

The Effect of Net Income, Price-To-Book Value, and Price-Earnings Ratio on Stock Prices in The Food and Beverage Industry Listed on The Indonesian Stock Exchange Period 2016-2020

Theodora Inda Maria ^{1*}, Hana Tamara Putri ², Fadil Iskandar ³

^{1,2,3} Faculty of Economics, Universitas Batanghari, Indonesia

Email: theodorainda99@gmail.com ¹, hanatamaraputri88@gmail.com ², fdliskandar00@gmail.com ³

*Corresponding Author

ABSTRACT

The purpose of this study is to analyze the effect of market ratios (independent variables: Net Profit, Price to Book Value, Price Earnings Ratio on variables bound to stock prices) simultaneously and personally on the food and beverage industry in Indonesia Stock Exchange for the period 2016-2020. The data analysis method used in this study is a quantitative descriptive method with multiple linear regression analysis tools that are useful for seeing the relationship between independent variables and dependent variables. The program used to process this research data is SPSS version 22. The tests carried out are the F hypothesis test, t hypothesis, and coefficient of determination (R²). This industrial estate is a company whose activities are engaged in food and beverages for the needs of the community. Companies listed on the Indonesia Stock Exchange are PT Delta Jakarta Tbk (DLTA), PT Indofood CBP Makmur Tbk (ICBP), PT Indofood Sukses Makmur Tbk (INDF), PT Mayora Indah Tbk (MYOR), PT Multi Bintang Indonesia Tbk (MLBI), PT Nippon Indosari Corporindo Tbk (ROTI), PT Prasidha Aneka Niaga Tbk (PSDN), PT. Sekar Bumi Tbk (SKBM), PT Sekar Laut Tbk (SKLT), PT Siantar Top Tbk (STTP), PT Tiga Pilar Sejahtera Food Tbk (AISA), PT Tri Banyan Tirta Tbk (ALTO), PT Ultra Jaya Industri Tbk (ULTJ), PT Wilmar Cahaya Indonesia Tbk (CEKA). Based on the results of this study, net profit, price-to-book value, and price-earner ratio have a significant effect on stock price simultaneously. At the same time, it is known that there is a significant influence between net profit and stock prices in the food industry listed on the Indonesia Stock Exchange for the 2016-2020 period. Price-to-book value does not have a significant effect on stock price in personal, while price-earnings ratio has a significant effect on the stock price.

Keywords: Net Profit; Price To Book Value; Price Earnings Ratio

DOI: <https://doi.org/10.35145/icobima.v3i2.5100>

SDGs: Decent Work and Economic Growth (8); Industry, Innovation, and Infrastructure (9)

INTRODUCTION

Background

The Capital Market is one of the meeting places for investors who want to trade their shares. To decide to buy or sell shares, investors need the availability of financial information from the company. One of the financial pieces of information that investors pay attention to is the market price of the company's shares on the Indonesia Stock Exchange or what is usually called the stock price index. If the stock price index falls, it means that the issuer's efforts to improve its economy are not successful, and vice versa. If the Stock Price Index rises, it means that the issuer's efforts have succeeded in increasing profits or investment returns. In many countries, especially those that follow the capital market economy system, the development of the Stock Price Index has become evidence of the country's economic progress. This is because the development of the Stock Price Index can make a significant contribution to the capital market and can form Gross Domestic Income (GDP). Funds obtained from the capital market can be used for business development, expansion, additional working capital, and other purposes. Both capital markets have become a means for the public to invest in financial instruments such as stocks, bonds, mutual funds, and others. Thus, the public can place their funds in accordance with the profit and risk characteristics of each instrument.

The company's value is very important because it reflects the company's performance (Panjaitan et al., 2023), which can affect investors' perceptions of the company. Investors, when making investment decisions in the capital market, require information about stock valuation. There are three types of valuations related to shares: book value, market value, and intrinsic value. Book value is the value of shares according to the issuer's

books. Market value is the bookkeeping value of shares on the stock market, and intrinsic value is the true value of shares. Investors need to know and understand these three values as important information in making stock investment decisions because they can help investors know which stocks are growing and cheap.

In the stock market, a company's share price often depends on the movement of the overall stock price. In general, the company's goal is to increase the prosperity of shareholders, especially companies in the form of Limited Liability Companies (PT), where the investment comes from shareholders. In increasing the prosperity of shareholders, management is required to be able to increase the value of the company, which is reflected in an increase in the company's share price. The increase in the company's share price will increase the share income of investors who invest in the company.

Stock prices on the stock exchange, in reality, have a level of instability, so investors must do a good analysis in order to make the right decisions, and the increase and decrease in stock prices are still within reasonable limits. The share price reflects the value of the company, so the share price is strongly influenced by the company's achievements and performance, as well as prospects for increasing the company's value in the future. If achievement and performance increase, then investors will receive income or profits from shares owned in the company in the form of dividends and capital gains. Dividends are the value of the company's net income after tax minus the retained earnings that are held as reserves for the company (Walettina & Anton, 2022). Meanwhile, capital gain is income from the difference between the selling price of shares and the purchase price.

Several variables, including net income, price-to-book value, and price-earnings ratio (Hocky et al., 2023), can influence the stock price. The company's net profit is one of the factors that investors see in the capital market to determine their investment choice. Net income must be increased because it will allow the company to continue to exist and remain in demand by investors. Price-to-book value is the book value of the company's shares that shareholders will receive.

The price-earnings ratio is a market ratio used to see how the market values the performance of a company's shares against the company's performance as reflected by its EPS (Earning Per Share). The greater the price-earnings ratio of a stock, the more expensive the stock will be against its net income per share. PER on stock prices has a negative effect on stock prices. This means that investors tend to invest in companies that have low PER values. In this period, investors do not have a stock price as a reference in investing, but investors use the level of earnings per share issued by the company.

The object of this research is the Food and Beverage Industry listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period, which reports annual financial performance in accordance with the research year. The reason the authors chose food and beverage companies as the object of research is because food and beverage companies are one of the business sectors that continues to experience growth along with the increasing population. In addition, in 2016, the contribution of the food and beverage industry was seen from the contribution of the export value of USD456.6 million. In 2017, the industry contributed to the export value of food and beverage products (Chandra et al., 2023), reaching USD 17,86 billion.

