

Cost of Production, Cost of Operation, and Net Sales to Net Profit

Benny Oktaviano^{1*}, Dian Sulistyorini Wulandari², Ade Priyani³

Universitas Pelita Bangsa

Corresponding Author: Benny Oktaviano

benny.oktaviano@pelitabangsa.ac.id

ARTICLE INFO

Keywords: Production Cost, Operating Cost, Net Sales, Net Profit

Received : 5 January

Revised : 13 January

Accepted: 21 February

©2024 Oktaviano, Wulandari, Priyani:
This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRAK

This research aimed to assess the impact of production costs, operating costs, and net sales on the net income of metal and comparable manufacturing companies listed on the Indonesia Stock Exchange during the period 2016–2020, whether individually or collectively. The data collection employed a purposive sampling method. The findings revealed that production costs had a partial impact on net income, whereas operating costs exhibited an influence on net income, while net sales did not. Collectively, the variables of production costs, operating costs, and net sales exerted a significant effect on net income. The R^2 test indicated a value of 0.359. These results substantiate that production costs, operational costs, and net sales jointly contribute to the net income of metal and similar manufacturing companies on the Indonesia Stock Exchange for the 2016-2020 period, accounting for 35.9%. This implies that profit in this study is influential, while the remaining 64.1% is influenced by other factors not considered in this research

INTRODUCTION

The business landscape is evolving in tandem with the growing societal demands. The expansion of global trade necessitates the survival and competition of existing companies against emerging ones in the present and future, ensuring a continuous generation of profits. Manufacturing companies, in particular, play a pivotal role in this scenario as they transform raw materials through production processes into market-ready goods. To optimize profitability, it is crucial for manufacturing companies to meticulously manage production costs, ensuring accurate determination of production expenses. Companies must also monitor income and operating costs to generate the desired profit for sustainable business operations. The choice of manufacturing companies listed on the Indonesia Stock Exchange as the research focus is justified by their large-scale nature compared to other entities, enabling meaningful comparisons among companies. Manufacturing companies, especially during economic crises, tend to have robust stocks due to the continued demand for their products. The research emphasizes the reliability and experience of entrepreneurs running these companies, highlighting the necessity for individuals with tenacity, expertise, and experience to navigate the challenges of the manufacturing business. In essence, manufacturing represents a specific type of business entity, distinguished by its utilization of specialized tools, raw materials, and labor in the production of goods (Pasca, 2019).

Manufacturing companies adhere to established Standard Operating Procedures (SOPs), which are defined by laws, regulations, and written guidelines. In Indonesia, a prime example of such a company aligning with this definition is a factory. Factories engage in a process involving specialized tools, labor, and raw materials to produce goods. Specifically, a manufacturing company is characterized by the chemical and physical processing of raw materials to alter their form and appearance, ultimately creating specific products. In essence, a manufacturing company focuses on assembling raw materials to manufacture distinct products, which are subsequently introduced to the market. An integral factor influencing profitability in this context is the expenses incurred by the company throughout the production process, encompassing both production costs and costs associated with creating various goods or services (Harahap, 2019)

Profit, also referred to as earnings or net income, serves as a key metric indicating a company's profitability. It signifies the return to equity holders within a specific period, with financial reports detailing the mechanisms through which profit is generated. This metric is valuable for stakeholders as it provides insight into the effectiveness of management in overseeing the company. Achieving profit is intricately linked to managing costs, as they represent the company's sacrifices to generate income.

The determination of the selling price for a product or service is closely tied to production costs, which, in turn, impacts the overall profit earned. According to Mulyadi in his book on Cost Accounting, production costs have a direct influence on operating profit. Essentially, higher production costs correlate with

greater profits, indicating that the amount earned will be more substantial when production expenses are higher.

Production costs encompass the expenses utilized for the effective management of industrial company operations, including raw materials, direct labor costs, production, storage, and overhead costs associated with selling finished products. These costs represent economic resources sacrificed in the production process, with the anticipation that the value of the output will exceed the resources invested, leading to organizational profit. It is imperative for companies engaged in production management to carefully consider these costs, as they directly impact operational expenses. Through meticulous planning, a company can ensure the seamless execution of all activities, promoting unhindered operations. The success of such measures is evident in the company's production activities, where an increase in production signals a positive trend and signifies the company's growth.

