# DID MICROECONOMIC AND MACROECONOMIC FACTORS AFFECT STOCK PRICES?

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### **ABSTRACT**

This study to analyze and explain the factors that influence stock prices. The object of this research is the automotive and components sub sector manufacturing companies sector on the Indonesia stock exchange for periode 2010-2018. The variables used in this study are stock prices, micro economic factors and macro economic factors. Micro economic factors are projected by Debt to Equity Ratio (DER), Gross Profit Margin (GPM), Net Profit Margin (NPM), Price Earning Ratio (PER) and Return on Assets (ROA). Macro economic factors used as variables are inflation (INF), interest rates (INT) and Gross Domestic Product (GDP). Data analysis and hypothesis testing were carried out using the SmartPLS 3.0 program. The results of the study indicate that stock prices are determined by microeconomic factors projected by Net Profit Margin (NPM). Companies must keep trying to make a profit so that stock prices remain good, so investors are still interested in owning shares.

Keywords: stock prices, microeconomic factors and macroeconomic factors.

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### INTRUDUCTION

The increasing number of vehicle users is turning into a factor in the increase in sales of automotive and component companies, so investors who think about sales will increase profits and ultimately will increase stock prices. Many investors are interested in investing their funds in shares. Brigham and Daves (2002: 4) state that the purpose of financial management is to help maximize the value of a company's stock. Investment in the form of shares promises a higher level of profit, both from dividends and from capital gains. But investment in shares also has a high risk, due to variations in stock prices. Variations in stock prices will be influenced by the financial performance of the company concerned, so the stock price is a function of the company's value, therefore investors' decisions in buying and selling shares are strongly influenced by microeconomic and macroeconomic factors. Microeconomic factors are internal factors of a company that affect stock trading transactions, including the level of risk, company performance can also be in the form of corporate action by the company. Whereas macroeconomic factors are external factors of a company, including the level of inflation, the rupiah exchange rate, gross domestic product, economic conditions and socio-political conditions of a country.

Company performance can be measured by the profit generated. Profitability is a ratio that measures a company's ability to generate profits. Profitability ratios that can be used in measuring the company's financial performance are the ratio of net profit margin (NPM) and return on assets (ROA). Net profit margin measures the extent to which a company generates net income at a certain level of income. A low profit margin ratio can indicate management inefficiency. Return on assets (ROA) shows how much the company's ability to generate profits by utilizing its assets. Good asset management can increase company profits. A large ROA shows the level of profit achieved by the company and the better the company's position in terms of asset use. (Kasmir, 2017).

Debt to equity ratio is an indicator of a company's ability to repay loans from outside parties and is a ratio that interprets corporate expenses funded by external loans. This ratio can also be said to be the leverage ratio (leverage), which is defined as a measure of how well the investment structure of a company. The smaller this ratio number, the better and will affect the company's performance and ultimately will increase share prices.

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Inflation is a general increase in prices. Inflation can also be said to decrease the purchasing power of money. The higher the price increase, the lower the value of money. The most widely used inflation measures are: Consumer price index or cost of living index. When inflation has a lot of money supply, so one way that can be done to reduce inflation is to raise interest rates. According to the Central Bureau of Statistics (BPS), Indonesia's economy in 2018 measured by Gross Domestic Product (GDP) at current prices reaches Rp14 837.4 trillion and GDP per capita reaches Rp 56.0 Million or US \$ 3 927.0. Indonesia's economy in 2018 grew 5.17 percent higher than the achievements in 2017 of 5.07 percent. This is the reason the author uses this variable in determining stock prices.

Manufacturing companies are the companies most in demand by investors or potential investors to invest. Manufacturing companies whose operational activities process raw materials into semi-finished materials to become finished materials. Manufacturing companies themselves are very important for economic growth whether national or regional. Many manufacturing companies are listed on the Indonesia Stock Exchange, so investors or potential investors must be careful and precise in making decisions to invest or buy shares. The automotive and sub-sector manufacturing companies are companies engaged in the sale and supply of automotive components or products. The increasing needs of the community from year to year, especially during the last 8 (eight) years, namely from 2010 to 2018 has an impact on the level of automotive and component sales, which will encourage investors to invest in this subsector company because they obtain high levels of profit and effect on rising stock prices. This has led researchers to conduct this research to look at economic factors that affect the prices of automotive and component companies.