This achievement still made the trade balance positive when compared to the value of imports in the same period of USD 6,81 billion. In 2018, seen from the development of investment realization, the food and beverage industry sector for domestic investment reached IDR 27,92 trillion, while foreign investment was US\$ 1.46 billion. In 2019, the food and beverage industry were also one of the sectors that supported the increase in the value of national investment, which contributed up to IDR56.60 trillion. The total realization of investment value in the manufacturing industry sector over the past year reached Rp222.3 trillion. In 2020, the gross domestic product (GDP) growth of the food and beverage industry reached 6,77%. This figure is above the national industry GDP growth of 5.07%. The food and beverage industry were able to attract investment of US\$383 million and Rp8,9 trillion until the fourth quarter of 2020 and contributed 35,58% to the Non-Oil and Gas Industry GDP and 6,35% to the National GDP (Stevany et al., 2022).

In this study, the population used in the Food and Beverage industry totaled 27 companies listed on the Indonesia Stock Exchange in 2016-2020, which were listed on the IDX, while part of the number and characteristics possessed by the population was determined using purposive sampling. The sample withdrawal criteria for food and beverage industry companies listed on the Indonesia Stock Exchange for the 2016-2020 period were 27 companies, and food and beverage industry companies listed on the Indonesia Stock Exchange that had incomplete data during 2016-2020 were 13 companies, while the samples used in this study were 14 companies.

Problem Formulation

Based on the problem identification above, it can be seen that the problem formulation is as follows:

1. How do net income, price-to-book value, and price-earnings ratio affect stock prices simultaneously in the food and beverage industry listed on the Indonesia Stock Exchange from 2016 to 2020?
2. How do net income, price-to-book value, and price-earnings ratio affect stock prices in the food and beverage industry listed on the Indonesia Stock Exchange from 2016 to 2020?

Research Objectives

Based on the problem formulation above, it can be seen that the objectives of this study are as follows:

1. The aim is to determine and analyze the effect of net income, price-to-book value, and price-earnings ratio on stock prices simultaneously in the food and beverage industry listed on the Indonesia Stock Exchange from 2016 to 2020.
2. To determine and analyze the effect of net income, price-to-book value, and price-earner ratio on stock prices in the food and beverage industry listed on the Indonesia Stock Exchange from 2016 to 2020.

LITERATURE REVIEW

Management

According to Effendi (2014: 5), management is a process of cooperation between two or more people to achieve organizational goals by planning, organizing, directing, coordinating and controlling to achieve organizational goals effectively and efficiently by using human resources and other resources. According to M. Manullang (2018: 2), the definition of management is the art and science of planning, organizing, preparing, directing, and supervising human resources to achieve goals that have been set in advance. Malayu S.P. Hasibuan (2016: 2) defines management as the science or art of managing the process of utilizing human resources and other resources effectively and efficiently to achieve a certain goal. Meanwhile, according to G.R. Terry (2018: 3), management is a typical process consisting of planning, organizing, directing, and controlling actions carried out to determine and achieve predetermined goals through the use of human resources and other sources.

From some of the above opinions, management is the science and art of someone's effective and efficient achievement of certain goals through the process of planning, organizing, directing, and controlling with the help of others.

Financial Management

According to Fahmi (2014: 2), it is a combination of science and art that discusses, examines, and analyses how a financial manager processes funds and distributes funds with the aim of being able to provide profit or prosperity for shareholders and sustainability for the company. According to Utari Dkk (2014: 1), financial management is planning, organizing, implementing, managing and controlling financial funds at the lowest cost and using these funds effectively and efficiently to carry out operational activities.

From some of the above definitions, financial management is a decision-making process in the financial sector where decisions are always related to efforts to obtain funds and spend them effectively and efficiently. Financial management can be interpreted as planning, organizing, staffing and controlling financial functions.

Financial Report

According to Munawir (2010: 2-5) states that financial statements are the result of an accounting process that can be used as a means of communicating between financial data or activities of a company and parties with an interest in the data or activities of the company (Suhardjo et al., 2023). According to Darsono (2011: 101), financial management is the activity of owners and borrowers of a company to obtain capital sources from a company as cheaply as possible and use them as effectively, efficiently, and economically as possible to generate profits. From the other two definitions, it can be concluded that financial statements are a list, namely the balance sheet and profit and loss calculation compiled by an accountant, which contains information about the company's performance to parties with an interest in the company.

According to Darsono (2011: 101), financial management is the activity of owners and borrowers of a company to obtain capital sources from a company as cheaply as possible and use them as effectively, efficiently, and economically as possible to generate profits. From the other two definitions, it can be concluded

that financial statements are a list, namely the balance sheet and profit and loss calculation prepared by an accountant, which contains information about the company's performance to parties with an interest in the company.

Financial reports are prepared with the intention of providing financial information on a company to interested parties for consideration in making decisions. In addition, financial reports can also be used to fulfil other purposes, namely as financial reports to parties outside the company.

Net Profit Margin (NPM)

Joel G. Siegel and Jae K. Shin in Irham Fahmi (2013: 136) discuss this profit margin: "(1) net profit margin divided by net sales. This shows the unit's stability in generating revenue at a specific sales level. (2) Gross margin is equal to gross profit divided by net profit. A high-profit margin is preferable because it shows that the company gets good results that exceed the cost of goods sold.

Market ratio

It is a set of ratios that relate stock prices to earnings and book value per share (Panjaitan et al., 2024). This ratio provides clues about what investors think of the company's past performance and prospects (Moeljadi, 2006: 75). It is a set of ratios that relate stock prices to earnings and book value per share (Fahmi, 2011: 83). According to Hanafi (2004: 43) Market ratios measure the market price of a company's shares, relative to its book value. The point of view of this ratio is more based on the point of view of investors or potential investors, although management is also interested in this ratio. In the market ratio, there is a price-earnings ratio and Price-to-book value.

Price To Book Value (PBV)

In Indonesian, the Price to Book Value Ratio, abbreviated as Price to Book Value, is an investment valuation ratio often used by investors to compare the market value of a company's shares with its book value. This ratio shows how much the holder is financing the company's net assets. Book Value provides an estimate of a company's value if it is required to liquidate (Fadrul et al., 2024).

This Book Value is the value of the company's assets listed in the financial statements or Balance Sheet. It is calculated by subtracting the company's liabilities from its assets ($\text{Book Value} = \text{Assets} - \text{Liabilities}$). In other words, this price-to-book value ratio can show what shareholders will get after the company is sold and all debts are paid off (Infante et al., 2024). A low Price-to-book value ratio is a good sign for the company. Price to Book Value helps investors compare the market value or stock price they pay per share with traditional measures of a company's value.

