



Inventory Turnover Analysis Against Profitability at PT. Voksel Electric, Tbk

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Article Info

Article History:

Received: 15 March 2022

Revised: 28 March 2022

Published: March 2022

e-ISSN: 2623-2324

p-ISSN: 2654-2528

DOI: 10.5281/zenodo.6418058

Abstract:

This study is to determine the effect of inventory turnover on profitability (net profit margin) at PT. Voksel Electric Tbk. This research is a study of two variables using quantitative descriptive research methods, namely the independent variable is inventory turnover and the dependent variable is profitability. The analysis technique used is simple linear regression analysis, correlation analysis, coefficient of determination analysis and t test. The results of the research analysis show that inventory turnover has an effect on profitability. This can be seen by the simple regression equation $Y = 8.32 - 1.37 X$ with the value of correlation analysis (r) with the correlation obtained -0.38 so that inventory turnover has a low effect on profitability. The results of the analysis of the coefficient of determination show that 14.44% of profitability is influenced by inventory turnover and 85.56% is influenced by other factors not examined. And the results of the t-test are $T_{count} < T_{table}$ ($-0.70 < 3.182$), then H_0 is accepted and H_a is rejected because the results are not significant.

Keywords: Inventory Turnover, Profitability (net profit margin)

INTRODUCTION

In the development of the business world in this era of globalization, competition between companies is increasing. Financial management must lead to responsible financial behavior so that all individual and family finances can be managed properly (Utami & Marpaung, 2022). As is currently the case, the government is currently developing electricity projects and the demand for transmission cables which are commonly used by the private sector for housing, building and industrial construction.

In this case, competition between cable manufacturers will increase. In this competition can not be separated from the contribution of supplies. Because inventory is an active element in the company's operations which is continuously acquired, changed and sold to consumers (Judin et al., 2021). Inventories make it easier or smoother for the company's operations to be carried out successively to produce goods and distribute them to consumers (Ahlina &

Simamora, 2021). Basically, inventory facilitates or expedites the operations of manufacturing companies which must be carried out successively to produce goods and then deliver them to customers or consumers (Hamid, 2021).

Inventory allows products to be produced in places far from customers and sources of raw materials (Sanjaya. S & St Habibah, 2019). With inventory, production does not need to carry out special production for consumption, or vice versa, there is no need for consumption to be urged to suit the interests of production (Kushartini & Almahdy, 2015). The magnitude of the calculation results of inventory turnover shows the level of speed of inventory turnover into cash or trade receivables (Hamid, 2020). The inventory turnover rate shows how many times the inventory is purchased and resold (Marpaung, 2021b). To achieve a high level of inventory turnover, many things must be considered by companies such as processing inventory regularly and efficiently, improving the quality of goods, and fulfilling what consumers want (Sari, 2014). The higher the inventory turnover rate, the higher the net profit (Masrifah, 2021).

The company's short-term goal is to get optimal profits, while the long-term goal is to increase the value of a company or what is known as book value or book value which is an asset or net worth of the company (Marpaung, 2021a).

Benefits of Research The expected usefulness of this research is as follows; 1) For Companies This research is expected to provide useful information and can be used as a guide in making decisions for the benefit of the company, 2) For Academics As a reference material used to complete and add information to similar studies in the future.

LITERATURE REVIEW

Profitability

Profitability is the company's ability to generate profits during a certain period (Soetjitro, 2008). According to (Saputra, 2013) profitability is the company's ability to earn profits in relation to sales, total assets and own capital. According to (Kasmir, 2011) in (Priatna, 2016) states that the profitability ratio is a ratio to assess the company's ability to seek profits in providing a measure of the effectiveness of the company's management, this is indicated by the profits earned and investment income. According to (Rahayu & Susilowibowo, 2014), Profitability is the company's ability to earn a profit. Profitability ratio (Profitability Ratio) describes the ability of a company to generate profits relatively (PONTOH et al., 2016).

Based on the opinion of experts, it can be concluded that profitability is the company's ability to earn profits from sales, total assets and own capital during a certain period.

