# NET PROFIT MARGIN IN MEASURING PROFITABILITY IN PERUMDA PASAR CHAMPION BANDUNG

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| ARTICLEINFO | ABSTRACT |
|---|---|
| *Keywords*:<br>*Net Profit Margin, Financial Statements, Profitability* | This study aims to determine the effect of Net Profit Margin in measuring the Profitability of Perumda Pasar Juara. The population used in this study is the financial statements of Perumda Pasar Juara for the 3 year period 2019-2021. The income statement and balance sheet of Perumda Pasar Juara are used as research samples. The technique of determining the sample using purposive sampling. This type of research is a quantitative method utilizing a descriptive approach. The research data were analyzed through linear regression analysis using SPSS 26. The results of this study were that the net profit margin had a positive and significant effect on measuring the profitability of Perumda Pasar Juara. |
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## 1. INTRODUCTION

The rubber and plastics industry is an industry that is closely related to several other industries, therefore it is able to support national development because the rubber and plastics industry has an important role because it is needed by strategic manufacturing sectors such as the food, automotive, machinery and electronics industries. The development of the rubber and plastics industry in Indonesia is believed to have promising opportunities because it is supported by more than nine hundred companies with a total production of various plastic and rubber products reaching 4.7 million tonnes per year [1].

Profit growth in the rubber and plastics industry sector has decreased and not increased significantly over the past 4 years because during the last 4 years the rubber and plastic industry has recovered quite well, especially during the pandemic towards the new normal for the rubber and plastic industry the demand level was quite large. This was caused by the high demand for raw materials from various industries made from rubber and plastic. The following is a graph of profit growth for rubber and plastic industry companies for the period 2018 – 2021.
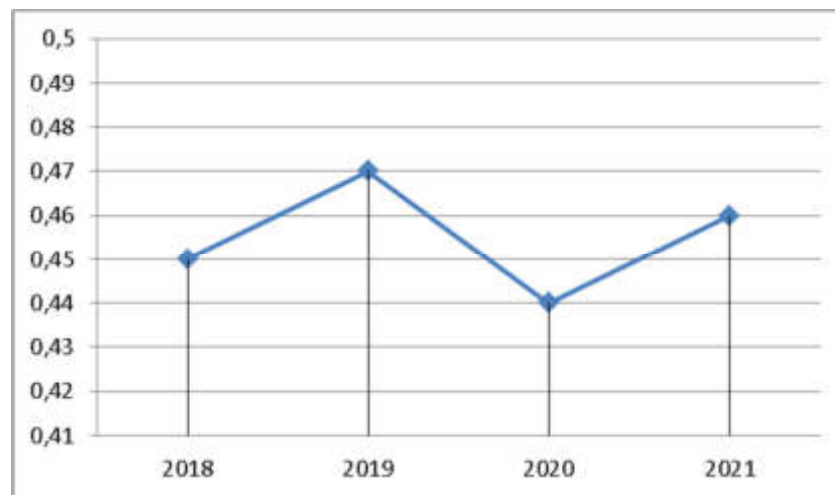


Figure 1. Rubber and Plastic Industry Profit Growth for the 2018 – 2021 period
*Source: Central Bureau of Statistics*

One of the industries that require raw materials from rubber and plastic is the automotive industry, one of which is spare parts such as Seal Leak Tests, Engine Testers, O-Rings, Rubber Seals, Cover Carrier Graphic and Urethane Dumpers which are urgently needed to manufacture motorcycle or car engines. Therefore, the demand for these goods is high enough to make the companies that produce these goods get quite lucrative profits. One of the companies that produce and sell these goods is PT Bunyamin Inovasi Teknik.

One of the company's ability to receive profits or profits can be seen based on ratios that tell developments based on sales and operational activities of a company, this can be calculated by the Profitability ratio, namely Net Profit Margin.