Signal theory is one of the pillar theories in understanding financial management. In general, the signal is interpreted as a signal made by the company to investors. These signals can take the form of various forms, both those that can be directly observed and those that need to be examined in more depth to be able to find out.

Previous research has examined several things related to factors that affect stock prices. One research on share prices was conducted by Muksal (2015), in which his research took the object of sharia shares listed on the secondary market of the Jakarta Islamic Index. This study examines the effect of ROA, DER, EPS, BV, past stock prices, trading volume of shares on stock prices. Another study conducted by Udoka, et al. (2018) concerning macroeconomic factors affecting stock prices in Nigeria. In his research, it is known that macroeconomic factors (inflation and interest rates) cannot affect stock prices, so the government must adopt a policy to stimulate investment in the capital market. Companies listed on the Indonesian stock exchange market, particularly companies manufacturing automotive sub-sectors and components are still limited to studies related to determinants of stock prices, so it is necessary to study related factors affecting stock prices in automotive and component manufacturing companies.

Khan's research (2018) on macroeconomic factors affecting stock prices on the Karachi Stock Exchange. The variables used are the supply of money, exchange rates and interest rates. The results obtained are that macroeconomic factors that affect stock prices in a long time, but will not affect for a short period of time. Rjoub *et al.* (2017), in this study, micro and macro variables are important factors in determining stock prices. El-Nader *et al.* (2012), this study uses macroeconomic factors, one of which is real gross domestic product (RGDP), which states that RGDP has a positive impact on stock prices

# Stock price

Shares are proof of ownership of a company in the form of a limited liability company. According to Fahmi (2016: 271) shares are paper that are clearly listed in nominal value, the name of the company and followed by rights and obligations that are explained to each holder. Stock prices are prices that occur in the stock market at certain times determined by market participants and determined by the demand and supply of the relevant shares in the capital market (Jogiyanto, 2010: 143). The stock price is very closely related to the market price of a stock. Changes in stock prices are influenced by the strength of demand and supply that occur in the secondary market. The more investors who want to buy or save a stock, the price will rise, and vice versa if more investors sell or release it will have an impact on the stock price decline. Share price is the value of a stock that reflects the wealth of the company that issued the stock.

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### **Microeconomic Factors**

Microeconomic factors are economic factors related to the company's internal conditions, affecting the ups and downs in the company's performance. The company's performance can be seen from the company's financial statements which are reflected in financial ratios such as the Gross Profit Margin (GPM) ratio, Net Profit Margin (NPM) and Return on Assets (ROA). Microeconomic factors in this study are projected by: Debt To Equity Ratio (DER), Gross Profit Margin (GPM), Net Profit Margin (NPM), Price Earning Ratio (PER) and Return on Assets (ROA).

### a. Debt To Equity Ratio

Solvency ratios are ratios used to measure a company's ability to meet all its obligations, both short-term needs and long-term obligations. One way to calculate the solvency ratio is Debt To Equity Ratio (DER).

According to Kasmir (2017: 157), Debt To Equity Ratio is used to assess debt with equity. This ratio is sought by comparing all debt, including current debt and all equity. This ratio is used to determine the amount of funds provided by the borrower (creditor) with the owner of the company. In other words, this ratio serves to find out every rupiah of its own capital used as collateral for debt. The formula to find the debt to equity ratio can be used as a comparison between total debt and total equity as follows:

$$DER = \frac{Total \ Debt}{Total \ Equity}$$

# b. Gross Profit Margin

According to Brigham and Houston (2011) profitability is the net result of a series of policies and decisions. Profitability describes the level of profits obtained by the company in a certain period. Profitability can be assessed in various ways, one of which is using Gross Profit Margin. Gross profit margin is used to measure the profit margin on sales. Gross profit margin is formulated as follows:

Gross profit margin = 
$$\frac{Sales - CGS}{Sales}$$

### c. Net Profit Margin

Net profit margin is the ratio between net income and sales (Ehrhardt dan Brigham, 2011). The formula Net profit margin as follows:

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Net Profit Margin = 
$$\frac{Net Income}{Sales}$$

## d. Price Earning Ratio

Price Earning Ratio (PER) is one measure in fundamental stock analysis. PER is a comparison between the share price and the company's net profit, where the stock price of an issuer is compared with the net profit generated by the issuer in a year. Because the focus of the calculation is the net profit that the company has generated, then with an PER of an issuer, it can be seen whether the price of a stock is reasonable or not. PER (Ehrhardt and Brigham, 2011: 101) is formulated as follows:

