



The Impact of Accounting Fundamentals and Macroeconomic Indicators on Manufacturing Companies' Stock Prices

Van hyung Shih¹, Chien Hoang¹

¹University of Economics Ho Chi Minh City, Viet Nam

*Corresponding Author: Van hyung Shih



Article Info

Article history:

Received 14 July 2021

Received in revised form 8 August 2021

Accepted 14 August 2021

Keywords:

Accounting Fundamentals
Macroeconomic Indicators
Stock Prices

Abstract

The aim of this research is to ascertain if accounting fundamentals and macroeconomic indicators have an effect on stock prices. In this research, a quantitative method was used. The population of this research includes manufacturing firms listed on the Stock Exchange, with a sample size of ten companies collected through secondary data during the 2019-2020 quarter. Scale of data measurement using a ratio scale. The findings indicated that inflation and interest rate macroeconomic variables had little impact on stock values. Fundamentals of Accounting the return on equity and the price-earnings ratio both have a substantial beneficial impact on company prices.

Introduction

Globalization is accelerating, and as economic ties between nations become more intertwined, the movement of products, as well as money and capital, will rise (Steger, 2017). Changes in macroeconomic data in other nations will have an indirect effect on the economic indicators of a particular country. The manufacturing sector's resiliency was mostly fueled by the consumer products industry, which expanded by 28%. Throughout 2014, the consumer products business sector's share performance was underpinned by high domestic income. Additionally, during this time period, consumer goods issuers have provided items that have evolved into fundamental daily necessities for the people.

People today have a greater desire to invest their money, either in stock deposits or in investment, which is the placement of a number of funds at this moment with the expectation of profit in the future. Investment is a commitment to a variety of funds or other sources of money made now with the goal of receiving a variety of advantages in the future. Numerous securities are exchanged in the capital market in a variety of formats, including mutual funds, bonds, and other valuable certificates (Bogle, 2015). Investing in stocks is one kind of investment that is very appealing to the general population.

Investor confidence is bolstered by their view of the fairness of securities prices (shares). The capital market is considered to be information efficient in this case (Chaity & Sharmin, 2012). It is claimed that the capital market is informationally efficient. If the prices of its securities accurately represent all relevant information, the capital market is considered to be informationally efficient. Incorrect and misleading information will almost definitely mislead investors when it comes to investing in securities, which may be harmful to investors. The more timely and precise information is communicated to potential investors and reflected in the stock price, the more efficient the capital market is.

Increased interest rates aggressively may boost the currency but the Composite Index (JCI) would fall as investors choose to save in banks (Febrianto, 2014). When interest rates rise, stock prices fall. Similarly, when interest rates fall, stock values rise. The currency weakened as a result of the high interest rate. Additionally, as a result of the investment shift. On the other

hand, if interest rates fall, investors will return to the capital market, since the JCI position would have grown.

Interest rate reductions are very likely to have an effect on credit expansion. The issue is, however, whether this strategy of reducing interest rates would result in an increase in credit distribution growth, particularly during the COVID-19 epidemic. Between January and April 2020, the data indicates that the distribution of conventional bank loan funds reached just 1.96 percent. As is well known, interest rates were reduced twice between January and April, from 5.00 percent to 4.50 percent, or 50 basis points. On the other hand, despite BI's continuous rate cuts, time deposits continued to increase despite a decreasing trend. Naturally, with the reduction in BI interest rates, the interest profit on deposits will be decreased. Thus, although the quantity of time deposits has risen, the growth tendency has actually slowed. According to Lifepal, the proportion of time deposits in traditional banks was 6.14 percent in 2016, but increased to 6.21 percent in 2017. Then, time deposits grew at a rate of just 4.9 percent in 2018 and 2.9 percent in 2019.

Investors usually hope for a rise in the stock price, but in fact, the stock price is very volatile and constantly changing, necessitating that investors be adept at evaluating stock prices before to buying, or they risk suffering significant losses. Prior to making investment choices, investors should perform a financial statement study of the business. Financial statements may educate investors about the overall health of the business (Du Toit & Vermaak, 2014). Financial performance is one factor that investors will consider (Hassan et al., 2015).