Based on the description above, the researcher is interested in examining profit growth at the company PT Bunyamin Inovasi Teknik, so the researcher takes the title "The Influence of Net Profit Margin in Measuring Profitability at PT Bunyamin Inovasi Teknik"[2]

## 2. LITERATURE REVIEW
### 2.1. *Net Profit Margins*(Net Profit Margin)
NPM (Net Profit Margin) is a ratio that measures how much a company's net profit is compared to the company's sales. This shows how efficient the company is, namely how far the company is able to reduce various operational costs in a period [3]. Or in other words, this ratio is a measure of net profit after sales tax. The higher the net profit margin, the better the operations of a company [4]. Mathematically Net Profit Margin can be formulated as follows:

$$\text{NPM} = \text{Net Profit After Interest and Tax / Net Sales} \times 100\%$$

Figure 2. Net Profit Margin Formula

### 2.2. Profitability
Profitability in the company is something that is fundamental to assessing the condition of the company, therefore an analysis tool is needed in its assessment. Related to this context, the analytical tool is in the form of financial ratios. Profitability ratios as a measure of how effective management is based on the return on investment and sales. Profitability is also crucial in efforts to maintain the long-term sustainability of a company, because it shows whether the company is related have good prospects in the future. Thus, every business entity will always try to increase its profitability, because the higher the level of company profitability, the more guaranteed the survival of the company [5].

Referring to the presentation of [6], profitability used by companies or outside parties aims to:
1) Measuring the productivity of all use of company funds;
2) Measuring the productivity of all uses of company funds, either own capital or loans;
3) Measuring the productivity of all use of company funds both own capital;
4) Assessing profit development over time;
5) Assess the company's profit position between the current and previous years;
6) Count or measure the profit that the company gets in a period.

There are many types of profitability ratios, one of which will be calculated here is Return On Assets (ROA) [7]. This is the ratio used as a measure of the overall ability of the company's available assets. ROA is also the most important ratio in the profitability ratio [8]. Return On Assets in the calculation uses the formula, namely: (Net Profit / Total Assets) x 100%

### 2.3. Thinking Framework Model
The framework of thinking serves to see the effect of net profit margin on the profitability of PT Bunyamin Inovasi Teknik. The following is an outline of the formulation of the research hypothesis:

Influence *Net Profit Margins*(x) → Profitability of PT Bunyamin Inovasi Teknik (y)
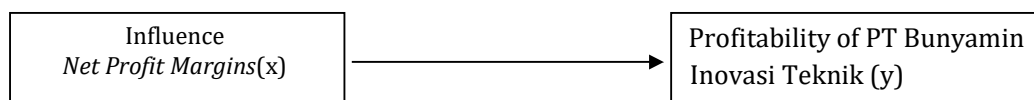
Figure 3. Thinking Framework

### Hypothesis
A hypothesis is a temporary conjecture about a cause and effect, or a relationship between variables whose truth must be proven. Based on this frame of mind, a hypothesis can be made, namely:

H0: Net Profit Margin has no effect on measuring the profitability of PT Bunyamin Inovasi Teknik.
HA: Net Profit Margin has an influence on measuring the profitability of PT Bunyamin Inovasi Teknik.

## 3. METHODS

### 3.1. Population and Sample

A brief definition of a population is a group of events, individuals, or something that is of interest to researchers to study[9]. In this study the population is based on financial reports for the 3 year period 2019 – 2021 Perumda Pasar Champion Bandung.

The part of the population that is selected is called the sample of the part of the population that is selected. Not all members of the population are samples [10]. The profit and loss report and balance sheet of PT Bunyamin Inovasi Teknik for the 3 year period 2019 – 2021 were determined to be the sample for this study.

Purposive sampling method is used as a sampling technique. This is sampling based on predetermined research criteria with the aim of obtaining a representative sample (Net et al., 2013).

### 3.2. Types of research

The type of research used is a quantitative method through a descriptive approach, where the research data uses quantitative data and the results of the data are described in statistical form so that it further strengthens the researcher's analysis in making conclusions from the hypotheses that have been presented in writing by the authors (Margin et al. , 2021).