Price Earning Ratio = 
$$\frac{\textit{Market value per share}}{\textit{Earning per share}}$$

### e. Return on Assets

Return on Assets (ROA) is a comparison between profit before tax and the average total assets in a period. Income before tax is profit as recorded in yearly bank profit and loss for the year. Average total assets is the total number of assets divided by the number of months / years to be calculated. ROA is formulated as follows:

Return on Assets = 
$$\frac{Earning\ before\ Tax}{Average\ Total\ Aset}$$

### **Macroeconomic Factors**

Macroeconomic factors are factors that are outside the company. Macroeconomic factors also have an influence on the ups and downs in the company's performance both directly and indirectly. Macroeconomic factors studied are inflation, interest rates and gross domestic product.

### a. Inflation

Inflation is an event that describes the situation and conditions where the price of goods has increased and the value of the currency has weakened (Fahmi, 2014). According to Sadono Sukirno (2011: 165) inflation is: An increase in prices of goods that are general and continuous, but an increase of one or two items can not be called inflation unless the increase is widespread in other goods. Inflation is calculated using the following formula (M. Natsir, 2014: 266):

$$IHK_n = \underbrace{IHK_{\underline{n}} - IHK_{\underline{n-1}}}_{IHK_{\underline{n-1}}}$$

Notes:

IHKn: Consumer Price Index for n year

IHKn-1: Consumer Price Index for n year-1 (n-1)

### b. Interest Rates

According to Boediono (2014: 76), the interest rate (INT) is: the price of the use of investment funds (loanable funds). The interest rate is one indicator in determining whether someone will invest or save. Interest rates also have the function of controlling the supply and demand for money circulating in an economy. Factors affecting interest rates are government policy, and company reputation. While the indicator to determine interest

rates is the BI Rate, because the BI Rate is the reference interest rate set by Bank Indonesia.

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# c. Gross Domestic Product (GDP)

GDP is an economic variable that occupies the most important position of various macroeconomic variables that exist to measure a country's economic performance. Fast GDP growth is an indication of economic growth in a country. If economic growth improves, the purchasing power of the people increases, and this is an opportunity for the company to increase its sales. This increase in sales signifies a good company performance and this will raise share prices. Rising stock prices due to rising GDP will encourage an increase in the Jakarta Composite Index (Tandelilin, 2007: 212). Gross Domestic Product (GDP) is divided into two namely nominal GDP (or called GDP at current prices) and real GDP (or called GDP at constant prices). GDP is obtained using three approaches, they are:

- a. Production Approach The production approach is obtained by adding up the gross value added of all production sectors.
- b. Approach to GDP income is obtained by adding up gross service fees (not yet deducted by tax) from the factors of production used. Repayment of factors of production in the form of wages and salaries, land rent, capital interest and profits. Rent is the income of the owner of fixed production factors such as land, wages for labor, interest for capital owners, and profits for entrepreneurs.
- c. Expenditure Approach Calculation is done by adding up the final demand from economic units / components, namely household consumption (C), companies in the form of investment (I), government expenditure / expenditure (G), and exports minus imports (X M).

In theory, GDP with the expenditure and income approach should produce the same figures. However, because in practice calculating GDP using the income approach is difficult, then what is often used is the expenditure approach.

Based on the formulation of the problem and the results of previous studies, the following research hypotheses are as follows:

- H<sub>1</sub>: Microeconomic factors have a positive effect on share prices of manufacturing companies in the automotive and components sub-sector listed on the Indonesia Stock Exchange.
- H<sub>2</sub>: Macroeconomic factors have a positive effect on share prices of manufacturing companies in the automotive and components sub-sector listed on the Indonesia Stock Exchange.

### RESEARCH METHODS

The objects of this study are all automotive sub sector manufacturing companies and components that are on the Indonesia Stock Exchange (IDX). Data of manufacturing companies in the automotive sub sector and components were obtained through the official website of the Indonesia Stock Exchange (www.idx.co.id). Data is taken from financial reports and annual reports published on the Indonesia Stock Exchange, also obtained from the company's website, as well as from news media.

The sampling technique in this study was conducted by using purposive sampling method. This type of research is descriptive quantitative and explanatory descriptive, which aims to get an explanation of the relationship between variables through hypothesis testing (Solimun, 2010: 3).