According to Athanasius (2012: 23), Price to Book Value is a ratio that shows how high investors buy a share compared to the book value of the shares. The smaller the PBV value, the cheaper the price of a stock is considered. PBV is a value that can be used to compare a stock that is more expensive or cheaper than other stocks. To compare, two or more companies must be from one business group that has the same business nature (Sihombing, 2008: 95).

Price Earnings Ratio (PER)

According to Sugiyanto (2008: 26), the Price Earnings Ratio is a ratio obtained from the market price of common shares divided by the company's profit. So, the higher the ratio will indicate that the company's performance is getting better; on the other hand, if the Price Earnings Ratio is too high, it can also indicate that the share price offered is high or irrational. According to Fahmi (2013: 83), for investors, the higher the price-earnings ratio, the higher the expected profit growth will also be. That way, the Price Earnings Ratio (price to earnings ratio) is a comparison between the market price per share (price per share). The greater the Price Earnings Ratio of stock, the more expensive the stock price will be against its net income per share. The growth rate of a company is a determinant of stock prices; the higher the growth rate, the higher the Price Earnings Ratio. Therefore, the Price Earnings Ratio can be used as an indicator of the expected growth rate.

Based on the explanation above, it can be concluded that knowing a company's price-earnings ratio can help investors estimate its position relative to other stocks and whether it is worth buying.

Relationship between Variables

Effect of Net Income on Share Price

According to Halim (2013: 17), the net profit of a company is often used as a benchmark or measure of successful performance in a company. This, of course, will be important information for investors because this earnings information will provide an estimate of the return that will be obtained, which will have an impact on stock price movements due to stock supply and demand. This is in line with research conducted by Lailan (2015), which states that net income does not have a positive and significant relationship with stock prices.

The Effect of Price To Book Value on Stock Price

According to Henry (2016: 145), Price to Book Value is a ratio that shows the results of the comparison between the market price per share and the book value per share. The indicator of price to book value is the market price per share divided by the book value per share. For companies that are doing well, this ratio generally reaches above one, which indicates that the market value of the stock is greater than its book value. The greater the Price-book Value ratio, the higher the company is valued by investors relative to the funds invested in the company. According to Djarmadji (2011: 139), Price To Book Value is the ratio of a company's share price. Price To Book Value, which illustrates the market's appreciation of the company's ability to generate profits. A high Price-to-book value will cause a high stock price and vice versa.

According to Poernomowati (2010: 45), the Price Book Value ratio is a comparison between the share price and the book value of the company's equity, showing the level of the company's ability to create relative value for the amount of capital invested by investors. Thus, the higher the ratio, the more successful and capable the company is in creating value for shareholders, whereas the higher the level of market confidence in the company's prospects, the demand for these shares increases, then driving the company's share price. This is in line with research conducted by Nerissa and Narumi (2013), which states that price-to-book value has a positive and significant relationship with stock prices.

Effect of Price Earnings Ratio on Stock Price

According to Sugiyanto (2013: 26), the earnings ratio ratio is obtained from the share price divided by earnings per share. So, a higher ratio will indicate that the company's performance is also improving. According to Tandelilin (2010: 375), PER information indicates the number of rupiah that investors must pay to get one rupiah of company earnings. In other words, PER shows the price of every one rupiah of the company's earnings. Based on the theory, according to Djarmadji (2011: 139), reveals that PER is the ratio of a company's share price. PER illustrates the market's appreciation of the company's ability to generate profits. A high PER will cause a high stock price, and vice versa. In addition, PER is also a measure of the relative price of a company's shares. So, PER has a very close relationship with stock prices. This is in line with Susiani's research (2017), which states that PER has no positive or significant effect on stock prices.

Framework of Thought

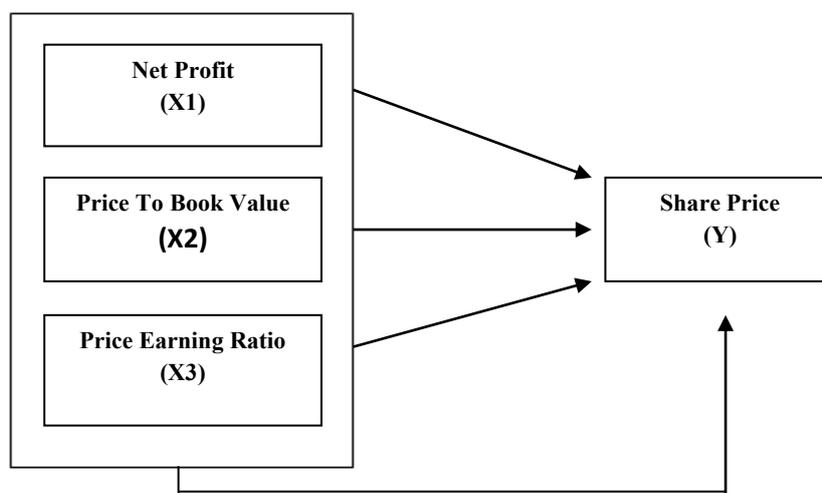


Figure 1. Framework Chart

Research Hypothesis

Based on the above framework, the hypothesis for this study is formulated as follows:

1. It is suspected that net profit, price to book value, and price earnings ratio simultaneously affected the share price in the Food and Beverage Industry listed on the Indonesia Stock Exchange from 2016 to 2020.
2. It is suspected that net profit, price-to-book value, and price-earnings ratio partially affected the share price in the Food and Beverage Industry listed on the Indonesia Stock Exchange from 2016 to 2020.

RESEARCH METHODOLOGY

Data Type and Source

1. Data Type

In this study, the data used is a type of secondary data, namely data obtained or collected by people conducting research from existing sources (Dalil et al., 2024). The data collected is in the form of annual financial reports of the Consumer Goods Industry listed on the Indonesia Stock Exchange for 2016-2020 (Rahman et al., 2024).

2. Data Source

The data in this study were obtained from the financial statements of the Food and Beverage Industry listed on the Indonesia Stock Exchange 2016-2020 from www.idx.co.id and each company's website (Renaldo & Veronica, 2024).