Operating costs play a crucial role in the company's success in achieving its primary objective of attaining business profits. For companies engaged in long-term production, delivering products to consumers involves a series of interconnected processes. These operational costs typically fall into two categories: marketing costs, administrative costs, and general costs. A reduction in operational costs can lead to an increase in net profit, as highlighted by (Oktapia, 2017).

The overarching objective for most companies is to generate profits, both in the short and long term. Effective management is essential not only to enhance returns for company owners but also to improve employee welfare. Profitability serves as a key metric for assessing a company's ability to generate profits. Sales activities are integral to the promotional aspect of the overall marketing system. Sales are considered complementary actions that facilitate transactions, uniting buying and selling activities for the transfer of rights or transactions. Framing sales as an integrated business approach involves developing strategic plans focused on satisfying the needs and desires of buyers, ultimately leading to sales that generate profits. Based on several definitions of sales, it can be concluded that sales are one of the marketing functions that are very important and decisive for the company to achieve the company's goal of making a profit to maintain the company's survival. This company was founded to increase sales profits and generate optimal profits. Changes that are very fast in the business world need to be considered in running the business. Companies must be able to anticipate all the possibilities that will be faced; therefore, a creative and innovative marketing strategy is needed.

The study focuses on manufacturing companies in the metal sector and similar industries listed on the Indonesia Stock Exchange (IDX) during the 2016-2020 period, revealing distinct phenomena among selected companies:

In the case of Alakasa Industrindo Tbk, the 2017 financial statements showed an increase in production costs, operating costs, net sales, and net profit. However, in 2018, the company witnessed a decrease in production costs without a corresponding reduction in operational costs, sales costs, or net income.

Subsequently, in 2019, production costs, net sales, and net income decreased, and in 2020, there was a reduction in production costs, operating costs, and net profit.

PT Indal Aluminum Industry Tbk experienced a decrease in production and operating costs in the 2017 financial statements. In 2018, there was an increase in production costs, net sales, and net profit, but operational costs did not follow suit. In 2019, there was an increase in production costs, operating costs, and net profit, followed by a decrease in all these aspects in 2020.

PT Lion Metals Works Tbk saw an increase in production and operating costs in the 2017 financial statements. In 2018, there was an increase in production costs, operating costs, net sales, and net income. In 2019, net sales increased, and in 2020, net profit increased.

PT Trinitan Metals and Minerals Tbk experienced a decrease in operating costs in 2017. In 2018, there was an increase in production costs, operational costs, net sales, and net income. In both 2019 and 2020, the company observed an increase in net profit.

PT Steel Pipe Industry Of Indonesia Tbk witnessed a decrease in production costs, operating costs, net sales, and net income in the 2017 financial statements. In 2018, there was an increase in production costs, net sales, and net income, but operating costs did not follow the same trend. In 2019, the company experienced a decrease in operating costs, followed by an increase in production costs in 2020.

PT Pelat Timah Nusantara Tbk reported a decrease in operating costs in 2017. In 2018, production costs, net sales, and net profit increased. In 2019, operating costs increased, and in 2020, net sales decreased.

From the analyzed cases, it is evident that an increase in production costs does not consistently align with the net profit achieved by the company. The study suggests that to maximize profits, companies should focus on controlling operational costs and increasing sales. Operational costs, representing expenditures related to a company's daily operational activities, play a significant role in influencing net profit. Companies emphasizing operational cost management and boosting sales are likely to enhance their net profit, while mismanagement of costs and a decline in excessive sales may lead to a decrease in overall net profit.

LITERATURE REVIEW

Hypothesis

A hypothesis serves as a provisional response to the formulation of research problems, expressed in the form of a statement sentence (Sugiyono, 2017). Hypothesis testing is conducted to ascertain the presence or absence of a relationship between the independent and dependent variables. The temporary hypotheses formulated for this study are outlined below:

1. Influence of Production Costs on Net Income

Production costs represent economic resources sacrificed to yield outputs, with the anticipation that the output value exceeds the input sacrificed, resulting in profit generation in organizational activities (Pasaribu & Hasanuh, 2021). Companies, therefore, strive to curtail cost expenditures in production processes, covering raw material expenses, supporting material costs, labor expenses, and equipment depreciation. Existing research (Pasaribu & Hasanuh, 2021; Febriyati, 2021) supports the idea that production costs impact net profit positively, in contrast to findings from research by Susilawati (2019), suggesting no significant effect on net profit. The hypothesis can be formulated as follows:

H1: Production costs have an impact on net income.