### 3.3. Data Analysis Methods

Data analysis used descriptive statistical methods, classic assumption tests and simple linear regression tests which included one dependent variable (Y) and one independent variable (X) using the SPSS 26 application program.

## 4. RESULTS AND DISCUSSION

Descriptive analysis methods are used in the analysis and presentation of presenting quantitative data whose purpose is to describe the data so that it can be easily understood. Descriptive statistics provide an overview of the sample data used in the study, so you can see the minimum, maximum, standard deviation, and mean values of the variables studied [11]

The minimum value is the lowest value of the data being studied. While the highest value of the data studied is called the maximum value. The mean / average value is the average value of the data being studied. The standard deviation is a value that indicates the variation in the data being studied[12].

Descriptive statistics are related to efforts to collect data and present it. Thus, for the initial stages of the research, statistics were carried out with descriptive analysis which had a function to check the input data. Descriptive statistics show the results of measures such as the maximum value, minimum value, standard deviation, mean and sample value size of each research variable including the independent and dependent variables. The results of descriptive statistics for the 2019-2021 period use the SPSS 26 application program.

Table 1. Results of Descriptive Statistics
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| NPM | 3 | .04 | .61 | .3967 | .31086 |
| PROFITABILITY | 3 | .16 | 2.10 | 1.4267 | 1.09769 |
| Valid N (listwise) | 3 | | | | |

These results show that the amount of data used here is 3 data. PT Bunyamin Inovasi Teknik's net profit margin during 2019-2021 has 3 samples, the lowest value is a score of 0.04, namely net profit margin in 2020 and the highest value is a score of 0.61, namely net profit margin in 2021. The average value the net profit margin of PT Bunyamin Inovasi Teknik for 2019-2021 is 0.3967 with a standard deviation score of 0.31086[13].

PT Bunyamin Inovasi Teknik's profitability for 2019-2021 with a total of 3 samples, the lowest score is 0.16, namely profitability in 2020 and the highest score is 2.10 which is profitability in 2021. The average value of PT Bunyamin Inovasi Teknik's profitability in 2019- 2021 is worth 1.4267 with a score of 1.09769 for the standard deviation value.

## 4.1. Classic assumption test

The requirements to be able to use the linear regression equation include fulfilling the classical assumption test. The purpose of regression analysis is to determine the relationship of two or more variables. It is said to be good and feasible when the regression model meets the classical assumptions which include heteroscedasticity, autocorrelation, multicollinearity, and assumptions normality. After the classical assumption test is fulfilled, then the regression test can be carried out (Sha et al., 2015).

The normality test used is the Kolmogorov – Smirnov Test referring to a significance value of 5%. Residual data is declared to produce a normal distribution when the significance is > 0.05. Conversely, if the significance value is <0.05, it means that the residual data is not normally distributed.

This test is carried out in order to test whether the distribution of residuals or confounding variables is normal or not in the regression modeling. It is said to be good when the data used is normally distributed or almost normal. Data with a normal distribution or close to it is declared a good regression model. The normality test was carried out using the Kolmogorov – Smirnov test with 95% confidence.

**Tabel 2. Hasil Uji Normalitas**

| One-Sample Kolmogorov-Smirnov Test | | Unstandardized Residual |
|---|---|---|
| N | | 3 |
| Normal Parameters[a,b] | Mean | .0000000 |
| | Std. Deviation | .08376304 |
| Most Extreme Differences | Absolute | .218 |
| | Positive | .218 |
| | Negative | -.188 |
| Test Statistic | | .218 |
| Asymp. Sig. (2-tailed) | | .218 |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |

*Sumber : Data diolah, SPSS 26*

Table 2 shows that the significance value is 0.218> 0.05 indicating that there are no normality problems and the conclusion is that the residual values are normally distributed.