Manufacturing firms in increased from 49.9 in January to 50.1 in February. A reading of more than 50 implies that the manufacturing sector is growing. GDP expanded from 5.07 percent in 2017 to 5.17 percent in 2018. Economic development is based on a stable manufacturing industrial sector (Marconi et al., 2016; Haraguchi et al., 2017). Along with being a primary sector for promoting equality in development and community welfare, the government is concentrating its efforts on creating a manufacturing sector that is focused on natural resource processing, export-oriented, and labor-intensive.

Manufacturing contributes for almost a quarter of Gross Domestic Product

Gross was able to sustain positive growth even throughout the global financial crisis, while industrialized nations' economic circumstances deteriorated (Khoon& Lim, 2010). Although average economic growth is low, it is steady due to prudent management of domestic spending. The food and beverage industry is one of biggest industrial industries (Valta et al., 2015). A big nation with a sizable population. With a growing population comes an increase in public consumption. Well-known across the globe as a possible target market due to its huge population and high level of public consumption. Numerous items sell well. Automobiles, gadgets, lifestyle, and other consumer items are all included. This demonstrates the attractiveness of manufacturing firms as an investment target. To begin the investing process, an investor must first understand many fundamental investment principles. Understanding the fundamental principles of investing is critical for making the appropriate investment decisions to accomplish the intended objectives.

On the basis of the background phenomenon, IS and LM theory, as well as prior findings, the title of this research can be expanded to Macroeconomic indicators and accounting fundamentals determine the amount of stock prices in manufacturing companies listed on the Stock Exchange in 2019-2020

Methods

The research method utilized in this study is descriptive associative research using a quantitative approach. The research variable is the definition of the definition, since it already include the indications that will be utilized to quantify the relevant variable.

A variable that is self-contained or a variable that is self-contained. Independent or unrelated factors are those that influence or cause changes or occurrences. variable that is reliant (dependent). The independent variables in this research are as follows: (a) PER is a ratio that is used to forecast a company's growth prospects by comparing stock prices to earnings per share.. The greater this ratio, the greater the rate of return on investment obtained by shareholders. Yekti Sulistiyo (2018) cites the following formula: ROE = Return on equity

Totally unique

Interest is the amount of value/return that the lender charges the borrower over a certain period of time. Changes in the benchmark interest rate throughout the course of the year. Inflation is the continual percentage rise in the price of products in a nation. Inflation is calculated using the Consumer Price Index (CPI), which measures changes in the prices of packaged products and services used by the general population. Inflation: The Central Bureau of Statistics publishes monthly inflation figures throughout the year.

Illustration

Sampling is a component of determining the population's size and characteristics. As such, the sample represents a subset of the population drawn for research reasons. Purposive sampling was used to choose the study sample, which means that the sample was chosen based on specific criteria and factors. Sampling criteria include the following: a. Manufacturing businesses that are listed on stock market; and b. Manufacturing companies who regularly provide full data and publish financial reports sequentially during the 2019-2020 quarter period.

Technique for data gathering

The data for this research is a cross section using secondary data sources at ten businesses during a two-year period. Thus, the researcher records all data necessary for this study in accordance with the financial statements published by the Stock Exchange, which can be obtained through the stock market's official website

Result and Discussion

Inflation is the percentage increase in the price of goods that occurs continuously in a country. Inflation is measured using the Consumer Price Index (CPI) indicator, which reflects the price movements of the packages of goods and services consumed by the public.