2. Influence of Operating Costs on Net Income

Operating costs serve as indicators of business management efficiency, encompassing selling and administrative costs associated with operations (Wardiyah, 2017). Research conducted by Ramadhan (2015) and Pasca (2019) indicates that operational costs influence net profit positively, implying that higher operational costs correspond to greater net profit. Conversely, research by Mulyana & Muslih (2020) found no significant effect of operating costs on net profit. The hypothesis can be formulated as follows:

H2: Operating costs have an impact on net income.

3. Influence of Net Sales on Net Income

Sales represent the revenue generated by a company from its primary business activities (Syaifullah, 2016). Elevated sales correspond to increased net profit, while decreased sales result in reduced net profit (Akbar & Astuti, 2017). Research by Wijaya et al. (2021), and Syaputra & Eka (2020) supports the notion that net sales affect net profit positively. Conversely, research by Alfiani (2016), Diana et al. (2021), and Zahara & Zannati (2018) suggests no significant impact of net sales on net profit. The hypothesis can be formulated as follows:

H3: Net sales have an impact on net income.

4. Combined Effect of Production Costs, Operating Costs, and Net Sales on Net Income

Production costs, operating costs, and net sales collectively influence a company's net profit. Higher production costs yield smaller profits, while increased operational costs and net sales lead to higher net profits. Previous studies (Ferliyanti, 2019; Harahap, 2019) contend that production costs, operational costs, and net sales have an impact on net income. Based on the relationship between variables such as sales growth, company age, business risk, and firm value, it can be concluded that:

H4: Production costs, operating costs, and sales collectively impact net income.

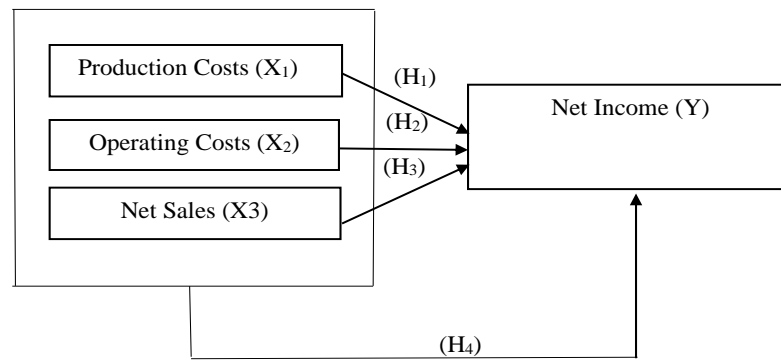


Figure 1. Research Model

METHODOLOGY

Researchers conducted an investigation on manufacturing companies in the metal sector and similar industries listed on the Indonesia Stock Exchange (IDX) from 2016 to 2020, accessing data through the website www.idx.co.id. Employing a quantitative research approach, this method is chosen to elucidate the relationships between research variables, test hypotheses or theories, and make generalizations about the studied social phenomena. The research adopts a causal type, aiming to ascertain the extent of influence the independent variable exerts on the dependent variable. The population for this study comprises 16 manufacturing companies in the metal sector and similar industries listed on the Indonesia Stock Exchange during the period 2016 to 2020.

Data collection utilizes a documentation study method, involving the recording, gathering, and examination of company data related to the research problem. The data is sourced from financial statements of manufacturing companies in the metal sector and similar industries listed on the Indonesia Stock Exchange. Secondary data, retrieved from the idx.co.id website, takes the form of financial reports of the aforementioned manufacturing companies.