The use of the heteroscedasticity test as a tester whether in the regression modeling different variances and residuals appear from one observation to another. But if the opposite is called heteroscedasticity. It will be said to be good if the regression model does not show heteroscedasticity. Whether there is heteroscedasticity can be known from the significance value of each independent variable (Sha et al., 2015). If the independent variable has a significance value of <0.05, it can be concluded that the regression model shows heteroscedasticity. Conversely, if the significance value is > 0.05, it can be concluded that the regression model does not show heteroscedasticity. The results of the heteroscedasticity test are: The results of the heteroscedasticity test show the significance value of the NPM score 0.154 > 0.05 so there is no heteroscedasticity here.

## 4.2. Hypothesis testing

After carrying out the classical assumption test, it can be concluded that the data distribution is normal and does not show heteroscedasticity. It means that the regression model is feasible and good as a prediction of the dependent variable, namely profitability on the basis of the variable input net profit margin. The next stage is to carry out hypothesis testing using a 95% confidence level (Sha et al., 2015).

Simple linear regression analysis is a method used to test the effect of an independent variable (x) on the dependent variable (y), which is generally depicted using a straight line (Physics et al., 2016). For simple linear regression testing, decisions are taken based on the comparison of the significance value with the probability value of 0.05. If the significance value is <0.05, it means that variable X has an effect on variable Y. Conversely, if the significance value is > 0.05, it means that variable X has no effect on variable Y. A simple linear regression analysis test shows the results:

Table 4. Variable Entered/Removed

Variables Entered/Removed[a]

| Model | Variables Entered | Variables Removed | method |
|---|---|---|---|

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| 1 | NPMᵇ | . enter |
|---|------|---------|

a. Dependent Variable: PROFITABILITY
b. All requested variables entered.

In table 4 the entered/removed variables explain the variables entered, namely the NPM variable as the independent variable and profitability as the dependent variable and the enter method is the method used here.

Analysis of the coefficient of determination test (R Square) is included in the simple linear regression analysis section which is used as a measure of the extent to which the model is able to explain the dependent variable and its variations. The coefficient of determination is zero and one. If the value of R is getting closer to one, it means that the relationship that appears is getting stronger, conversely, the value of R is getting closer to zero, the relationship will be getting weaker [14].

In the data presented, the magnitude of the value of the relationship or correlation (R) is 0.997. which concludes that the influence of the independent variable (NPM) on the dependent variable (Profitability) is strong and positive because the R value exceeds 0.5. From the previous table, the coefficient of determination (R Square) obtained is 0.994, which means 99.4%. Variations in profitability can be explained by variations in net profit margin while the remaining 0.6% is explained by other factors outside the research model.

The F statistical test analysis (simultaneous effect test) is a part of a simple linear regression analysis or an ANOVA test to examine the effect of the independent variables simultaneously on the dependent variable. As a test of the significance or not/good or not the regression model used. (Hidayat, 2017)

**Table 6. Statistical Simultaneous Test Results F**

ANOVAª

| Model | | Sum of Squares | Df | MeanSquare | F | Sig. |
|-------|--|---------------|-----|-----------|-----|------|
| 1 | Regression | 2,396 | 1 | 2,396 | 170,735 | .049ᵇ |
| | residual | 014 | 1 | 014 | | |
| | Total | 2,410 | 2 | | | |

a. Dependent Variable: PROFITABILITY
b. Predictors: (Constant), NPM

Referring to table 6, it can be concluded that the value F count = 170,735 with a significance score of 0.04 <0.05, for that regression modeling can be used as a predictor of the profitability variable or it is said that the effect of the net profit margin/NPM (x) variable on the profitability variable (y) is said to be found.