Tabel 1. Inflation Data

| No | Period | Inflation Data |
|----|----------------|----------------|
| 1 | December 2020 | 1.68 % |
| 2 | November 2020 | 1.59 % |
| 3 | October 2020 | 1.44 % |
| 4 | September 2020 | 1.42 % |
| 5 | August 2020 | 1.32 % |
| 6 | July 2020 | 1.54 % |

| | | |
|----|----------------|--------|
| 7 | June 2020 | 1.96 % |
| 8 | May 2020 | 2.19 % |
| 9 | April 2020 | 2.67 % |
| 10 | March 2020 | 2.96 % |
| 11 | February 2020 | 2.98 % |
| 12 | January 2020 | 2.68 % |
| 13 | December 2019 | 2.72 % |
| 14 | November 2019 | 3 % |
| 15 | October 2019 | 3.13 % |
| 16 | September 2019 | 3.39 % |
| 17 | August 2019 | 3.49 % |
| 18 | July 2019 | 3.32 % |
| 19 | June 2019 | 3.28 % |
| 20 | May 2019 | 3.32 % |
| 21 | April 2019 | 2.83 % |
| 22 | March 2019 | 2.48 % |
| 23 | February 2019 | 2.57 % |
| 24 | January 2019 | 2.82 % |

Descriptive Statistics Test Results

Descriptive statistical analysis was carried out to provide an overview of the data that had been collected which consisted of 4 variables, namely Price Earning Ratio PER (x1), Return of Equity ROE (x2), Interest Rates (x3), Inflation (x4) and Stock Prices. This analysis includes the number of studies, minimum value, maximum value, average value (mean) and standard deviation.

Table 2. Descriptive Statistical Test Results

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---------------|----|---------|---------|---------|----------------|
| Stock price | 60 | 20.98 | 109.32 | 59.6829 | 26.22298 |
| Inflation | 60 | 1.40 | 3.30 | 2.5167 | .69725 |
| Interest rate | 60 | 4.00 | 6.30 | 5.0333 | .88426 |

According to table , the results of the computation above indicate that n, or the quantity of data in each variable, is 60. Each variable will be explained in detail as follows:

Stock price fluctuation

The Stock Price Variable has a range of values from 20.98 to 109.2, with a mean of 59.6 and a standard deviation of 26.2.

Variable Inflation

The inflation variable has a mean of 2.5 and a standard deviation of 0.69. It has a minimum value of 1.40, a maximum value of 3.30, an average of 2.5, and a standard deviation of 0.69.

Variable Interest Rate

The Interest Rate variable has a mean of 5.03 and a standard deviation of 0.88. It has a minimum value of 4.00, a maximum value of 6.30, an average of 5.03, and a standard deviation of 0.88.

Variable according to Roe

Roe has a minimum of -77, a maximum of 1.39, an average of 0.14, and a standard deviation of 0.30 e. PER. has a minimum of -37.10, a high of 578.40, an average of 68.66, and a standard deviation of 97.23.

The Conventional Assumption Test

Prior to doing multiple regression on the data, the classical assumption test is used to ensure that the data collected together with the study variables are appropriate for further processing. The following conventional assumption tests may be employed in this study:

Test of Residual Normality

The residual normality test is used to determine the residual distribution's normality. A decent regression model has a normally distributed or nearly normally distributed data set. The Kolmogorov Smirnovtest may be used to visualize this test. If the probability is greater than 0.05, H0 is accepted, assuming the data is normally distributed. If the probability of the data is 0.05, H0 is rejected, indicating that the data are not normally distributed and thus need special treatment to make them normal.

Table 3. Normality Test Results With One-Sample Kolmogorov-Smirnov Test

| | Unstandardized Residual |
|------------------------|--------------------------------|
| Mean | .0000000 |
| Std. Deviation | 3046.82100800 |
| Absolute | .131 |
| Positive | .131 |
| Negative | -.094 |
| Test Statistics | .131 |
| Asymp. Sig. (2-Tailed) | .120 ^c |

According to table 4.7, the normality test results from SPSS processing are 0.120 higher than 0.05 using the One Sample Kolmegrov-Smirnov Test. As a result, it is possible to infer that the data is normally distributed.