The study conducts a classic assumption test, encompassing a normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Multiple linear regression analysis is employed for statistical analysis. Hypothesis testing involves both individual parameter significance testing (T statistical Test) and simultaneous testing (F Statistical Test). The research evaluates whether the independent variable has a partial or simultaneous impact on the dependent variable using both F and t-tests. The multiple linear regression formula serves as the analytical framework for the study.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = net profit

β_0 =Constant

X₁ =Production Cost

X₂ =Operating Expenses

X₃ = Net Sales

$\beta_1, \beta_2, \beta_3$ = Coefficients of Independent Variables X₁.X₂.X₃

RESEARCH RESULT

Multiple Linear Regression

In this study, hypothesis testing was carried out through the application of multiple regression analysis. The utilization of multiple regression analysis aimed to assess the impact of production costs, operating costs, and net sales on the net profit.

Table 1. Multiple Linear Regression Tests

| Coefficients ^a | | | | |
|-----------------------------------|------------------|-----------------------------|------------|---------------------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients |
| | | B | Std. Error | Beta |
| 1 | (Constant) | 15505,750 | 11422,580 | |
| | Production Costs | ,024 | ,010 | ,673 |
| | Operating Costs | -,096 | ,148 | -,123 |
| | Net Sales | ,002 | ,008 | ,061 |
| a. Dependent Variable: Net Profit | | | | |

$$\text{Net Profit} = 15505.750 + 0.024 \text{ Production Costs} + (-0.096) \text{ Operating Costs} + 0.002 \text{ Net Sales}$$

The interpretation of the above equation can be elucidated as follows:

- 1) The constant value of 15,505.750 signifies that in the absence of any variation in the values of production costs (X1), operating costs (X2), and net sales (X3), set at zero (0), the net income (Y) will increase by 15,505.750, assuming other variables remain constant.
- 2) The regression coefficient for production costs (X1) is 0.024, indicating that for every unit increase in production costs (X1), the net income (Y) will increase by 0.024, assuming other variables remain constant.
- 3) The regression coefficient for operating costs (X2) is -0.096, implying that for every unit increase in operating costs (X2), the net income (Y) will decrease by 0.096, assuming other variables remain constant.
- 4) The regression coefficient for net sales (X3) is 0.002, suggesting that for every unit increase in net sales (X3), the net income (Y) will increase by 0.002, assuming other variables remain constant.

Hypothesis Test

The regression equation derived from a calculation process may not always be suitable for accurately estimating the value of the dependent variable. To assess the adequacy of the resulting regression equation for estimating the dependent variable's value, the following methods can be employed:

1) Partial t-test

The partial t-test is conducted to determine the significance level of the regression coefficient. As per Ghozali (2011), this test evaluates how much influence an individual explanatory or independent variable has in explaining the variation in the dependent variable. The decision-making criteria for the t-statistical test involve utilizing a confidence level (α) of 5%. If the significance

value is ≤ 0.05 , it indicates that individual independent variables have a significant impact on the dependent variable.

Table 2. T-Test

| Coefficients ^a | | | | | | |
|---------------------------|------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 15505,739 | 11422,565 | | 1,357 | ,184 |
| | Production Costs | ,024 | ,010 | ,673 | 2,409 | ,022 |
| | Operating Costs | -,096 | ,148 | -,123 | -,649 | ,521 |
| | Net Sales | ,002 | ,008 | ,061 | ,252 | ,803 |

a. Dependent Variable: Net Profit

a) Production Costs

Regarding the impact of production costs on profit, the analysis indicates that the tcount value is 2.409 (tcount 2.409 > ttable 2.056) with a significance value (sig) of 0.022, which is less than the 0.05 threshold. These findings lead to the conclusion that production costs exert a significant effect on net profit.

b) Operating Costs

In assessing the influence of operating costs on profit, the results demonstrate a tcount value of -0.649 (tcount -0.649 > ttable -2.056) and a sig value of 0.521, exceeding the 0.05 threshold. Consequently, it can be inferred that operating costs do not have a significant impact on net profit.

c) Net Sales

The examination of the impact of Net Sales on Profit reveals a tcount value of 0.252 (tcount 0.252 < ttable 2.056) and a sig value of 0.582, which surpasses the 0.05 threshold. Based on these outcomes, it is concluded that net sales do not have a significant effect on net profit.

2) F Test (simultaneous)

The concurrent examination seeks to establish whether the independent variables collectively influence the dependent variable. The criteria for decision-making in the F-test involve employing a confidence level (α) of 5%. If the significance value is ≤ 0.05 , it indicates that the regression model, or simply put, the model itself, is viable. This implies that, collectively, the independent variables have a significant impact on the dependent variable.