The T test (Partial Test) is part of the statistical test used to test the research hypothesis regarding the effect of each independent variable on the dependent variable individually. The T test is also used to prove whether the hypothesis is true which describes that from two sample means drawn randomly from one population, no significant difference is found. The T test is also called the final stage in calculating a simple linear regression test because in this T test we can make the final decision in a simple linear regression test whether our hypothesis is significant or not. With the criteria for the T statistical test, if the significance value of the T test is <0.05, it means that H0 is rejected and HA is accepted. This means that the effect of the independent variable (x) on the dependent variable (y) is found. Conversely, if the significance value is > 0.05, it indicates that H0 is accepted and HA is rejected. This means that there is no effect of the independent variable (x) on the dependent variable (y). (Meiryani, 2021)

Table 7. Statistical Partial Test Results T

Coefficientsª

| | Model | Unstandardized Coefficients | | standardized Coefficients |
|--|-------|---------------------------|--|--------------------------|
| | | B | std. Error | Betas |
| t | Sig. | | | |
| 1 (Constant) | .030 | .127 | | .237 | .852 |
| NPM | 3,521 | .269 | .997 | 13,067 | .049 |

a. Dependent Variable: PROFITABILITY

Referring to the previous data, the effect of profitability on the net profit margin shows a constant value (a) with a score of 0.30, while the NPM (b / regression coefficient) has a score of 3,521, therefore the regression equation is formulated here, namely:

$$Y = a + bX$$
$$Y = 0.30 + 3.521X$$

It can be concluded that the magnitude of the net profit margin raises a significance value of 0.049, which means that Ha is accepted because the significance value is less than 0.05 and H0 is rejected because the significance value does not exceed 0.05. So found the effect of net profit margin on profitability with a significant positive.

Net profit marginis the ratio that measures the amount of net profit on net sales. The higher this ratio indicates the profit earned on the results of the sale is getting higher. Conversely, the lower the net profit margin indicates the profit earned on small sales activities. [15]

Referring to the test results, the significance value is scored 0.049, which means that the net profit margin variable has a positive effect on the profitability of PT Bunyamin Inovasi Teknik with a significant value because the significance value is 0.049 <0.05. This elaboration explains that the company can earn profits due to its net sales and manage costs for operational activities generated so that the company is able to use its net profit again to support increased sales [16]

## 5. CONCLUSION

Referring to the hypothesis test, the coefficient of determination (R Square) is 0.994, which means 99.4%. Variations in profitability can be revealed by variations in net profit margin, while the rest with a score of 0.6% is explained by other factors beyond this research.

Based on the hypothesis test simultaneously, Net Profit Margin has a significant positive effect on profitability, where the value F count = 170,735 with a significance score of 0.04 <0.05, with regression modeling it can be used as a predictor of the profitability variable or it is said that the effect of the net profit margin / NPM (x) variable on profitability variable (y) then the hypothesis is supported.

Based on the hypothesis tested individually, Net Profit Margin has a significant positive effect on profitability, so Ha is accepted because it describes that Net Profit Margin has an influence in measuring the Profitability of PT Bunyamin Inovasi Teknik. Whereas H0 was rejected because it revealed that there was no effect of Net Profit Margin in measuring the Profitability of PT Bunyamin Inovasi Teknik.

## REFERENCES

[1]    E. K. Kiha, S. Seran, and G. Seuk, "Pengaruh Inflasi, Produk Domestik Regional Bruto Dan Upah Minimum Regional Terhadap Indeks Pembangunan Manusia Propinsi Nusa Tenggara Timur," *INVEST J. Inov. Bisnis dan Akunt.*, vol. 2, no. 1, pp. 41–56, 2021.

[2]    O. J. Keuangan, "Penyelenggara Fintech yang Terdaftar di OJK per Agustus 2018." 2018.

[3]    M. Irman and A. A. Purwati, "Analysis on the influence of current ratio, debt to equity ratio and total asset turnover toward return on assets on the otomotive and component company that has been registered in Indonesia Stock Exchange Within 2011-2017," *Int. J. Econ. Dev. Res.*, vol. 1, no. 1, pp. 36–44, 2020.