The population of this study are all automotive sub sector manufacturing companies and components listed on the Indonesia Stock Exchange and publish an annual

financial report published on the Indonesia Stock Exchange (IDX) for the period 2010 to 2017. The sampling technique in this study was carried out using the purposive method sampling, the method of determining the sample by establishing several considerations or criteria. There are 3 (three) criteria set out in this study:

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- 1. Automotive and component sub sector manufacturing companies are listed on the IDX since 2010 and remain listed on the IDX until 2018.
- 2. Automotive and component sub sector manufacturing companies that have published annual financial reports for eight years in a row, from 2010 to 2018. This is intended to obtain sustainable data.
- 3. Automotive and component sub sector manufacturing companies have information relating to various measurement variables used, such as stock prices (SP), *Debt To Equity Ratio* (DER), *Gross Profit Margin* (GPM), *Net Profit Margin* (NPM), *Price Earning Ratio* (PER), *Return on Assets* (ROA), inflation (INF), interest rate (INT) and Gross Domestic Product (GDP)

### Research Variable

The summary of research variables used in this study are as follows:

Table 1
Operational Definitions and Measurement of Research Variables

Variables and Indica	<b>Operational Definition</b>	Measurement Indicator
Stock Price		
Stock price (SP)	The share price obtained from the clc price of each study period	SP = Stock price at closing
Microeconomic Factors	S	
Debt To Equity	Calculate the liquidity of funds obtain	Total Debt
Ratio (DER)	from third parties against loans chant to the public	$DER = {Total Equity}$
-	Ratio to measure the profit-on-sales margin .	$GPM = \frac{Sales - CGS}{Sales}$
•	Ratio to measure the amount of net income compared to revenue.	$NPM = \frac{Net \ Profit}{Sales}$
Price Earning Rat (PER)	The ratio measures the market price ${\mathfrak l}$ share compared to net income per sha	$PER = \frac{Market\ value\ per\ share}{Earning\ per\ share}$
Return on Assets (ROA)	Rasio profitabilitas untuk mengukur kemampuan perusahaan menggunaka keuangan kepada perusahaan.	ROA = Profit before Tax Average Total Aset
Macroeconomic Factor	s	
Inflations (INF)	Inflation recorded at Bank Indonesia published monthly data which is	INF = I <u>HKn – IHKn-1</u>

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> Interest rate (INT) Price of using investment funds (loan funds)

INT = BI Rate

Gross Domestic Measure the value of goods and servi Product (GDP) produced in an area of the country

GDP = C + I + G + (X-M)

Source: 2019

### **RESULTS AND DISCUSSION**

Manufacturing companies are the most listed on the Indonesia Stock Exchange. Manufacturing companies are divided into 3 sectors, namely the chemical industry sector, various industrial sectors, and the consumer goods industry sector. Manufacturing companies in the process of processing raw goods into finished goods which in its development one of the most popular sectors in various industrial sectors.

In various industrial sectors, there are several subsectors, one of which is the automotive and component subsectors. This sub-sector manufacturing company is one of the companies whose operational activities provide automotive and component goods. The increasing growth in the number of motorized vehicles can encourage investor interest in investing their capital in this subsector company because with the high needs of the community it is hoped that it can increase profits.

The automotive subsector and component manufacturing companies listed on the Indonesia Stock Exchange are diverse but in accordance with predetermined sampling criteria using a purposive sampling technique, the names of the companies along with the issuer code sampled in this study are as in Table 2.

Table 2 **Companies Research Samples** 

No.	Commons	Code	Initial Public Offering		
190.	Company	Code	(IPO)		
1	PT. Astra International, Tbk	ASII	April 4, 1990		
2	PT. Astra Otoparts, Tbk	AUTO	June 15, 1996		
3	Gajah Tunggal, Tbk	GJTL	May 5, 1990		
4	Goodyear Indonesia, Tbk	GDYR	December 1, 1980		
5	Indo Kordsa, Tbk	BRAM	September 5, 1990		
6	PT. Indomobil Sukses International, Tbk	IMAS	September 15, 1993		
7	Indospring, Tbk	INDS	August 10, 1990		
8	Multi Prima Sejahtera, Tbk	LPIN	February 5, 1990		
9	Multistrada Arah Sarana, Tbk	MASA	June 9, 2005		
10	Nipress, Tbk	NIPS	July 24, 1991		
11	Prima Aloy Steel Universal, Tbk	PRAS	July 12, 1990		
12	Selamat Sempurna, Tbk	SMSM	September 9, 1996		

Source: Indonesia Stock Exchange, 2019.