Table 3. F Test (Simultaneous)

| ANOVA ^a | | | | | | |
|---|------------|-----------------|----|----------------|-------|--------------------|
| | Model | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | 26661454747,632 | 3 | 8887151582,544 | 7,358 | <,001 ^b |
| | Residual | 37443213589,762 | 31 | 1207845599,670 | | |
| | Total | 64104668337,394 | 34 | | | |
| a. Dependent Variable: net profit | | | | | | |
| b. Predictors: (Constant), production costs, operating costs, net sales | | | | | | |

To examine the statistical hypothesis presented earlier, an F-test is conducted at a significance level of $\alpha = 5\%$. The calculated value for $n = 30$ is determined as follows:

$$F_{table} = n - k - 1 = 30 - 3 - 1 = 26$$

$$F_{calculated} = 7.358 \text{ or } F_{table} = 2.975154$$

Upon processing the data, as illustrated in the table above, the calculated F value ($F_{calculated}$) is 7.358, exceeding the F_{table} value of 2.975154. Additionally, the significance value is 0.001, which is less than 0.05. These outcomes confirm that production costs, operational costs, and net sales collectively exert a significant influence on net income within the metal sector manufacturing companies and similar entities listed on the Indonesia Stock Exchange for the 2016–2020 period.

3) Test Coefficient of Determination (R^2)

The purpose of the coefficient of determination is to gauge the extent to which the independent variable can elucidate variations in the dependent variable. When the coefficient of determination falls between zero and one, a smaller R^2 value indicates a limited capacity of the independent variable to expound upon the variations in the dependent variable. Conversely, a larger R^2 value signifies a heightened ability of the independent variable to elucidate variations in the dependent variable. The data about the outcomes of the coefficient of determination test is outlined as follows:

Table 4. Test Coefficient of Determination

| Model Summary ^b | | | | |
|---|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | ,645 ^a | ,416 | ,359 | 34754,07314 |
| a. Predictors: (Constant), production costs, operating costs, net sales | | | | |
| b. Dependent Variable: net profit | | | | |

Derived from the outcomes of the coefficient of determination test presented in the table above, the adjusted R-Square within the regression model is determined as follows:

The adjusted R-squared within the regression model is established at 0.359. This signifies that the collective contribution of production costs, operating costs, and net sales to the profits of metal sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2016–2020 period is 0.359,

equivalent to 35.9%. Consequently, in the findings of this study, profit emerges as highly influential, while the remaining 64.1% is influenced by other factors not encompassed within this study.

DISCUSSION

The analysis of the findings in this study involves evaluating the compatibility of theories, perspectives, and prior research that align with the outcomes of preceding studies and the behavioral patterns needed to address them. The analysis encompasses four primary sections:

1. The Impact of Production Costs on Profit

According to the research outcomes, the influence of production costs on profit is evident. The calculated tcount value of 2.409 surpasses the ttable value of 2.056, with a significance level (sig) of 0.022, which is below 0.05. This suggests that production costs indeed affect net profit in metal sector manufacturing companies and similar entities listed on the Indonesia Stock Exchange during the 2016–2020 period. These findings align with previous studies by Pasaribu & Hasanuh (2021), Rostiati & Ferliyanti (2019), and Febriyati (2021), all of which assert that production costs significantly impact net profit. Consequently, any increase or decrease in production costs is noted to have a substantial effect on net income, emphasizing the importance of optimizing production costs for a positive influence on net income.

2. The Impact of Operating Costs on Net Income

In examining the effect of operating costs on net profit, the calculated tcount value of -0.649 exceeds the ttable value of -2.056, while the sig value of 0.521 is greater than 0.05. This leads to the conclusion that operating costs have an impact on net income in the aforementioned sector and timeframe. These findings align with the research conducted by Ramadan (2015) and Pasca (2019), indicating that greater incurred operating costs result in higher net profits.