Data Collection Methods

In order to obtain the necessary data, secondary data collection techniques are as follows:

1. Desk research

Data collection techniques are based on theories from various literature related to the object of research. The data needed for research is obtained from books related to the research to be carried out. The data can also be obtained from the Internet, which is one of the media for library research (Hutahuruk et al., 2024).

2. Documentation

Data collection techniques include recording data from documents related to the research object and in the form of financial reports published annually by the Food and Beverage Industry listed on the Indonesia Stock Exchange 2016-2020 (Junaedi et al., 2024).

Analysis Tool

The method used in this research is Multiple Linear Regression analysis to find out the effect of Net Income, Price To Book Value, and Price Earnings Ratio on stock prices and how much influence it has; multiple linear regression equations are used, using the formula quoted from Sugiyono (2010: 275) as follows:

$$Y = a + \beta X_{1it} + \beta X_{2it} + \beta X_{3it} + e$$

The variables in this study use different counting units; therefore, to minimize the range of units, logarithms are used, so the regression equation becomes as follows:

$$Y = a + \beta_1 \text{Log } X_{1it} + \beta_2 \text{Log } X_{2it} + \beta_3 \text{Log } X_{3it} + e$$

Description:

Y = Share Price

β = Regression Coefficient

a = Constant

X_1 = Price Book Value (PBV)

X_2 = Net Profit

X_3 = Price Earnings Ratio (PER)

e = Error

i = Industry

t = Time

Classical Assumption Test

Before conducting hypothesis testing, a classic assumption test is first carried out, the classic assumption test is a requirement that must be met in calculations using regression analysis to assess whether a linear regression model has classical assumption problems so that it is not feasible to test, the following is the classic assumption test used in this study (Kersiati et al., 2023):

Normality Test

Before conducting data analysis and hypothesis testing, the assumptions in the regression analysis model must first be tested (Putri et al., 2023). Normality test results by means of graph analysis (Rafizal et al., 2022). Normality can be detected by looking at the distribution of data (points) on the diagonal axis of the graph (Yarmanelis et al., 2022). If it can spread around the diagonal line and follow the direction of the diagonal line, the histogram graph will show a normal distribution pattern (Ngatno et al., 2022). The regression fulfils the assumption of normality (Hafni et al., 2024). If the data spreads far from the diagonal line or does not follow the direction of the diagonal line, or the histogram graph does not show a distribution pattern (Nasien et al., 2025). The regression model does not fulfil the assumption of normality (Susanti et al., 2025).

This test aims to determine whether the dependent variable or independent variable in a regression model has a normal or abnormal distribution (Zuhairra & Putri, 2020). To see the distribution of normality in a regression model, we can use SPSS version 22, which can be seen in the P-Plot graph below (Sinaga & Hajjah, 2020):

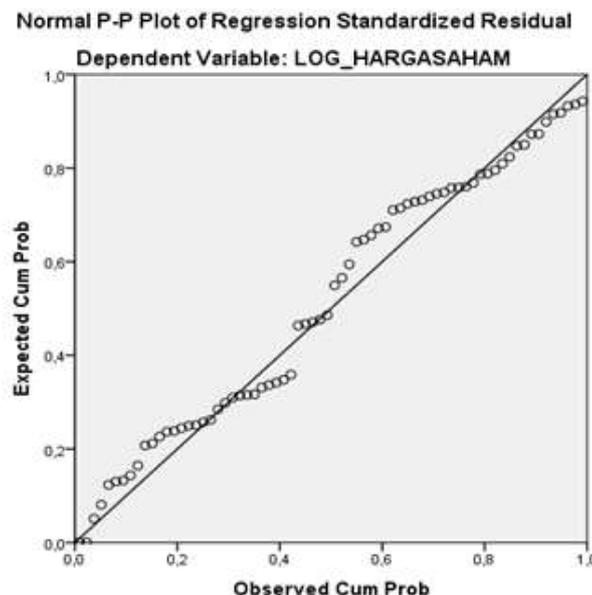


Figure 1. Normality Test Results

The picture above shows the normal probability plot with the points spread around the diagonal line (Marlim et al., 2025). This shows that the regression model, the dependent variable and the independent variable have a normal or near-normal distribution (Purwati et al., 2025).

Multicollinearity Test

A multicollinearity test is a situation where the independent variable correlates with other independent variables or an independent variable is a linear function of other independent variables (Safari et al., 2025). The presence or absence of multicollinearity can be seen from the VIF value < 10 and the tolerance value $> 0,1$, so the regression model can be concluded to be free from multicollinearity assumptions, and vice versa if the VIF value > 10 and the tolerance value $< 0,1$, it can be concluded that there is a multicollinearity disorder in the linear

model (Suharti & Shinta, 2021). The higher the VIF, the lower the tolerance. The results of multicollinearity testing in this study can be seen in the following table:

Table 1. Multicollinearity Test Results

Model		Coefficients ^a			T	Sig.	Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients			Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	,726	,366		1,981	,052		
	LOG NET PRICE	,335	,065	,477	5,133	,000	,954	1,048
	LOG PBV	,021	,090	,023	,239	,812	,878	1,139
	LOG PER	,519	,135	,379	3,830	,000	,841	1,189

a. Dependent Variable: LOG STOCK PRICE

Based on Table 1, it can be seen that the VIF value and tolerance value for each research variable are as follows:

1. The VIF value for the Net Profit variable is $1,048 < 10$, and the tolerance value is $0,954 > 0,1$, so it can be said that the Net Profit variable does not occur in multicollinearity.
2. The VIF value for the price-to-book value variable is $1,139 < 10$, and the tolerance value is $0,878 > 0,1$, so the price-to-book value variable does not occur in multicollinearity.
3. The VIF value of the Price Earnings Ratio is $1,189 < 10$, and the tolerance value is $0,841 > 0,1$, so the Price Earnings Ratio variable does not occur in multicollinearity.