The purpose and benefits of Profitability The purpose of using profitability for internal and external parties according to the company (Kasmir, 2011:): 1. To measure and calculate the profit earned by the company in a certain period. 2. To assess the company's profit position in the previous year with the current year. 3. To assess profit development over time. 4. To assess net profit after tax. 5. To measure the productivity of all company funds that have been used, either loan capital or own capital.

The types of profitability ratios according to (I Made Sudana, 2011): 1. Net Profit Margin This ratio is used to measure the company's ability to generate net profit from sales made by the company. Net profit margin is a measure of profit by comparing profit after interest and taxes with sales. This ratio shows the company's net income on sales. The bigger this ratio, the better because it is considered that the company's ability to earn profits is quite high.

RESEARCH METHOD

The Research Object at PT Voksel Electric Tbk (the "Company") was established on

April 19, 1971 in Jakarta and is engaged in the cable industry. In 1989, the Company's status changed to PMA with the signing of a joint venture agreement with Showa Electric Wire & Cable Co. Ltd. ("Showa"), a leading cable company in Japan, which since 2006 has changed to SWCC Showa Cable Systems Co., Ltd.

The author carried out the writing to compile this research, namely by citing the data records provided by the company at PT Voksel Electric, Tbk Jalan Raya Narogong Km. 16, Cileungsi, Bogor 16820 Tel : (021) 8230525 Fax : (021) 8230526 Email : ve@voksel.co.id which is available on the company's official website and listed on the Indonesia Stock Exchange (IDX) related to research issues, Website official PT. Voksel Electric, Tbk : www.voksel.co.id. And the official website of the Indonesia Stock Exchange.

This research is a qualitative descriptive study. According to (Prof.Dr.Sugiyono, 2015), explains that the qualitative research method is a research method based on the philosophy of positivism, used to examine the condition of natural objects, (as opposed to experiments) where the researcher is the key instrument, sampling data sources carried out purposively and snowball, collection technique with triangulation, data analysis is inductive/qualitative, and qualitative research results emphasize meaning rather than generalization.

Population and Sample. According to (Sugiyono, 2013) the population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The sample is part of the number and characteristics possessed by the population

Variable Operational Definition

According to Suharsimi Arikunto (2010:161) Variable is the object of research or what is the point of attention or research. Several experts put forward the operational definition of variables, among them stated that the definition is based on the properties of things defined that can be observed (observed) so that what researchers do is open to be re-examined by Achmadi and Narbuko (2009:61).

Data analysis technique

The data analysis technique is organizing and sorting data into patterns, categories and basic units of description so that themes can be found and working hypotheses can be formulated as suggested by the data according to Lexi J. Moleong (2011: 103).

Simple Linear Regression Analysis

In Somantri (2011: 243), it is stated that Simple Linear Regression aims to study the linear relationship between two variables. Meanwhile, in Sugiyono (2010: 261), it is stated that simple regression is based on a functional or causal relationship of one independent variable with one dependent variable.

Simple linear regression analysis is used to determine changes that occur in the variable (Y), the value of the dependent variable based on the known independent value (X). By using simple linear regression analysis to determine changes in influence based on existing research in the previous time period. To determine the extent of the influence of Inventory Turnover on Profitability. The general equation for a simple liner is:

$$Y = a + bX$$

Information :

Y = Dependent Variable (Profitability)

X = Independent Variable (Inventory Turnover)

a = Constant Value (Y value if X = 0)

The formula used is as follows:

$$a = \frac{(\sum Y) (\sum X^2) - (\sum X) (\sum XY)}{n (\sum X^2) - (\sum X)^2}$$

b = Regression Coefficient (increase or decrease value)

The formula used is as follows:

$$b = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2}$$

Correlation Analysis (r) This correlation technique is used to find the relationship and prove the hypothesis of the relationship between two variables if the two variables are in the form of intervals or ratios.

Coefficient of Determination Analysis. The value of the coefficient of determination shows the percentage of the relationship of the independent variable to the dependent variable and explains the amount of contribution made by the independent variable to the dependent variable. The coefficient of determination ranges between zero and one ($0 \leq R^2 \leq 1$). This means that $R = 0$ indicates that there is no relationship between the independent and dependent variables, if R is getting closer to 1, it indicates the stronger the relationship between the independent variables and the dependent variable will also be smaller.

