

# The Influence of Fundamental and Technical Factors Toward the Stock Price of Automotive Company Listed in the IDX

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## Abstract

*This study aims to study the effect of fundamental and technical factors on stock prices in companies that are included in the automotive sector on the Indonesia Stock Exchange. The object of this research is automotive sector companies listed on the Indonesia Stock Exchange in the 2015-2019 period. The dependent variable used is stock prices. Meanwhile, the independent variable used is the Price Earning Ratio which acts as a fundamental factor, Trading Frequencies and Trading Volume which act as technical factors. The processed data were analyzed using Panel Data Regression Analysis. This study found that partially, Price Earning Ratio does not have a significant effect on stock prices. Meanwhile, Trading Frequency and Trading Volume have a significant influence on share prices.*

**Keywords:** *fundamental analysis, technical analysis.*

## 1. Introduction

Indonesia is one of the developing countries where the automotive industry is one of its main industries. With a population of more than 250 million, Indonesia is a large market share in ASEAN for automotive industry players. In previous years, the percentage of car production in Indonesia in the 2009-2016 period experienced the highest increase in 2010. In 2010, the increase in total annual production reached 51.1 percent of production in 2009. In 2009, car production in Indonesia was 464,816 units, and rose to 702,508 in 2010 (Republika, 2020). In 2010, the production of all categories increased. In Indonesia, car production at that time consisted of six categories. These include sedans, 4 × 2, 4 × 4, buses, pickups, and trucks. In terms of percentage, of the six categories, 4 × 4 production rose the most phenomenal in 2010 (around 500 percent) to 15,191 units from 3,560 units in 2009. Meanwhile, the other five categories in 2010 increased by 100 percent on average. For the total number of cars produced in Indonesia, the highest figure occurred in 2014 (1,298,523 units). The peak of production figures in 2014 was preceded by a downward trend for two years since 2013. After increasing 25.7 percent in 2011-2012, the percentage of production weakened where growth was 14.6 percent in 2012-2013. This weakening continued in 2013-2014 where production growth was only 7.6 percent. The strengthening of car production growth in Indonesia in the 2009-2016 period was driven by the production of environmentally friendly and affordable cars (LCGC). LCGC car production in Indonesia has occurred since 2013, preceded by the issuance of government policies. For production figures, the 4 × 2 category shows consistency. Meanwhile, sedan production had grown convincingly since 2009 until it reached its peak in 2014 (61,499 units), before dropping drastically to 29,525 units in 2016.

As one of the main industrial sectors in Indonesia, the automotive sector in Indonesia has always been a concern of the Indonesian government. Significant growth did not occur in 2019. In 2019, the production of four-wheeled vehicles reached 1.28 million vehicles (equivalent to US \$ 13.17 billion), down 4.2 percent from the previous year. Apart from the real sector, the performance of companies in the automotive sector has also experienced turmoil during the previous years. The Central Statistics Agency (BPS) said that the processing or manufacturing industry throughout 2019 declined. BPS assessed that this decline should be a concern considering that manufacturing is one of the supporting sectors for the Indonesian economy. Head of BPS Suhariyanto said the manufacturing industry in the fourth quarter of 2019 grew 3.66% lower than in the fourth quarter of 2018 which only grew 4.25%. The manufacturing industry throughout 2019 also declined when compared to 2018. In 2019, the manufacturing industry grew 3.8%, down 12.4% compared to manufacturing growth in 2018 which was 4.3%. The increase and decrease that occurs in an industry will of course have an impact on the performance of its shares. In the stock exchange, the various industrial sectors that overshadow the automotive and component industries have decreased by 7.03% since the beginning of the year (year to date / ytd) in line with the decline in the manufacturing industry due to declining demand for automotive. Of the 13 issuers whose businesses are engaged in the automotive sector, 11 stocks have decreased since the beginning of the year, only one share strengthened, and 1 share was stagnant, referring to data from the Indonesia Stock Exchange (IDX) (CNBC, 2019). Various studies have been conducted to find answers to what factors affect the performance of a company's stock. According to Husnan in Wina and Arie (2017), there are two approaches in assessing stock prices, namely fundamental analysis and technical analysis. Fundamental analysis tries to estimate future stock prices by estimating the values of fundamental factors that affect future stock prices and applying these variable relationships to obtain an estimate of the stock price. In this study, researchers chose Price Earning Ratio (PER) as one of the variables. PER is one of the fundamental indicators that reflects investor confidence in a company. The value in PER shows a high market value too. The trading frequency variable was chosen to be the other independent variable. Trading frequency is chosen because it is an indicator to measure the activity of a stock transaction. Ahmad (2015) said that when there is an increase in the number of trading frequencies, it will have an impact on the increase in share prices as well. In addition to trading frequency, the technical factor that researchers used in this study was trading volume. Trading volume is an indicator that shows investor interest in a stock. Automotive sector stocks are an attractive commodity for investors in Indonesia because automotive sector stocks promise long-term benefits. However, this potential long-term gain is still accompanied by the risk of loss because the industry is moving in a volatile manner. Changes in stock prices that can be influenced by various factors, ranging from fundamental and technical ones. Therefore, based on this background, researchers are interested in making research entitled "The Influence of Fundamental and Technical Factors Toward the Stock Price of Automotive Company listed in the IDX"