Based on the results above, which show that all independent variables have a tolerance value above 0,1 and VIF below 10, it can be concluded that there is no multicollinearity or that multicollinearity is fulfilled.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether, in the regression model, there is an inequality of variance from the residuals of one observation to another (Desnelita et al., 2025). One of the ways used is by looking at the plot graph. Heteroscedasticity test results using the scatterplot graph in the image below:

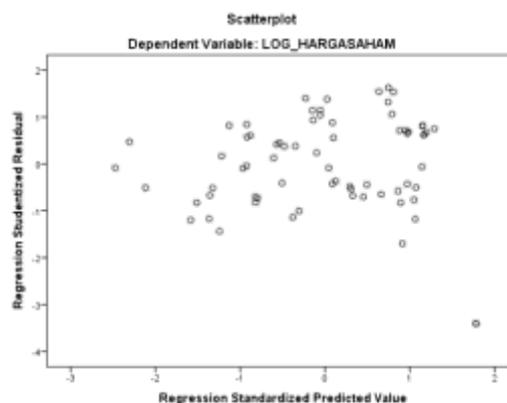


Figure 2. Heteroscedasticity Test Results

Based on the scatterplot graph analysis above, it can be seen that the points spread randomly and do not form a clear pattern. They are spread both above and below the number 0 (zero) on the Y-axis. This means that there is no deviation from the classical assumption of heteroscedasticity in the regression model.

Autocorrelation Test

A good regression model is free from autocorrelation. Autocorrelation test with Durbin Watson (DW), in simple terms, uses regression analysis to see the effect between the independent variable and the dependent variable. Durbin Watson (DW) detects the presence or absence of autocorrelation symptoms as the basis above; the basis for making statistical test decisions with the run test is (Ghozali, 2016: 116):

- if the value of Asymp, Sig. (2-tailed) is less than 0.05, then H_0 is rejected, and H_a is accepted. This means that the residual data occurs non-randomly (systematically).
- if the Asymp, Sig. (2-tailed) value is more than 0.05, then H_0 is accepted, and H_a is rejected. This means that the residual data occurs randomly (random).

The results of the autocorrelation test, based on the results of data analysis calculations using SPSS, can be seen in the model summary table.

Table 2. Durbin Watson Autocorrelation Test Results

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,675 ^a	,456	,431	,43630	,887
a. Predictors: (Constant), LOG PER, LOG NET PROFIT, LOG PBV					
b. Dependent Variable: LOG STOCK PRICE					

Based on Table 2 above, the Durbin-Watson test number of 0.887 lies between -2 to 2 ($-2 < 0.887 < 2$), so it is decided that this regression does not occur autocorrelation. So, it can be entered into multiple linear regression.

Multiple Linear Regression

Multiple linear regression with panel data is used to explain the relationship between one variable and more than one other variable. In this study, multiple linear regression equation models with panel data were compiled to determine the effect of Net Income, Price to Book Value, and Price Earnings Ratio as independent variables on the closing price as the dependent variable simultaneously (together) and partially (alone). By using the SPSS version 22 computer program, the following calculations were obtained:

Table 3. Multiple Linear Regression Results

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	,726	,366		1,981	,052		
1 LOG NET PROFIT	,335	,065	,477	5,133	,000	,954	1,048
LOG PBV	,021	,090	,023	,239	,812	,878	1,139
LOG PER	,519	,135	,379	3,830	,000	,841	1,189

a. Dependent Variable: LOG STOCK PRICE

Based on the regression output table above, the coefficient for the independent variable $X_1 = 0.335$ $X_2 = 0.021$ $X_3 = 0.519$, the multiple linear regression analysis models used in this study can be formulated as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

$$Y = 0.726 + 0.335X_1 + 0.021X_2 + 0.519X_3 + e_3$$

Where:

- Y = Stock Price
- a = Constant
- b_1 = Net Income regression coefficient
- b_2 = Earnings Per Share regression coefficient
- b_3 = Price Earnings Ratio regression coefficient
- X_1 = Net Profit
- X_2 = Price to Book Value

X3 = Price Earnings Ratio

e = error

From the regression equation above, it can be concluded that:

1. If the constant value is 0.726, it means that when the Net Income, price-to-book value, and Price Earnings Ratio variables are 0 (zero), the stock price is 0.726.
2. The Net Income regression coefficient is positive, meaning that when Net Income increases by 1 unit, the stock price will increase by 0.335.
3. The Price to Book Value regression coefficient is positive, meaning that when the Price to Book Value increases by 1 unit, the stock price will increase by 0.021.
4. The Price Earnings Ratio regression coefficient is positive, meaning that when the Price Earnings Ratio increases by 1 unit, Y will increase by 0.519.

F Test (Simultaneous)

The F hypothesis test basically shows whether all independent variables included in the model have a joint influence (simultaneously) on the dependent variable. The following F test results in the Food industry processed using SPSS Version 22 are presented in the form of the following table:

Table 4. F-test on the Food industry

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10,539	3	3,513	18,455	,000 ^b
1 Residuals	12,564	66	,190		
Total	23,103	69			

a. Dependent Variable: LOG STOCK PRICE

b. Predictors: (Constant), LOG PER, LOG NET PROFIT, LOG PBV

Based on the table above, the Fcount value is 18.455 > Ftable 2.74, and the sign value is 0.000 < 0.05, so it is said that there is a significant influence between the variables of Net Income, Price to Book Value, Price Earnings Ratio on stock prices.

The results of calculations using the SPSS programme by comparing Fvalue with Fstat with a significant level of $\alpha = 0.05$. It can be seen that Fhitung is 18.455 by comparing Fstat $\alpha = 0.05$ with the free degree of the numerator (number of X) = 3 and the degree of the denominator (N-K-1) = 70-3-1 = 66, obtained Fstat of 2.74. Fcount is greater than Fstat (18.455 > 3.10). Ho is rejected, and Ha is accepted, meaning that there is a significant influence between the independent variables (x) together on the dependent variable (y), which means that it can be said that simultaneously, the independent variables Net Income, Price to Book Value, Price Earnings Ratio affect the dependent variable Stock Price.

T Test (Partial)

The t-hypothesis test is used to test whether there is a significant effect of the independent variables individually on the dependent variable. This test compares the probability value with the p-value (sig t), which has a significant level of 0.05. If the p-value < 0.05, then Ha is accepted, and vice versa. If the p-value > 0.005, then Ha is rejected.