The coefficient of determination can be found with the following formula:

$$Kd = r^2 \times 100\%$$

Information :

Kd = Determinant coefficient or coefficient of determination

r^2 = Correlation Coefficient

Research Hypothesis Testing, This study uses a significant test or parameter, to test the level of significance, parameter testing must be carried out with:

Hypothesis Determination

1. Determination of the null hypothesis with alternative hypothesis testing - testing the intended hypothesis to determine whether there is a significant relationship between inventory turnover and profitability.

2. The null hypothesis (H_0) is a hypothesis which states that there is no significant relationship between the independent variable and the dependent variable.

Determination of the Significant Level This study uses a level of $\alpha = 0.05$, which means that the possibility of the truth of the conclusions drawn has a profitability of 95% in the social sciences, a significant level of $\alpha = 0.05$ is commonly used because it is considered tight enough to represent the differences between the variables being tested.

Determination of Statistical Test or t Test.

To test the relationship of the independent variable partially to the dependent variable. To determine the value of the t-table, the significant level used is 5% with the degree of freedom $df = (n-k)$ where n is the number of observations, k is a constant variable. In testing the hypothesis, the magnitude of (error type 1) is determined in advance, which is often called the level of significance (level of real level). In this study $H_a : \rho \neq 0$ (there is a correlation between X and Y), habits in the world of research are 0.05 or 5% each and use the t distribution as the statistical test.

According to Dr. Ridwan, M.B.A & Dr. Sunarto M.Si (2011: 117 – 119) if from the results of the above calculations can the value:

a. "If $t_{count} > t_{table}$, then the initial hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, meaning that there is a significant relationship between the independent variable and the dependent variable".

b. "If $t_{count} < t_{table}$, then the hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected, meaning that there is no significant relationship between the independent variables".

To determine whether an alleged hypothesis should be accepted or rejected, a t test is

carried out, with the following formula $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$

Information :

t = number t research results

r = Pearson correlation coefficient

n = number of samples

Conclusion Withdrawal. The analysis and hypothesis testing that have been carried out are basically to draw conclusions from the research that has been carried out. With this analysis it will be known the changes that will occur in the Y variable, if there is a change in the X variable by 1 unit. In addition, it will also be known how the relationship between variable X and Variable Y is in the same direction or opposite.

RESEARCH RESULTS AND DISCUSSION

Inventory turnover is a ratio used to measure how many times the funds invested in this inventory rotate in one period. It can also be interpreted that inventory turnover is a ratio that shows how many times the number of inventory items is replaced in one year. The ways to calculate inventory turnover include:

$$\text{Inventory Turn Over} = \frac{\text{Cost of good sold}}{\text{Average Inventory}}$$

Here the author presents the annual inventory turnover contained in PT Voksel Electric Tbk. from 2015-2019:

$$\text{Year 2015} = \frac{2.252.807}{343.843,71} = 6,55 \text{ times}$$

$$\text{Year 2016} = \frac{1.898.380}{401.845,29} = 4,72 \text{ times}$$

$$\text{Year 2017} = \frac{1.356.440}{433.211,22} = 3,13 \text{ times}$$

$$\text{Year 2018} = \frac{1.541.589}{436.006,25} = 3,53 \text{ times}$$

$$\text{Year 2019} = \frac{1.784.978,65}{548.247,94} = 3,25 \text{ times}$$

Based on the net profit margin table of PT Voksel Electric, Tbk. for the last 5 years, namely from 2015-2019 was 12.57 times.

Based on the table shows the development of inventory turnover from PT Voksel Electric, Tbk. during the 2015-2019 period are as follows:

In 2015 the inventory turnover at PT Voksel Electric, Tbk was 6.55 times or for 54.96 days if rounded to 55 days. In 2016 the inventory turnover at PT Voksel Electric, Tbk experienced a decrease in the inventory turnover rate to 4.72 times or for 76.27 days if rounded to 76 days. This is due to the decrease in demand for finished goods and the high price of raw materials resulting in the accumulation of goods in the warehouse.