Test for Multicollinearity

The purpose of this procedure is to determine if there is a correlation between the independent variables identified in the regression model. There should be no connection between the independent variables in a decent regression model. The multicollinearity test requires an examination of the Tolerance and VIF (Variance Inflation Factor) values. If the Tolerance value is higher than 0.10, the regression model is not multicollinear. If the Tolerance value is less than 0.10, the regression model is multicollinear. If the VIF value is less than 10.00, the regression model is not multicollinear. If the VIF value is higher than 10.00, the regression model is multicollinear.

Table 4. Multicollinearity Test Results

| Model | Collinearity Statistics | |
|---------------|-------------------------|-------|
| | Tolerance | VIF |
| Inflation | .656 | 1.525 |
| Interest rate | .597 | 1.674 |

Source: Secondary data

Based on Table 4.7 above, it can be seen that the Tolerance value for Inflation Variable x1 Interest Rate x2 Return of Equity x3 and Price Earning Ratio x4 get 0.656, 0.597, 0.995, and 0.888 each greater than 0.10 and the value of Variance Inflation Factor (VIF) for the four independent variables, the Inflation variable x1 Interest Rate x2 Return of equity x3 and Price Earning Ratio x4 has a value less than 10.00. So it can be concluded that the regression equation model does not have a multicollinearity problem and can be used in this study.

Heteroscedasticity Test using Glejser Test

Aims to test whether the regression model occurs inequality of variance and residual from one observation to another observation. If the residual variance from one observation to another observation remains, it is called homoscedasticity and if it is different it is called heteroscedasticity. A good regression model is homoscedasticity.

Test of Autocorrelation

Results of the Autocorrelation Test Autocorrelation refers to the existence of a correlation between sample members or time-ordered observational data, so that one set of data is affected by preceding data. The purpose of this test is to evaluate whether or not there is a connection between the mistakes that occur in time-sorted data (time series). A good model must be autocorrelation-free. The Durbin-Watson model is used for the autocorrelation test. The Durbin-Watson statistical test was used to determine if the residual value lacked autocorrelation. The following are DurbinWatson's testing criteria:

If the DW is -2, a positive autocorrelation exists b). If the value of DW is between -2 and +2, there is no autocorrelation c). If the DW value is more than two, then there is a negative autocorrelation.

Correlation Coefficient Test Results (R) and Determination Coefficient

The correlation coefficient test (R) is used to concurrently evaluate the connection between two or more independent variables (X) and the dependent variable (Y). While the coefficient of determination (R²) is employed in multiple linear regression to estimate the proportion of the impact of the independent variables on the dependent variable concurrently (Y). This coefficient indicates how much variation in the independent variable can be explained by the variance in the dependent variable.

For regressions involving more than two independent variables, the modified R² coefficient of determination is employed. If the modified R² value is equal to 0, the variation in the independent variable employed in the model does not account for even the smallest change in the dependent variable. By contrast, when adjusted R² equals 1, the change in the independent variable employed in the model fully accounts for the variance in the dependent variable.

0.00 - 0.199 = very little

0.20 - 0.399 is a low value.

0.40 - 0.599 is a reasonable value.

0.60 - 0.799 = powerful

0.80 - 1,000 = very powerful

Table 5. Correlation Coefficient Test Results (R) and Determination Coefficient

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .511 | .469 | .408 | 24.762 |

According to output display, the correlation coefficient (R) of 0.511 shows a moderate connection (correlation) between the independent and dependent variables, indicating that the factors examined have a moderate effect on stock prices.

According to Table 4.9, the R Square value is 0.469, indicating that the independent variables, namely Inflation x1, Interest Rate x2, Return on Equity x3, and Price Earnings Ratio x4, can explain 46.9 percent of the variation in the Stock Price variable, while the remaining 54.1 percent is explained by variables not included in this research model.