## **2. Literature Review**

The development of an industrial sector in a country can be influenced by various factors. Starting from internal company factors, company external factors, technical factors to fundamental factors. Various kinds of research have been conducted to find answers to what factors have the most influence on a company's stock price. In this study, it refers to previous research that has been conducted by many researchers. From the many studies, the results obtained are different. Husnan and Wina (2017) in their research state that there are two approaches used in analyzing the company's stock performance, namely technical and

fundamental analysis. Research conducted by Ema (2015) shows the results where PER as a fundamental factor does not have a significant effect on stock prices. Meanwhile, research conducted by John (2015) shows a significant influence exerted by PER. Research conducted by Samsuar and Akranmunnas (2017) uses ROA as one of the fundamental factors where ROA has a significant effect on stock prices. For technical factors, Samsuar and Akranmunnas (2017) use trading volume where this variable has a significant effect on stock prices. Purnamawati (2015) uses a different approach to her research. Purnamawati (2015) uses macroeconomic factors such as the interest rate and the inflation rate as independent variables. This study also shows that the interest rate and the inflation rate partially have a significant effect on stock prices. Uli and Sularto (2009) make a significant difference in this study where one of the variables used is systematic risk. The systematic risk variable used in this study uses beta. However, the results of his research show that simultaneously, the independent variables used have an effect on stock prices.

In this study, the researcher chose to use Trading Frequency and Stock Trading Volume. This analysis can produce information on stock price movements that will occur next or forecasts about stock prices and provide information on how the effect of trading frequency and share trading volume on stock prices.

### 3. Methodology

This research method used is descriptive research with quantitative research approach. The research type is a causal relationship, namely a causal relationship. Types and sources of data in the study used secondary data, i.e. data on PER (Price Earnings Ratio), trading frequency, trading volume, and stock prices. The data used were taken from various sources such as the Indonesia Stock Exchange and other sources. This study analyzes the influence of fundamental and technical factors on the company's stock price. The fundamental factors in this study are represented by the Price Earnings Ratio variable, while the technical factors are represented by the variable trading frequency and trading volume.

The object of this research is the automotive sector companies listed on the Indonesia Stock Exchange. The sample selection in the study was determined by purposive sampling, the sampling technique for data sources with certain considerations. The samples in this study were all manufacturing companies in the automotive sub-sector and components listed on the Indonesia Stock Exchange during the 2015-2019 periods. The main requirement in this sampling technique is that these companies must have been listed on the Indonesian stock exchange before 2015. Furthermore, these companies must also regularly make annual reports for the 2015-2019 periods.