Then in 2017 there was a decline again from 4.72 times to 3.13 times or for 115.01 days if rounded up to 115 days. This is due to the high price of raw materials and delays in the construction of communication lines and cable distribution lines that have been installed but have not been sold.

Meanwhile, in 2018 inventory turnover increased from 3.13 times to 3.53 times or 101.98 days if rounded to 102 days. This was due to an increase in demand for goods as reflected in the cost of goods sold account, which was higher than the previous year

And in 2019 the inventory turnover of PT Voksel Electric, Tbk. Again, it decreased from 3.53 times to 3.25 times or has made inventory turnover for 110.76 days if rounded up to 111 days in 1 year. If viewed more closely, although there was an increase in the total cost of goods sold compared to the previous year, the average inventory also experienced a greater increase compared to the previous year so that this caused the inventory turnover to decrease.

The formula used in calculating profitability is as follows by using the Net Profit Margin formula, namely:

$$\text{Net Profit Margin} = \frac{\text{Net profit}}{\text{Net Sales}} \times 100\%$$

Here the author presents the profitability of PT Voksel Electric, Tbk. from 2015-2019 using the Net Profit Margin formula

$$\begin{aligned} \text{Year 2015} &= \frac{39.092,75}{2.510.818} \times 100\% = 1,55\% \\ \text{Year 2016} &= \frac{(85.393,83)}{2.003.353} \times 100\% = -4,26\% \\ \text{Year 2017} &= \frac{277}{1.597.736} \times 100\% = 0,01\% \\ \text{Year 2018} &= \frac{160.046}{2.022.350} \times 100\% = 7,91\% \\ \text{Year 2019} &= \frac{166.204,96}{2.258.316,81} \times 100\% = 7,36\% \end{aligned}$$

Based on table 4.3 the net profit margin of PT Voksel Electric, Tbk. for the last 5 years, namely from 2015-2019 was 12.57 times.

Based on the table above, it can be seen a picture of the profitability of PT Voksel Electric, Tbk. the 2015-2019 period are as follows:

In 2015 the total profitability obtained by PT Voksel Electric, Tbk. is at 1.55%. In 2016 the total profitability of PT Voksel Electric, Tbk. experienced a sharp decline, namely by 5.81% from the previous year's profitability to -4.26% this was due to a decrease in demand for goods and selling prices on the one hand, high raw material prices and slowing implementation of PLN electricity projects as well as other factors. others outside of this study.

Meanwhile, in 2017 PT Voksel Electric, Tbk. experienced an increase in profitability by 4.27% from the previous year to 0.01% but was still in poor condition this was due to a decrease in demand for electric cables and delayed payments from contractors due to delays in the completion of projects being built.

In 2018 the profitability of PT Voksel Electric, Tbk. Experiencing a fairly rapid increase again by 7.90% compared to the previous year to 7.91% this is due to the proliferation of ongoing projects in the infrastructure sector, especially electricity and telecommunications

Then in 2019 the profitability obtained decreased from 7.91% to 7.36%. If you pay attention to the net sales column in 2019 there was an increase from the previous year, but the total cost of goods sold and the higher cost factor compared to the previous year affected the amount of net profit received by the company so that if presented, it decreased by 0.55% compared to the previous year. .

Inventory Turnover Analysis on Profitability at PT Voksel Electric, Tbk .. The calculation of variable X and variable Y, can be seen in the following table:

Table Variable X and Variable Y

Tahun	Perputaran	Profitabilitas	X.Y	X ²	Y ²
	Persediaan				
	(X)	(Y)			
2015	6,55	1,55	10,15	10,56	54,16
2016	4,72	-4,26	-20,10	12,46	62,56
2017	3,13	0,01	0,03	9,79	0,00
2018	3,53	7,91	27,92	22,27	18,14
2019	3,25	7,36	23,92	42,90	2,40
Total	21,18	12,57	41,92	97,98	137,26

Based on the calculation of table 4.5 above, it is obtained:

$$\begin{aligned} n &= 5 \\ \sum X &= 21,18 \\ \sum Y &= 12,57 \\ \sum XY &= 41,92 \\ \sum X^2 &= 97,98 \\ \sum Y^2 &= 137,26 \end{aligned}$$