Inflation's Effect on Stock Prices

Inflation has a little impact on stock prices; this is because inflation moves in one digit increments, so that changes in inflation have little effect on determining stock values. The lack of a strong correlation between inflation and stock prices for businesses listed, particularly manufacturing, is due to rising inflation, which may impact production costs and selling prices (Kilian & Park, 2009). The need for a rise in selling prices decreases market demand, and therefore when there is inflation, the business often cuts its output. Reduced output ultimately results in decreased operational efficiency and profitability. However, the increase in household spending, which is very significant compared to previous year, suggests that domestic demand remains pretty strong. This was also a result of the increase in the Provincial Minimum Wage and the improving composition of employment, which signaled to investors that demand for consumer goods would not decline despite inflation, particularly given that the consumer goods sector is resistant to economic recession due to the fact that the majority of products sold are for basic needs. Thus, investors continue to assume that even as inflation increases, the consumer goods industry can endure until prices reach a new equilibrium. Stocks that fluctuate substantially in response to external variables such as covid 19, which impacts the company's revenue, particularly in the manufacturing sector, obviously have a greater impact on stock prices.

Inflation is a widespread rise in prices, or Additionally, inflation may be defined as a decline in the buying power of money (Bernanke et al., 2018). The greater the price rise, the lower the currency's worth. Thus, a rise in the price of certain products or a price increase owing to a poor crop, for example, does not constitute inflation. The most often used inflation metrics are the "consumer price index" and the "cost of living index." This index is calculated using the price of a chosen package of products and is intended to reflect consumer purchasing habits. Inflation has no impact on the rise and fall of stock values. As a result of the research above, it is clear that inflation has no impact on the stock price index. This study corroborates concluded that inflation had no substantial impact on stock prices

Conclusion

Inflation has no impact on stock prices for businesses listed, particularly manufacturing. This is due to rising inflation, which may impact production costs and selling prices. However, the

increase in household spending suggests that domestic demand remains pretty strong. The study corroborates concluded that inflation had no substantial impact on stock prices.

References

- Bernanke, B. S., Laubach, T., Mishkin, F. S., & Posen, A. S. (2018). *Inflation targeting: lessons from the international experience*. Princeton University Press.
- Bogle, J. C. (2015). *Bogle on mutual funds: New perspectives for the intelligent investor*. John Wiley & Sons.
- Chaity, N. S., & Sharmin, S. (2012). Efficiency measures of capital market: a case of Dhaka stock exchange. *International Journal of Business and Management*, 7(1), 102.
- Du Toit, E., & Vermaak, F. (2014). Company financial health: financial statement users' and compilers' perceptions. *Journal of Economic and Financial Sciences*, 7(3), 819-836.
- Febrianto, M. (2014). *The Influence Of Dow Jones Index, Nikkei Index, Hang Seng Index, Exchange Rate On Idr, Bi Interest Rate And Inflation Towards Jakarta Composite Index Period 2010–2013* (Doctoral dissertation, President University).
- Haraguchi, N., Cheng, C. F. C., & Smeets, E. (2017). The importance of manufacturing in economic development: Has this changed?. *World Development*, 93, 293-315.
- Hassan, R., Marimuthu, M., & Kaur Johl, S. (2015). Diversity, corporate governance and implication on firm financial performance. *Diversity, Corporate Governance and Implication on Firm Financial Performance*, 7(2), 28-35.
- Khoon, G. S., & Lim (Mah-Hui.). (2010). *The impact of the global financial crisis: the case of Malaysia*. Third World network (TWN).
- Kilian, L., & Park, C. (2009). The impact of oil price shocks on the US stock market. *International Economic Review*, 50(4), 1267-1287.
- Marconi, N., de Borja Reis, C. F., & de Araújo, E. C. (2016). Manufacturing and economic development: The actuality of Kaldor's first and second laws. *Structural Change and Economic Dynamics*, 37, 75-89.
- Steger, M. B. (2017). *Globalization: A very short introduction* (Vol. 86). Oxford University Press.
- Valta, K., Kosanovic, T., Malamis, D., Moustakas, K., & Loizidou, M. (2015). Overview of water usage and wastewater management in the food and beverage industry. *Desalination and Water Treatment*, 53(12), 3335-3347