The variables that have been selected in this study are then described in a description and operationalization of the variables as follows:

#### Identification and Definition of Operational Variables

No.	Variables	Indicators	Operational Definition Measurement	Unit
1	Price Earnings Ratio (PER) Share	price divided by earnings per share (EPS)	$PER = \frac{\text{stock price}}{\text{earning per share (EPS)}}$ A measure of a company to generate net income from shares.	Times (X)
2	Trading Frequency	Trading stock transactions number in a certain period is a	Company measuring instrument to measure the activeness of a company's shares.	Times (X)

3	Trading Volume	Shares number of the company being traded divided by the number of shares outstanding	Volume = $\frac{\text{tradable shares}}{\text{Listed shares}}$ A company measure instrument for gauge whether investors know the information issued by company and use it in buying or selling shares.	Sheet (Shares)
4	Stock Price	Data on the price of one share at closing.	Company measurement instrument to gauge the company performance in.	Rupiah (Rp).

To analyze the data used, the researchers used the Least Square Panel method (Panel Data). This method is used because the data used is in the time series form and cross section. The analysis stage using panel data begins with the panel data regression model selection. It consists of 3 models, i.e Common Effect Model, Fixed Effect Model, the Random Effect Model. Model selection is done to determine the best model for data analysis performed. Model Selection (Estimation Technique) Panel data regression consists of F statistical test (Chow test), Hausman test and Lagrange multiplier test. After the regression analysis is carried out, the hypothesis will be tested using T test, F test, and determination coefficient.

#### 4. Results and Discussion

From the research results, it can be determined the effect of Price Earning Ratio (PER), Trading Frequency, and Trading Volume on Stock Prices based on panel regression estimates using the fixed effect model (FEM) approach. By using the Eviews 9 program, the estimation results are obtained as in the following table:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2237.467	351.7855	6.360315	0.0000
PER	-3.318049	2.450573	-1.35398	0.1807
FREQ	0.005033	0.000899	5.597850	0.0000
VOL	-4030.668	1297.724	-3.10595	0.0029
R Squared	0.369171			
P-Value	0.000003			

Thus, the resulting panel data regression equation is as follows:

$$Y = 2237.467 - 3.328049 \text{ PER} + 0.005033 \text{ FREQ} - 4030.668 \text{ VOL}$$

From the regression analysis that has been carried out, the results of the analysis are as follows:

- 1) Variable Price Earning Ratio (PER) has a probability value (P-Value)  $0.1807 > 0.05$ , which means that PER does not have a significant effect on stock prices.
- 2) The Trading Frequency variable (FREQ) has a probability value (P-Value) of  $0.0000 < 0.05$ , which means that FREQ has a significant effect on stock prices.
- 3) The trading volume variable (VOL) has a probability value (P-Value) of  $0.0029 < 0.05$ , which means that VOL has a significant effect on stock prices.

In this study, a simultaneous test was also conducted to determine whether the Price Earning Ratio, Trading Frequency and Trading Volume have a simultaneous influence on stock

prices. By using a probability value (F-Statistic) of 0.000003 <0.05, it can be concluded that simultaneously the variables used have a significant effect on stock prices.

## **5. Conclusion**

Based on the results of research that has been carried out as well as in the discussion of chapter IV regarding the testing of the Price Earning Ratio (PER) model, Trade Frequency, and Trade Volume in automotive sector companies for the 2015-2019 period, the researchers can draw the following conclusions:

- 1) Price Earning Ratio (PER) has no significant effect between one independent variable on the dependent variable, namely the stock price of automotive sector companies listed on the IDX for the 2015-2019 period. There is no significant effect of the price earning ratio, so stock movements cannot be predicted because the nature and pattern of PER cannot be utilized optimally.
- 2) Trading frequency has a significant effect on one independent variable on the independent variable, namely the stock price of automotive sector companies listed on the IDX for the 2015-2019 period. The significant influence of trading frequency indicates the amount of contribution to future stock price movements following certain and repetitive patterns.
- 3) Trade Volume has a significant effect on one independent variable on the independent variable, namely the stock price of automotive sector companies listed on the IDX for the 2015-2019 period. The increase in trading volume reflects the increase in the amount of supply and demand for a stock, thereby contributing to future stock price movements.
- 4) Price Earning Ratio (PER), Trading Frequency, and Trading Volume together have a significant effect on the stock prices of automotive sector companies listed on the IDX for the 2015-2019 period. So that the three variables can contribute to stock price movements in the future.

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