Simple Linear Regression Analysis. From the data in the table above, then it is calculated to produce a regression. In this regression, the researcher looks for the coefficients a and b. The values of a and b are searched using the following formula. To determine the value of a, the following formula can be used:

$$\begin{aligned} a &= \frac{(\sum Y)(\sum X^2) - (\sum X)(\sum XY)}{n(\sum X^2) - (\sum X)^2} \\ a &= \frac{(12,57)(97,98) - (21,18)(41,92)}{5(97,98) - (21,18)^2} \\ a &= \frac{1.231,60 - 887,86}{489,9 - 448,59} \\ a &= \frac{343,74}{41,31} \\ a &= 8,32 \end{aligned}$$

To determine the value of b can be used the following formula:

$$\begin{aligned} b &= \frac{n(\sum XY) - (\sum X)(\sum Y)}{n(\sum X^2) - (\sum X)^2} \\ b &= \frac{5(41,92) - (21,18)(12,57)}{5(97,98) - (21,18)^2} \\ b &= \frac{209,6 - 266,23}{489,9 - 448,59} \\ b &= \frac{-56,63}{41,31} \\ b &= -1,37 \end{aligned}$$

Based on calculations using simple regression analysis, obtained a value of a = 8.32 and a value of b = - 1.37, the regression equation can be obtained as follows:

$$Y = a + bX$$

$$Y = 8,32 + (-1,37) X$$

Correlation Coefficient Analysis. Correlation analysis is used to determine whether there is a relationship between two variables, namely between the independent variable and the dependent variable. As for the correlation coefficient, this correlation technique is used to find the relationship and prove the hypothesis of the relationship between two variables if the two variables are formed intervals or ratios and the data sources of two or more variables are the same.

The formula used is the correlation coefficient formula (r), namely:

$$r = \frac{n \cdot \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \cdot \sum X^2 - (\sum X)^2][n \cdot \sum Y^2 - (\sum Y)^2]}}$$

source: Sugiyono, (2015:241)

Information :

r = correlation coefficient

n = number of data

X= Inventory Turnover

Y= Profitability

Based on the research data above, the values obtained are;

$$n = 5$$

$$\sum X = 21,18$$

$$\sum Y = 12,57$$

$$\sum XY = 41,92$$

$$\sum X^2 = 97,98$$

$$\sum Y^2 = 137,26$$

So, the calculation is as follows:

$$r = \frac{n \cdot \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \cdot \sum X^2 - (\sum X)^2][n \cdot \sum Y^2 - (\sum Y)^2]}}$$
$$r = \frac{5 \cdot 41,92 - (21,18)(12,57)}{\sqrt{[5 \cdot 97,98 - (21,18)^2][5 \cdot 137,26 - (12,57)^2]}}$$
$$r = \frac{209,6 - 266,23}{\sqrt{(489,9 - 448,59)(686,3 - 158)}} r = \frac{-56,63}{\sqrt{(41,31)(528,3)}}$$
$$r = \frac{-56,63}{\sqrt{21.824,07}} r = \frac{-56,63}{147,72}$$
$$r = -0,38$$

Thus the correlation obtained is -0.38. The correlation value when referring to the interpretation of the correlation coefficient value shows a relationship in the low category (0.20-0.399) between X and Y. So inventory turnover with profitability has a low relationship.

The coefficient of determination is used in relation to the use of correlation analysis, to find out how big the percentage of inventory turnover and its impact on profitability at PT Voksel Electric Tbk.

From the value of the correlation coefficient can be obtained the value of inventory turnover and its impact on profitability. Calculation using the coefficient of determination formula as follows:

$$Kd = r^2 \times 100\%$$

Information :

Kd = Determinant coefficient or coefficient of determination

r = Correlation coefficient

Then the calculation is as follows:

$$Kd = r^2 \times 100\%$$

$$Kd = -0,38^2 \times 100\%$$

$$Kd = 0,1444 \times 100\%$$

$$Kd = 14,44 \%$$

Based on the calculation of the coefficient of determination, the Kd value of 14.44% is obtained. This figure means that 14.44% of profitability is influenced by inventory turnover, while 85.56% is influenced by other factors or variables not examined in this study.