With a confidence level of 95% $\alpha = 5\%$ with degrees of freedom (df) = n-k-1 or 70-3-1=66 (n is the amount of data, k is the number of independent variables), the t table ($\alpha = 0.05$, df = 2) is obtained at 1.99656. From the results of the output coefficient regression analysis, it can be seen that the count in the table is as follows:

Table 5. Food industry t-test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized T	Sig.	Collinearity Statistics
	B	Std. Error			
1 (Constant)	,726	,366	1,981	,052	

Model	Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
LOG NET PROFIT	,335	,065	,477	5,133	,000	,954	1,048
LOG PBV	,021	,090	,023	,239	,812	,878	1,139
LOG PER	,519	,135	,379	3,830	,000	,841	1,189

a. Dependent Variable: LOG STOCK PRICE

Based on Table 5 above, it can be concluded as follows:

1. Based on the results of the t-test (partial) on the regression model, the results of the comparison between the count and table show a count of 5.133 while the table is 1.99656. From these results, it can be seen that $t_{count} > t_{table}$, $5.133 > 1.996$, it can be concluded that H_0 is rejected and H_a is accepted, meaning that the Net Profit variable partially has a significant effect on stock prices.
2. The results of the comparison between the count and table show a count of 0.239 while the table is 1.996. From these results, it can be seen that $count < table$, namely $0.239 < 1.996$, it can be concluded that H_0 is accepted, H_a is rejected, meaning that partially the Price to Book Value variable has no significant effect on the Stock Price variable.
3. The results of the comparison between the count and table show a count of 3,830 while the table is 1,996. From these results, it can be seen that $t_{count} > t_{table}$, namely $3,830 > 1,996$, it can be concluded that H_0 is rejected, H_a is accepted, meaning that partially the Price Earnings Ratio variable has a significant effect on stock prices.

Coefficient of Determination

The coefficient of determination is carried out to determine the percentage value of the contribution of the independent variable to the dependent variable. From the calculation results, the coefficient of determination is obtained as follows:

Table 6. Determination Coefficient Test

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,675	,456	,431	,43630	,887

a. Predictors: (Constant), LOG PER, LOG NET PROFIT, LOG PBV
 b. Dependent Variable: LOG STOCK PRICE

The results of testing the coefficient of determination in the table above show that the R square value is 0.456. This means that the contribution of the independent variables, namely X1 Net Income and X2 Price to Book Value X3 Price Earnings Ratio, affects the variable Y Stock Price by $(0,456 \times 100 = 45,6\%)$, while the rest $(100\% - 45,6\% = 54,4\%)$ is influenced by other variables outside this study.

Analysis and Discussion

The Effect of Net Income, PBV, PER on Stock Price Simultaneously.

Answering the first hypothesis of the study can be obtained that Net Income, price-to-book value, and Price price-earnings ratio have a positive effect on Share Price simultaneously; this is evidenced in the results obtained, namely the value of $18,455 > F_{stat} 2,74$ and a significant value of $0,000 < 0,05$, it can be seen that simultaneously Net Income, Price to Book Value, Price Earnings Ratio have an effect on Share Price for the period 2016-2020. The results of this study are in line with research conducted by Lailan (2015), which states that from the results of hypothesis testing based on the simultaneous regression coefficient test, it can be concluded that PBV, PER, and Net Income together affect stock prices. Moreover, this is in line with research conducted by Tamara (2013), which states that hypothesis testing simultaneously shows that EPS, PER, DER, and PBV have a significant effect on the dependent variable Stock Price.

The Effect of Net Income, PBV, PER on Share Price Partially.

In the Net Profit variable, the t_{count} of 5,133 is smaller than t_{table} of 1,996 and has a significant value of 0,000, smaller than 0,05, so H_a is accepted, and H_0 is rejected; this means that Net Profit partially has a significant effect on stock prices.

Based on the theory, according to Halim (2013: 17), the net profit of a company is often used as a benchmark or measure of successful performance in a company. This, of course, will be important information for investors because this earnings information will provide an estimate of the return that will be obtained, which will have an impact on stock price movements due to stock supply and demand. In the Price to Book Value variable, t value of 0.239 is smaller than t_{table} of 1.996, and a significant value of 0,812 is greater than 0.05, so H_a is rejected, H_o is accepted; this means that Price to Book Value partially has no significant effect on stock prices.

While the Price Earnings Ratio variable obtained t_{count} of 3,830 is greater than t_{stat} of 1,996, and a significant value of 0,000 is smaller than 0,05, so H_a is accepted, and H_o is rejected. This means that the Price Earnings Ratio has a significant effect on stock prices.

The results of this study are in line with research conducted by Lailan (2015), which states that net income partially affects stock prices, price-to-book value has a significant negative effect on stock prices, and the Price-Earnings Ratio affects stock prices.

CONCLUSIONS

Conclusion

Based on the research that has been done, the following conclusions can be drawn:

1. Simultaneously, net income, Price-to-book value, and price-earner ratio have a significant effect on stock prices in the food industry, as listed on the IDX 2016-2020.
2. It is known that Net Income significantly influences stock prices in the food industry, while price-to-book value has no significant effect on stock prices partially in the Food Industry listed on the IDX 2016-2020.

Suggestion

The suggestions that can be given in connection with the research that has been done are as follows:

1. The results of this study can be used as additional information and as a consideration for Food industry companies in Indonesia to carry out policies related to stock prices.
2. For further research, it is better to increase the number of research variables or use other variables so that more factors that affect stock prices using other variables are known, besides increasing the research sample so that further research is more accurate.
3. Investors and prospective Investors making investments should pay attention to information about financial statements and financial ratios, especially regarding market returns with PER and PBV ratios, which are very sensitive to Stock Prices.

REFERENCES

- Abdul, Halim and Mamduh M. Hanafi. (2011). Financial Statement Analysis. 4th Edition. UPP STIM YKPN. Yogyakarta.
- Bambang Rianto, (2010), The Effect of Profitability and Size on Firm Value with Capital Structure as an Intervening Variable. University of Sumatra.
- Darmadji, (2011) Indonesian Capital Market. Third Edition. Jakarta: Salemba Empat.
- Darsono, (2011). Practical Guide to Understanding Financial Statements. Yogyakarta: CV.Andi Offset
- Effendi, Usman, (2014). Basic Management, Definition and Problems, Jakarta: Bumi Aksara.
- Fahmi, (2014) Financial Statement Analysis, Yogyakarta: UPP AMP YKPN.
- Fahmi, Irham. (2015). Financial Statement Analysis 1st mould, Bandung: Alfabeta
- Ghozali (2016). Qualitative Quantitative Research Methods. Bandung: Alfabeta.
- Halim (2013), Financial Management Theory and Practice, Gajah Mada Research Agency foundation Yogyakarta, Yogyakarta
- Hanafi, Mahmud M. And Abdul Halim. (2013), Financial Management. Fifth mould. Yogyakarta: BPFE.