Increasing the community's need for vehicles in carrying out their daily activities can increase sales and purchases of component and automotive products. Companies that have a high level of profit can encourage investor interest to invest so as to increase share prices. Basically the movement of stock prices is very dependent on the level of buying and selling of shares by investors. The share prices of the automotive and components manufacturing companies in 2010 and 2018 also experienced ups and downs in the movement of stock prices as shown in Table 3.

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Table 3
Development of Share Prices at Manufacturing Companies
Subsector Automotive And Components In Indonesia Stock Exchange
2010 – 2014

No.	Company	Code	Stock Price (Y)				
110.	Company	Coue	2010	2011	2012	2013	2014
1	PT. Astra International, Tbk	ASII	54550	74000	7600	6800	7425
2	PT. Astra Otoparts, Tbk	AUTO	13950	3400	3700	3650	4200
3	Gajah Tunggal, Tbk	GJTL	2300	3000	2225	1680	1425
4	Goodyear Indonesia, Tbk	GDYR	12500	9550	12300	19000	16000
5	Indo Kordsa, Tbk	BRAM	2400	2150	3000	2250	5000
6	PT. Indomobil Sukses International, Tbk	<b>IMAS</b>	7600	12800	5300	4900	4000
7	Indospring, Tbk	INDS	10500	3500	4200	2675	1600
8	Multi Prima Sejahtera, Tbk	LPIN	3125	2200	7650	5000	6200
9	Multistrada Arah Sarana, Tbk	MASA	330	500	450	390	420
10	Nipress, Tbk	NIPS	3975	4000	4100	325	487
11	Prima Aloy Steel Universal, Tbk	PRAS	93	132	255	185	204
12	Selamat Sempurna, Tbk	SMSM	1070	1360	2525	3450	4750

Source: Indonesia Stock Exchange, 2019.

Stock prices during the study period varied. The highest share price during the study period was obtained by GDYR at 2013 and the lowest share price by PRAS at 2010.

## **Descriptive statistics**

Statistical data description aims to provide a description of the characteristics of research data. This study has three variables, namely two exogenous variables consisting of micro-economic factors and macro-economic factors, and one endogenous variable, namely stock price. Descriptive statistical analysis of research variables has the aim of interpreting each research variable and indicator variables in the form of mean (mean), maximum and minimum values, and standard deviations. In full, Table 4 presents descriptive statistics for each variable and indicator.

Microeconomic factor variables are formed by five indicators, namely Debt To Equity Ratio (DER), Gross Profit Margin (GPM), Net Profit Margin (NPM), Price Earning Ratio (PER), Return on Assets (ROA). Macroeconomic factor variables are formed by three indicators, namely inflation (INF), interest rates (INT) and gross domestic product (PDB).

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Variable and Indicato	Minimu	Maximu	Mear	Standar Deviatio
Stock Price				
<b>Microeconomic Factors</b>				
DER				
GPM				
NPM	-			
PER	-			
ROA	-			
<b>Macroeconomic Factors</b>				
INF				
INT				
GDP				

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From the table it can be seen that during the study period several sample companies experienced losses. This can be seen from the minimum value of ROA, NPM and PER which are negative. If a company does not have a profit or loss, it will have a negative impact on the value of ROA and PER.

### **Analysis of Research Results**

This study uses two latent variables whose indicators are reflective namely microeconomic factors and macroeconomic factors. Examination of the measurement model (outer model) of latent variables is intended to identify important indicators. Data obtained using the SmartPLS 3 application. Evaluation of reflective construct measurement models includes testing the validity and reliability of the construct.

### 1. Test Validity.

Validity testing consists of tests of convergent validity and evaluation of structural models

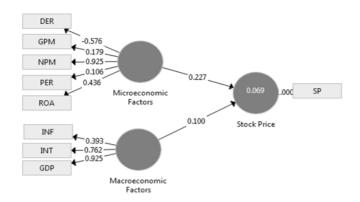
# a. Convergent Validity Test

The convergent validity of the measurement model with the reflective indicator can be seen from the correlation score between the indicator and its construct. The indicator is considered to meet the convergent validity test if it has a correlation value above 0.7. For research at the development stage, loading values 0.5 - 0.6 are still acceptable (Ghozali and Latan, 2015: 37).