Statistical test analysis (t test). Hypothesis testing to determine whether an alleged hypothesis should be accepted or rejected, it is necessary to test through a t-test, using the following formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-(r)^2}}$$

Information :

t = test value t
 r = correlation coefficient
 n = number of data

The following is a calculation of the existing data:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-(r)^2}}$$

$$t = \frac{-0,38 \sqrt{5-2}}{\sqrt{1-(-0,38)^2}} t = \frac{-0,38 \sqrt{3}}{\sqrt{1-0,1444}}$$

$$t = \frac{-0,38 (1,73)}{\sqrt{0,8556}} t = \frac{-0,65}{\sqrt{0,8556}}$$

$$t = \frac{-0,65}{0,92} t = -0,70$$

Based on the above calculation, the $t_{(count)}$ value is -0.70 which is then compared with the t_{table} value.

The value of $t_{(table)}$ can be known by determining the degree of freedom (df) first. In testing the hypothesis, the degrees of freedom are determined by the formula:

$$df = n-k$$

description :

n = number of data

k = number of variables (independent and dependent)

then, the calculation is as follows:

$$df = n-k$$

$$df = 5-2$$

$$df = 3$$

Table Guidelines

d.f.	TINGKAT SIGNIFIKAN				
	20%	10%	5%	2%	1%
Dua sisi	20%	10%	5%	2%	1%
Satu sisi	10%	5%	2,50%	1%	0,50%
1.	3,078	6,314	12,706	31,821	63,657
2.	1,886	2,92	4,303	6,965	9,925
3.	1,638	2,353	3,182	4,541	5,841
4.	1,533	2,132	2,776	3,747	4,604
5.	1,476	2,015	2,571	3,365	4,032

Based on the above calculations, and because this study uses a significance level of = 0.05 or 5% with two-sided testing (5% significance: 2 = 2.5% or 0.025) and the results of the df (Degree of Freedom) calculation above are 3 Therefore, the value of $t_{(table)}$ can be determined by looking at the position of $t_{(table)}$ at number 3, which is 3.18245.

Based on the above statement, the results obtained from the comparison of $t_{(count)}$ with $t_{(table)}$ are $t_{(count)} < [t]_{(table)}$ (-0.70 < 3.18245), so that H_0 is accepted and H_a is rejected. means that inventory turnover has no significant effect on profitability at PT Voksel Electric Tbk.

CONCLUSION

Based on the results of research and discussion of inventory turnover analysis on profitability at PT Voksel Electric Tbk. During the last 5 periods, namely 2015-2019, the following conclusions can be drawn:

1. The amount of inventory turnover of PT Voksel Electric, Tbk tends to decrease this is due to lower demand and high raw material prices as well as delays in construction projects of communication lines and cable distribution that have been installed but have not been sold.

2. Based on the results of calculations using simple regression analysis, the regression equation $Y = 8.32 + (-1.37) X$. This means that the constant value of this regression equation is positive. With a coefficient b of -1.37, it shows that every time there is a change of one inventory turnover (variable x) it will be followed by a change in profitability (variable y) of -1.37

Suggestion Based on the results of the research and the conclusions above, the authors propose several things that are expected to be taken into consideration for the future related to inventory turnover on profitability at PT Voksel Electric Tbk. The following are suggestions that the author can put forward:

For Companies

It is expected that PT Voksel Electric will be able to maintain stability of inventory turnover and profitability by paying attention to effective inventory turnover management in order to achieve the desired profitability based on current and future market conditions. By paying attention to the volume of sales and expenses incurred.