- Harmony, (2011), *Financial Management Based on Balanced Scorecard Approach to Theory, Cases, and Business Research* (1st Edition). Jakarta: Bumi Aksara.
- Hasibuan, Malayu, S.P, (2016) *Management: Basic*, Jakarta: Bumi Aksara.
- Istijanto, (2011). *Business Research Methodology*. Jakarta: PT Gramedia Pustaka
- Iwan, (2011) *The Effect of Stock Price on Food and Beverage Companies*. E-Journal Accounting FE Unsil Vol 3 No 1
- Cashmere, (2014). *Financial Statement Analysis, First Edition, Seventh Mould*. Jakarta: PT Rajagrafindo Persada.
- Lailan (2015) *The Effect of Net Income on the Share Price of Food and Beverage Companies*. E-Journal of Accounting and Business Research Vol 15 No1
- M. Manullang, (2018). *Basics of Management*, Ghalia Indonesia, Jakarta
- Mulyadi, (2014), *Accounting System*. 4th print, Jakarta: Salemba Empat.
- Munawir, S. (2011), *Financial Statement Analysis, 4th Edition*, Liberty, Yogyakarta. Indonesian Accounting Association (IAI) 2004. *Statement of Financial Accounting Standards (PSAK)*. Jakarta: Salemba Empat.
- Nerisa and Narumi, (2013) *The Effect of ROA, DER, EPS, PER and PBV on Stock Prices*. E-Journal of Accounting Science Vol5 No2
- Rusdin, (2010). *Capital Markets: Theory, Issues and Policies in Practice*. Bandung: Alfabeta
- Sugiyono, (2017). *Quantitative, Qualitative and R&D Research Methods*. Bandung: Afabeta
- Susiani (2017) *The Effect of EPS, PER, DER, and PBV on Stock Price*. E-Journal of Indonesian Business Vol 8 No 2
- Tanddelin, (2016) *Introduction to Capital Market Knowledge, 6th Edition*, Yogyakarta: YKPN College of Management
- Terry, George R. and Leslie W. Rue. (2014). *Fundamentals of Management*, translator G.A Ticoalu. Jakarta: PT Bumi Aksara.
- Utari Dewi. et al. (2014). *Financial Management. Revised Edition*. Jakarta: Publisher Mitra Wacana Media.
- Yustina and Tiara (2017) *The Effect of EPS, PBV, ROA, and ROE on Stock Prices*. E-Journal Economica Vol 13 No 2
- <http://www.idx.co.id/> Financial Statements/ accessed on 30/01/2020, 09.00 AM.
- Chandra, S., Tianto, A., Veronica, V., Ng, M., & David, D. (2023). The Influence of Products, Prices, Promotions, and Places on Purchase Decisions at PT. Arta Agrindo Subur Pratama Pekanbaru. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(1), 257–270. <https://doi.org/https://doi.org/10.35145/icobima.v2i1.4084>
- Dalil, M., Sofyan Arief, D., Jahrizal, J., Junaedi, A. T., Susanti, W., Tendra, G., Renaldo, N., Koto, J., Musa, S., Wahid, N., & Cecilia, C. (2024). Empowering Farmers Through a Practical and Energy-Efficient Goat Feed Chopping Machine. *International Conference on Business Management and Accounting*, 2(2), 402–409. <https://doi.org/10.35145/icobima.v2i2.5075>
- Desnelita, Y., Cesar, M., Gustientiedina, G., Hajjah, A., & Putri, R. N. (2025). Implementation of Certainty Factor Method in Mental Health Diagnosis Expert System in Adolescents Aged 18-24 Years. *Journal of Applied Business and Technology (JABT)*, 6(1), 42–51. <https://doi.org/10.35145/jabt.v6i1.195>
- Fadrul, F., Wijaya, F. T., Natalia, A., Estu, A. Z., Novitriansyah, B., & Hadi, S. (2024). The Effect of Profitability Ratio, Solvability Ratio, and Liquidity Ratio on Stock Price at Sector Company Consumer Non-Cyclicals Listed in Indonesia Stock Exchange Period 2017-2021. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(2), 317–331. <https://doi.org/https://doi.org/10.35145/icobima.v2i2.4380>
- Hafni, L., Anita, A., Vanesa, S., Safari, S., & Tjahjana, D. J. S. (2024). An Exploration of the Relationship between Leadership, Motivation, Environment, and Performance in Small and Medium Food Distribution