3. The Impact of Net Sales on Net Income

Assessing the influence of net sales on profit reveals a tcount value of 0.252, which is less than the ttable value of 2.056, and a sig value of 0.582, exceeding 0.05. Consequently, it is concluded that net sales do not significantly affect net income in the metal sector manufacturing companies and similar entities listed on the Indonesia Stock Exchange for the 2016–2020 period. This finding aligns with the results of studies by Alfiani (2016), Diana et al. (2021), and Zahara and Zannati (2018), all of which contend that net sales lack a significant impact on net income. Thus, fluctuations in sales do not correlate with changes in profits.

4. The Collective Impact of Production Costs, Operating Costs, and Net Sales on Net Income

The combined effect of production costs, operating costs, and net sales on net income is substantiated by the Fcount value of 7.358, surpassing the Ftable value of 2.975154. Furthermore, the significance value of 0.001 is less than 0.05, confirming that production costs, operational costs, and net sales jointly influence net income. These results validate the significance of considering these factors collectively to comprehend their combined impact on net income in the specified sector and timeframe.

CONCLUSIONS AND RECOMMENDATIONS

Drawing from the aforementioned conclusions, the authors propose the following recommendations:

1. Companies are advised to optimize their operational efficiency by minimizing operating costs to achieve the highest possible profit. It is crucial for companies to carefully monitor and manage incurred costs to enhance revenue values substantially.
2. Researchers are encouraged to expand their scope by incorporating additional variables that may influence profits. Considering the multitude of internal and external factors, there exists a need to explore and include various elements that could impact net income.

ADVANCED RESEARCH

To advance accounting research based on the findings of the aforementioned study, it is suggested to extend the duration of analysis, incorporating additional years. This approach aims to fortify and reinforce the research outcomes by delving into a more extensive timeframe.

REFERENCES

- Abdullah, M. R. (2015). Metode penelitian kuantitatif.
- Abdullah, Thamrin dan Francis Tantri. 2012. Manajemen Pemasaran. Depok: PT Raja Grafindo Persada.
- Akbar, A. S., & Astuti, W. A. (2017). Pengaruh penjualan dan biaya produksi terhadap laba bersih. *Universitas Komputer Indonesia*.
- Arfan Ikhsan. (2014). METODOLOGI PENELITIAN BISNI (M. S. Sukma Lesmana, S.E. (ed.)). Citapustaka Media.
- Ayuningtyas, D. (2013). Evaluasi Penerapan Biaya Standar Sebagai Alat Perencanaan Dan Pengendalian Biaya Produksi Pada Harian Tribun Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(4).
- Diana, D., Fani, J., Bangun, S., & Saragi, E. (2021). PENGARUH HUTANG, MODAL KERJA, DAN PENJUALAN TERHADAP LABA BERSIH PADA SEKTOR FOOD AND BEVERAGE YANG TERDAFTAR DI BURSA EFEK INDONESIA PADA TAHUN 2014-2018. *JURNAL MANAJEMEN*, 1(1), 25-42.
- Dunia, Firdaus Ahmad dan Abdullah Wasilah. 2018. Akuntansi Biaya. Jakarta: Salemba Empat.
- Ermaya, A. Y., Priatna, H., & Alfiani, H. (2016). PENGARUH PENJUALAN BERSIH DAN BIAYA PRODUKSI TERHADAP LABA BERSIH (Studi kasus pada PT. Aneka Tambang (Persero), Tbk.). *AKURAT | Jurnal Ilmiah Akuntansi FE UNIBBA*, 7(2), 20-26.
- Febriyati, N. A., & Utami, P. P. (2021). Investigating Students' Self-Confidence In Teaching English Speaking By Using Instagram As An Intructional Media. *Jurnal Pendidikan Tambusai*, 5(2), 4438-4445.
- Felicia, F., & Gultom, R. (2018). Pengaruh Biaya Produksi, Biaya Kualitas Dan Biaya Promosi Terhadap Laba Bersih Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2013-2015. *Jurnal Ilmu Manajemen METHONOMIX*, 1(1), 1-12.
- Ferliyanti, H. (2019). Pengaruh Biaya Produksi, Biaya Operasional, Dan Penjualan Terhadap Laba Bersih Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2012-2016. *Jurnal Akrab Juara*, 4(1), 52-62.

