also affected by the increase in costs. The research results are in line with research (Diana et al., 2020) which shows that operational costs have an effect on net profit.

The Effect of Production Costs and Operational Costs on Net Profit

Simultaneous Test Results can be seen that the $_{calculated}$ F value is 1.6552 while the F $_{table}$ is 4.139 with a significant F value greater than 0.05, namely $0.2069 > 0.05$, meaning, H $_0$ is accepted and H $_1$ is rejected , thus it can be it was concluded that simultaneously Production Costs (X1) and Operational Costs (X2) did not significantly influence the Net Profit (Y) of Manufacturing companies registered on the Jakarta Islamic Index (JII) which were active in the last ten years in the 2018-2022 period.

The costs incurred by the company for the running of all company activities must be controlled well, because if production costs and operational costs run well but are not supported by keeping the costs incurred by the company lower, it could result in increased costs. issued. Production costs have an impact on sales levels, where the production costs incurred become a benchmark for the sales price of a product or service. Purchasing too expensive raw materials increases production costs which can then reduce company profits. Coordinated purchasing of raw materials without reducing quality and capacity will benefit the company. Furthermore, a company's operational costs which are high will have an impact on reducing profits for the company. So, to model high profits, you need to pay attention to the costs incurred which are not too excessive.

Based on the Hypothesis Test conducted in the research, Production Costs (X1) do not have a significant effect on Net Profit (Y). So if production costs increase, it does not rule out

the possibility that Net Profit will increase, if demand for the goods offered increases. Operational Costs (X2) have a significant effect on Net Profit (Y). So if the operational costs of a precision manufacturing company increase, it will have the impact of decreasing the company's net profit.

CONCLUSION
Based on the research results above, the following conclusions were obtained
1. Production costs (X1) partially do not have a significant negative effect on Net Profit (Y) in manufacturing companies listed on the Jakarta Islamic Index (JII) in 2018 - 2022.
2. Operational Costs (X2) partially have a significant positive effect on Net Profit (Y) in manufacturing companies listed on the Jakarta Islamic Index (JII) in 2018 - 2022.
3. The results of simultaneous testing of Production Costs (X1) and Operational Costs (X2) did not have a significant effect on Net Profit (Y) in manufacturing companies listed on the Jakarta Islamic Index (JII) in 2018 - 2022.

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