- Enterprises. *Journal of Applied Business and Technology*, 5(2), 105–115. <https://doi.org/https://doi.org/10.35145/jabt.v5i2.167>
- Hocky, A., Pasaribu, Y. B., Junita, R., Putra, R., & Syahputra, H. (2023). The Effect of Price Earnings Ratio, Debt to Equity Ratio, Net Profit Margin, and Total Asset Turnover on Stock Returns on The Kompas 100 Index. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(1), 271–281. <https://doi.org/https://doi.org/10.35145/icobima.v2i1.4086>
- Hutahuruk, M. B., Sudarno, S., Valencia, E., Angelina, D., & Priyono, P. (2024). Analysis of the Influence of CAR, LDR, NIM, BOPO, and NPL on Profitability in Conventional Banking Companies Listed on the IDX in 2017-2021. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(2), 332–347. <https://doi.org/https://doi.org/10.35145/icobima.v2i2.4381>
- Infante, Y. O. T. A. Y., Arlyana, L., Haristan, M., & Akri, P. (2024). The Effect of Current Ratio, Debt To Equity Ratio, and Return on Assets on Dividend Policy Industrial Consumption Goods Sector Companies Listed in The Indonesian Stock Exchange Year 2013 – 2016. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(2), 391–401. <https://doi.org/https://doi.org/10.35145/icobima.v2i2.4486>
- Junaedi, A. T., Renaldo, N., Suhardjo, S., Musa, S., & Veronica, K. (2024). Credit Risk Prediction Model Using Artificial Intelligence in Digital Financial Systems. *Business Management and Accounting (ICOBIMA)*, 3(1), 127–134. <https://doi.org/10.35145/icobima.v3i1.5092>
- Kersiati, Wijaya, E., & Sudarno. (2023). Motivation, Organizational Culture, and Organizational Commitment on Job Satisfaction and Teacher Performance at State Junior High School, Bangko Rokan Hilir, Riau. *Journal of Applied Business and Technology*, 4(1), 67–78.
- Marlim, Y. N., William, W., Susanti, W., Fadrul, F., Nicholas Renaldo, Musa, S., & Wahid, N. (2025). Designing Startup Application “LaKu” for MSME in Riau Based on Android. *Journal of Applied Business and Technology*, 6(2), 125–134. <https://doi.org/10.35145/jabt.v6i2.228>
- Nasien, D., Hasmil Adiya, M., Farkhan, M., Rahmadhani, U. S., & Samah, A. A. (2025). Automated Waste Classification Using YOLOv11: A Deep Learning Approach for Sustainable Recycling. *Journal of Applied Business and Technology*, 6(1), 68–74. <https://doi.org/10.35145/jabt.v6i1.205>
- Ngatno, Junaedi, A. T., & Komardi, D. (2022). Discipline, Service Orientation, Integrity, and Leadership Style on Job Satisfaction and Performance of High School Teachers in Tanah Putih District. *Journal of Applied Business and Technology*, 3(2), 153–165.
- Panjaitan, H. P., Lumenta, M. Y., Febriyanto, F., Suyono, S., Rusilawati, E., & Kudri, W. M. (2023). The Influence of Leadership, Motivation, and Compensation on Employee Performance at PT. LG Electronics. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(1), 238–256. <https://doi.org/https://doi.org/10.35145/icobima.v2i1.4070>
- Panjaitan, H. P., Vinson, V., Yani, F., Sitompul, S. S., Sari, O., & Lubis, W. M. C. (2024). Influence of Product Quality, Price, Brand Image and Promotion on Customer Satisfaction on Lazada (Case Study in Pekanbaru City Communities). *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(2), 373–390. <https://doi.org/https://doi.org/10.35145/icobima.v2i2.4391>
- Purwati, A. A., Kurniawan, E., Chandra, T., Deli, M. M., Hamzah, M. L., & Abdullah, S. I. N. W. (2025). Unlocking Consumer Behavior: The Interplay of Marketing Mix and Hygiene Perceptions in Kembar Water’s Market Success. *Journal of Applied Business and Technology*, 6(2), 135–145. <https://doi.org/10.35145/jabt.v6i2.197>
- Putri, E., Rahman, S., Komardi, D., & Momin, M. M. (2023). Leadership, Discipline, and Motivation on Job Satisfaction and Teacher Performance at Public Elementary School, Bangko District, Rokan Hilir Regency. *Journal of Applied Business and Technology*, 4(1), 1–16.
- Rafizal, J., Nyoto, Sudarno, & Sulta, F. M. M. (2022). Organizational Culture, Work Environment, and Workload on the Performance of POLRI Members (Case Study in Pekanbaru Police Criminal Reserve Unit). *Journal of Applied Business and Technology*, 3(3), 263–271.
- Rahman, S., Dalil, M., Jahrizal, J., Junaedi, A. T., Renaldo, N., Marlim, Y. N., Susanti, W., Koto, J., Musa, S., Wahid, N., & Cecilia, C. (2024). Micro-Livestock and Macro-Impact with A Goat Farming Empowerment

- Program. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 3(1), 84–92. <https://doi.org/10.35145/icobima.v3i1.4653>
- Renaldo, N., & Veronica, K. (2024). The Role of Artificial Intelligence in Early Detection of Financial Statement Fraud in Digital Financial Institutions, AI-Fraud Behavior Integration Model. *Business Management and Accounting (ICOBIMA)*, 3(1), 135–144. <https://doi.org/10.35145/icobima.v3i1.5093>
- Safari, S., Hardilah, F., Hafni, L., & Siswoyo, S. (2025). Enhancing Job Satisfaction through Workload, Knowledge Sharing Behavior, Psychological Contract and Innovative Work Behavior. *Journal of Applied Business and Technology*, 6(2), 146–154. <https://doi.org/10.35145/jabt.v6i2.203>
- Sinaga, J. C., & Hajjah, A. (2020). Decision Support System for Best Lecturer Selection using Analytical Network Process (ANP) and TOPSIS Method. *Journal of Applied Business and Technology*, 1(2), 93–100. <http://www.e-jabt.org/index.php/JABT/article/view/34/25>
- Stevany, Wati, Y., Chandra, T., & Wijaya, E. (2022). Analysis of the Influence Events on the Increase and Decrease of World Oil Prices on Abnormal Return and Trading Volume Activity in Mining Sector Companies that Registered in Indonesia Stock Exchange. *International Conference on Business Management and Accounting (ICOBIMA)*, 1(1), 181–192.
- Suhardjo, S., Suharti, S., Suyono, S., Mukhsin, M., & Hadi, S. (2023). Digital Internal Controls: Safeguarding Data Integrity and Compliance in a Technologically Evolving Landscape. *Proceeding of International Conference on Business Management and Accounting (ICOBIMA)*, 2(1), 306–311. <https://doi.org/https://doi.org/10.35145/icobima.v2i1.4378>
- Suharti, S., & Shinta, S. (2021). Credit Accounting Sales System at PT. Pangaea Argo Adikara in Pekanbaru. *Journal of Applied Business and Technology*, 2(1), 39–43.
- Susanti, W., Widi, R., Nasution, T., Johan, J., & Verawardina, U. (2025). The Role of Artificial Intelligence Technology in Improving the Quality of Education. *Journal of Applied Business and Technology*, 6(1), 11–15. <https://doi.org/https://doi.org/10.35145/jabt.v5i3.178>
- Walettina, S., & Anton. (2022). Analysis the Effect of Tax Policy, Tax Amnesty Programme, Economic Growth, Inflation and Individual Taxpayer Compliance on Tax Receipt in Pekanbaru. *International Conference on Business Management and Accounting (ICOBIMA)*, 1(1), 24–39.
- Yarmanelis, Rahman, S., Junaedi, A. T., & Momin, M. M. (2022). The Effect of Commitment, Motivation, and Leadership on Heads and Teachers Performance in the Junior High School in Rimba Melintang. *Journal of Applied Business and Technology*, 3(3), 226–234.
- Zuhairra, O. W., & Putri, R. N. (2020). Selection of Computer Private College to Use Elimination Methods and Options of Expressing Reality (ELECTRE). *Journal of Applied Business and Technology*, 1(3), 188–195. <https://doi.org/10.35145/jabt.v1i3.44>