The PLS algorithm aims to estimate the value of all latent variables using the iteration procedure. The results of testing the measurement model that shows the value of factor loading between the indicator and the construct, as well as the path coefficient between the constructs, can be seen in Figure 1.

Figure 1
Measurement Model Testing Results

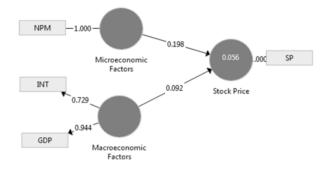
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Source: Data process, 2019

Figure 1, it can be seen that there are reflective construct indicators that have factor loading values smaller than 0.50, so they do not meet the construct validity test criteria (Hair et al., 2009: 117). These indicators are Debt To Equity Ratio (DER) indicators, Gross Profit Margin (GPM), Price Earning Ratio (PER), Return on Assets (ROA), and inflation (INF). This shows that the indicators cannot reflect the construct so they must be dropped (dropping) and not used further in this study. After dropping, the microeconomic factor variable is formed by the indicator, the Net Profit Margin (NPM). Macroeconomic factor policy variables are formed by interest (INT) and gross domestic product (GDP). The second test results on the measurement model can be seen in Fig. 2.

Figure 2
Test Results II Measurement Model



Source: Data processed, 2019

### b. Evaluation of Structural Models

An evaluation of the structural model (inner model) is carried out to ensure that the structural model that is built is robust and accurate. Evaluation of structural models is done by looking at the coefficient of determination or R-Square. The R-Square value indicates how much influence exogenous latent variables have on endogenous variables, or the ability of exogenous constructs to explain changes to endogenous constructs.

Based on figure 2. it can be seen that the R-Square value for the variable stock price is 0.056. This means that the variability of the construct of the stock price can be explained by the exogenous construct of 5.6%. From these results it can be seen that the microeconomic factor variable with its net profit margin indicator and the macroeconomic factor with its indicator of gross domestic product has a very small influence on stock

prices. There are other variables of 94.4% which affect the stock price, but are not used in this study.

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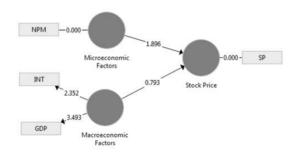
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# 2. Research Hypothesis Testing

Hypothesis testing is done after the model built in this study meets the criteria for testing the measurement model (outer model) and structural model testing (inner model). Hypothesis testing is done by examining the path loading or path coefficient values, and the probability value or p-value. For significance testing with an error rate  $\alpha = 5\%$ , then the p-value <0.05. As for the error rate  $\alpha = 10\%$ , then the p-value <0.1.

The test results in the form of a path diagram with t-statistic values that explain the level of significance of the relationship between latent variables can be seen in Figure 3.

Figure 3
Structural Model Test Results



Source: Data processed, 2019

This study has two hypotheses tested. Testing is done for direct influence, but for indirect effects cannot be tested because there are no intermediate variables in this study. Hypothesis testing results for direct influence, can be seen in Table 5.

Table 5
Hypothesis Testing Results

ote: signif icant level	Hypothesi	Variable Relationshi	Path coeffic	P Valu	Information
$\alpha = -10\%$	1	Micro economic factors - Stock Price	0.198	0.058	Significant
ource: Data process	2	Macro economic factors - Stock Price	0.092	0.428	No Significant
ed, 2019					

Based on the path coefficient of direct influence between variables in Table 5, the hypothesis test results can be explained as follows:

H1: The test results of the influence of Microeconomic Factors on Stock Prices indicate a path coefficient of 0.198 (positive), with a significance value (p-value) of 0.058, which means significant at  $\alpha = 10\%$ . Positive coefficients indicate a direct relationship between Microeconomic Factors and Stock Prices. The results of testing the

hypothesis one (H1) prove that the Micro Economic Factors affect the Stock Price, so that H1 is accepted.

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H2: The results of testing the influence of Macroeconomic Factors on Stock Prices indicate a path coefficient of 0.092 (positive), with a significance value of 0.428, which means it is not significant at  $\alpha=10\%$ . Positive coefficients indicate a direct relationship between Macroeconomic Factors and Stock Prices. The results of hypothesis testing two (H2) prove that the Macroeconomic Factor has no effect on the Stock Price, so H2 is rejected.

### **Discussion of Research Results**

Based on the results of the analysis and testing of the hypotheses that have been disclosed, the following are the results of the research discussion.