[4]    E. Hernawati, W. Warsiati, P. Studi, A. Keuangan, and P. P. Ganesha, "Analisis Pengaruh Efisiensi Modal Kerja Terhadap Net Profit Margin Pada PT Unilever," *J. EKBIS*, vol. 9, no. 1, pp. 40–50, 2021.

[5]    M. Darmawan, *Dasar-dasar Memahami Rasio dan Laporan Keuangan*. UNY Press, 2020.

[6]    B. Kasmir and L. K. Lainnya, "Analisisi Laporan Keuangan." Raja Grafindo Persada, Jakarta, 2002.

[7]    S. Suharti and Y. Tannia, "Analisis Pengaruh Debt to Equity Ratio, Debt to Asset Ratio, Price Earning Ratio dan Price to Book Value Terhadap Harga Saham Pada Perusahaan Sektor Pertanian," *INVEST J. Inov. Bisnis dan Akunt.*, vol. 1, no. 1, pp. 13–26, 2020.

[8]    E. Hernawati, "PENGARUH PERTUMBUHAN PENJUALAN DAN PERPUTARAN MODAL KERJA TERHADAP RETURN ON ASSETS (ROA)," *EKBIS (Ekonomi & Bisnis)*, vol. 8, no. 2, pp. 36–44, 2020.

[9]    R. F. Ramayani, "Analisis Pendapatan Usaha Industri Rumah Tangga Roti Mini Bakery Di Kota Palembang," *Manag. Stud. Entrep. J.*, vol. 2, no. 2, pp. 160–177, 2021.

[10]   D. N. C. Atra, Y. Yeti, B. Rahayu, and M. Yusuf, "EFFECT OF COMPETENCE AND COMPENSATION ON EMPLOYEE PERFORMANCE," *J. Innov. Res. Knowl.*, vol. 2, no. 6, pp. 2477–2482, 2022.

[11]   T. L. Sha, "Pengaruh Kebijakan Dividen, Likuiditas, Net Profit Margin, Return On Equity, dan Price To Book Value Terhadap Harga Saham Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia 2010-2013," *J. Akunt.*, vol. 19, no. 2, pp. 276–294, 2015.

[12]   S. Sutrisno, P. A. Cakranegara, F. Asri, M. Yusuf, and J. Sahala, "STRATEGY FOR MSME

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DEVELOPMENT USING FINANCIAL TECHNOLOGY TO INCREASE CAPITAL AND CONSUMERS," *J. Darma Agung*, vol. 30, no. 2, pp. 677–686, 2022.

[13]  F. Sampe, M. Yusuf, D. L. Pakiding, A. Haryono, and S. Sutrisno, "APPLICATION OF DIGITAL MARKETING IN MAINTAINING MSMES DURING THE COVID-19 PANDEMIC," *J. Darma Agung*, vol. 30, no. 2, pp. 663–676, 2022.

[14]  S. R. Ningsih and S. Utiyati, "Pengaruh Current Ratio, Debt To Asset Ratio, Dan Net Profit Margin Terhadap Pertumbuhan Laba," *J. Ilmu dan Ris. Manaj.*, vol. 9, no. 6, 2020.

[15]  A. F. Irawan and S. Sitohang, "PENGARUH CURRENT RATIO, NET PROFIT MARGIN, GROSS PROFIT MARGIN, DAN TOTAL ASSET TURNOVER TERHADAP PERTUMBUHAN LABA PADA UD PRIMA MEBEL DI SURABAYA," *J. Ilmu dan Ris. Manaj.*, vol. 7, no. 10, 2018.

[16]  N. K. Suryani, I. Sugianingrat, and K. Laksemini, *Kinerja Sumber Daya Manusia: Teori, Aplikasi dan Penelitian*. books.google.com, 2020. [Online]. Available: https://books.google.com/books?hl=en&lr=&id=FOTsDwAAQBAJ&oi=fnd&pg=PA1&dq=sumber+daya+manusia&ots=C3UpzZF3-m&sig=jaF-IYyV5UJuuSylWhdCvGgBagg