BIBLIOGRAPHY

- Ahlina, M. N., & Simamora, S. C. (2021). Pengaruh Perputaran Piutang dan Perputaran Persediaan Terhadap Return On Equity Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi yang Terdaftar di BEI Periode 2016-2018. *Jurnal Ilmiah M-Progress*, 11(1), 63–72. Perputaran Piutang, Perputaran Persediaan, Return On Equity (ROE)%0A
- Hamid, E. (2020). Analisis Perputaran Persediaan Terhadap Profitabilitas Pada PT. Gudang Garam, Tbk Tahun 2013-2015. *Sekolah Tinggi Ilmu Ekonomi Tribuana*, 2, 15–24.
- Hamid, E. (2021). Analisis Perputaran Persediaan Dalam Menilai Return On Asset (ROA) Pada PT. Kalbe Farma, Tbk Periode 2015 - 2019. *Parameter*, 6(1), 1–11. <https://doi.org/10.37751/parameter.v6i1.157>
- Judin, A. S., Somantri, Y. F., & Rahayu, I. (2021). Pengaruh Perputaran Kas Dan Perputaran Persediaan Terhadap Profitabilitas Perusahaan. *Jurnal Ekonomi Perjuangan*, 2(1), 402–411. <https://doi.org/10.36423/jumper.v2i1.652>
- Kushartini, D., & Almahdy, I. (2015). Jurnal PASTI Volume X No. 2, 217 - 234 SISTEM PERSEDIAAN BAHAN BAKU PRODUK DISPERSANT DI INDUSTRI KIMIA Dinni Kushartini, Indra Almahdy. *Jurnal PASTI*, X(2), 217–234.
- Marpaung, N. N. (2021a). *Relationship of Brand Ambassadors with Interest to Buy : Lazada e-Commerce Study*. 7(2), 341–352.
- Marpaung, N. N. (2021b). ANALISIS PERPUTARAN KAS DALAM MENILAI RETURN ON ASSET PADA PT. PRASIDHA ANEKA NIAGA, Tbk. *PARAMETER*, 4(2). <https://doi.org/10.37751/parameter.v4i2.155>
- Masrifah, B. (2021). *TERHADAP PROFITABILITAS (Pada Perusahaan Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2016-2020)*. 5(2), 143–154.
- PONTOH, N., PELLENG, F. A., & MUKUAN, D. D. (2016). Analisis Profitabilitas Pada Pt. Pegadaian (Persero) Kanwil V Manado. *None*, 4(4), 1–10.
- Priatna, H. (2016). Pengukuran Kinerja Perusahaan dengan Rasio Profitabilitas. *Jurnal Ilmiah Akuntansi*, 7(2), 44–53. <http://ejournal.unibba.ac.id/index.php/AKURAT>
- Prof.Dr.Sugiyono. (2015). *METODE PENELITIAN KOMBINASI*. Alfabeta.

- Rahayu, E. A., & Susilowibowo, J. (2014). Eka Ayu Rahayu dan Joni Susilowibowo; Pengaruh Perputaran Kas *Jurnal Ilmu Manajemen*, 2(4), 1444–1455.
- Sanjaya, S, A. R., & St Habibah, S. H. (2019). Analisis Pengendalian Persediaan Bahan Baku Tebu Dalam Pembuatan Gula Pasir di Pabrik Gula Bone Arasoe. *Jurnal Ilmiah Al-Tsarwah*, 2(2), 125–139. <https://doi.org/10.30863/al-tsarwah.v2i2.273>
- Saputra, D. (2013). Analisis Rasio Profitabilitas Pada Pt. Petrona Mining Contractors Di Samarinda. *Jurnal Ekonomi Universitas 17 Agustus 1945 Samarinda*, 53(1), 59–65. <http://dx.doi.org/10.1016/j.encep.2012.03.001>
- Sari, M. M. R. (2014). PERSEPSI KARYAWAN ATAS AUDIT MANAJEMEN Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia. *E-Jurnal Akuntansi Universitas Udayana*, 3, 538–553.
- Soetjitro, P. (2008). Mengukur Rentabilitas, Likuiditas, Solvabilitas, Profit Margin, Rasio Operasi, Dan Produktifitas Tenaga Kerja Perum Pegadaian Cabang Sleman Yogyakarta Periode 2006-2008. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*. Alfabeta.
- Utami, L. P., & Marpaung, N. N. (2022). Pengaruh Literasi Keuangan dan Gaya Hidup Terhadap Pengelolaan Keuangan Karyawan (Studi di PT. Mulia Boga Raya Tbk). *PARAMETER*, 7(1), 98–108. <https://doi.org/10.37751/parameter.v7i1.191>