### 1. Effects of Microeconomic Factors on Share Prices

Micro-economic factors projected by Net Profit Margin (NPM) have a positive and significant effect on stock prices with a jalous coefficient of 0.198 (positive), with a significance value (p-value) of 0.058, which means significant at  $\alpha=10\%$ . Positive coefficients indicate a direct relationship between Microeconomic Factors and Stock Prices. A positive or undirectional relationship which means that if the Net Profit Margin (NPM) in the automotive and components manufacturing companies increase, it will increase the company's stock price.

Net Profit Margin (NPM) is one of the microeconomic factors that influence the rise and fall of stock prices because Net Profit Margin (NPM) is part of the profitability ratio that measures the performance of the company in generating profits or profits in manufacturing companies in this sub-sector. The high value of Net Profit Margin (NPM) gives a positive signal to investors that the company is able to generate high profits, thus attracting investors to invest their capital. This is consistent with signal theory, where the amount of a company's profit (high profitability ratio) will provide information / positive signals that the management has the ability to manage the company well. Investors in automotive and component sector stocks must consider micro variables because it is found that Investors must assess performance, through net profit margin indicators, to make the right decisions about their investments.

The results of this study are in line with research by Yuneita Anisma (2012) which states that NPM has a significant effect on stock prices. The results of Muksal's (2015) and Nurfadillah (2011) research also showed that microeconomic factors influence stock prices, although using a profitability ratio that is different from this study.

### 2. Effect of Macroeconomic Factors on Share Prices

Macroeconomic factors projected by gross domestic product have no positive and significant effect on stock prices with a path coefficient of 0.092 (positive), with a significance value (p-value) of 0.428, which means that it is not significant at  $\alpha=10\%$ . Positive coefficients indicate a direct relationship between macroeconomic factors and stock prices.

Macroeconomic factors are determined by the market and the government. From the results of this study there is no relationship between macroeconomic factors and stock prices, so the government should find a way out through policies that can encourage the trade market, so that the stock market prices of manufacturing companies in the automotive sector and components are better.

The results of this study are in line with the research of Udoka, et al. (2018) concerning macroeconomic factors affecting stock prices in Nigeria. The results of his research note that macroeconomic factors cannot affect stock prices, so the government must adopt a policy to stimulate investment in the capital market.

Narayan et al. (2014) is not in line with the results of this study, because the results of his research found that economic activity and currency depreciation contributed to an increase in share prices, an increase in the interest rate decreased the stock prices of banks. In contrast to the results of Khan's research (2018) where macroeconomic factors affect stock prices in a long time, but will not affect for a short period of time. El-Nader *et al.* (2012), also not the same as this study, macroeconomic factors real gross domestic product (RGDP) has no significant positive impact on stock prices

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### **CONCLUSIONS**

This research was conducted to test, analyze and explain the factors that influence stock prices. This research aims to analyze and explain the factors that affect stock prices. The variables used in this study are stock prices, microeconomic factors and macroeconomic factors. The share price used is the average share price per year. Microeconomic factors are projected by Debt To Equity Ratio (DER), Gross Profit Margin (GPM), Net Profit Margin (NPM), Price Earning Ratio (PER) and Return on Assets (ROA). Macroeconomic factors that are used as variables are inflation (INF), interest rates (INT) and Gross Domestic Product (GDP).

The study was conducted on automotive sector manufacturing companies and components listed on the Indonesia stock exchange period 2010-2018. The sample selection in this study used a purposive sampling method, in order to obtain 12 sample companies. Data analysis techniques used the Structural Equation Modeling (SEM) method with the SmartPLS 3.0 computer program. Model testing is done by analyzing secondary data in the form of financial statements, annual reports and data from the IDX website.

The results of hypothesis testing and discussion of the results of hypothesis testing, the conclusions can be drawn in this study. This conclusion is expected to provide answers to the hypotheses proposed, and also give theoretical meaning to the new things found in this study. The results of this study indicate that the micro-economic factors projected by Net Profit Margin (NPM) have a significant positive effect on stock prices. Investors see the company in terms of net profit generated. Companies must keep trying to make a profit so that stock prices remain good, so investors are still interested in owning shares. While the macroeconomic factors projected by Interest (INT) and Gross Domestic Product (GDP) have no effect on stock prices. The government must adopt a policy to stimulate investment in the capital market for increase investment.

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