- Ghozali, Imam. (2011). *Aplikasi Analisis Multivariate dengan Progam SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- Harahap, N. (2019). *Pengaruh biaya produksi, biaya operasional dan penjualan terhadap laba bersih pada PT. Aksha Wira International Tbk pada tahun 2011-2018* (Doctoral dissertation, IAIN Padangsidimpuan).
- IMAM GHOZALI. (2016). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23* (8th ed.). Semarang: Universitas Diponegoro.
- Kasmir. 2015. *Analisi Laporan Keuangan*. Edisi Satu. Jakarta: PT RajaGrafindoPersada.
- Kotler, P. 2014. *Manajemen Pemasaran*. Edisi Milenium, Jilid 2. Jakarta: PT Prenhallindo
- Mulyadi, 2015, *Akuntansi Biaya*, Edisi kelima, UPP STIM YKPN, Yogyakarta.
- Muslih, I. PENGARUH BIAYA PRODUKSI DAN BIAYA OPERASIONAL TERHADAP LABA BERSIH.
- Oktapia, N., Manullang, R. R., & Hariyani, H. (2017). ANALISIS PENGARUH BIAYA PRODUKSI DAN BIAYA OPERASIONAL TERHADAP LABA BERSIH PADA PT MAYORA INDAH TBK DI BURSA EFEK INDONESIA (BEI)(Studi Kasus Pada PT Bursa Efek Indonesia). *Jurnal Akuntansi Bisnis & Keuangan*, 11(2), 37-45.
- Pasaribu, E. M. W., & Hasanuh, N. (2021). Pengaruh Biaya Produksi Dan Biaya Operasional Terhadap Laba Bersih. *COSTING: Journal of Economic, Business and Accounting*, 4(2), 731-740.
- Pasca, Y. D. (2019). Pengaruh Pendapatan Usaha dan Biaya Operasional Terhadap Laba Bersih Survey Pada Perusahaan Jasa Sub Sektor Transportasi Yang Terdaftar di Bursa Efek Indonesia. *Syntax Literate; Jurnal Ilmiah Indonesia*, 4(9), 163-173.
- Ramadhan, F. Z. (2015). Pengaruh Biaya Produksi dan Biaya Operasional Terhadap Laba Bersih. *Universitas Komputer Indonesia*.
- Sugiyono. 2017. *Metodologi Penelitian Bisnis*. Bandung: Alfabeta.
- Susilawati, E. (2019). PENGARUH BIAYA PRODUKSI DAN BIAYA PROMOSI TERHADAP LABA BERSIH (STUDI PERUSAHAAN ROKOK PT GUDANG GARAM TBK YANG TERDAFTAR DI BEI PERIODE 2011-2017). *MANNERS*, 2(1), 25-39.

Subramanyam. K. R dan John J. Wild. 2014. Analisis Laporan Keuangan. Penerjemah Dewi Y. Jakarta: Salemba Empat

SYAIFULLAH, M. PERANCANGAN PROGRAM PENILAIAN KINERJA SALES BERDASARKAN PADA KETERCAPAIAN TARGET PENJUALAN DI PT. MULTI MEGAH MANDIRI JAKARTA.

Syaputra, R. C. E. (2020). *Pengaruh penjualan bersih terhadap laba bersih dengan laba sebelum pajak sebagai variabel intervening di PT. Fajar Surya Wisesa Tbk. periode 2009-2019* (Doctoral dissertation, UIN Sunan Gunung Djati Bandung).

Algifari, 2013. Untuk mendiagnosis adanya autokorelasi dalam satu model regresi dilakukan melalui pengujian Durbin-Waston (Uji DW).

V. Wiratna Sujawerni. 2017. Analisis Laporan Keuangan Teori, Aplikasi, dan Hasil Penelitian. Yogyakarta: Pustaka Baru Press.

Wardiyah, M. Lasmi. 2017. Analisis Laporan Keuangan. Cetakan Pertama. Pustaka Setia. Bandung.

Wijaya, N., Veronika, V., Kosasih, S., & Natalia, F. (2021). Pengaruh Modal Kerja, Total Hutang, Tingkat Inflasi dan Penjualan Bersih Terhadap Laba Bersih. *Owner: Riset dan Jurnal Akuntansi*, 5(1), 240-251.

Wiratna Sujarweni. 2017. Analisis Laporan Keuangan. Yogyakarta: Pustaka Baru Press.