

The Influence of Fundamental and Technical Analysis on Stock Returns in Retail Industries: A Study on Indonesia Stock Exchange 2013-2017

Siti Komariah^a, Mohd Haizam Mohd Saudi^b, ^{a,b}Faculty of Business and Management, Widyatama University, Indonesia
Email: siti.komariah@widyatama.ac.id,

In investing in stocks, investors certainly expect returns in the future. To get a return, an analysis is needed, namely a technical and fundamental analysis. Fundamental factors of this research focus more on inflation and profitability, while the technical factors use Trading Volume Activity (TVA). The purpose of this research was to determine the effect of Inflation, Profitability and Trading Volume Activity (TVA) on Stock Returns of the retail industry listings on the Indonesia Stock Exchange in 2013-2017. The research sample consisted of 19 retail companies with sampling methods using Purposive Sampling. The method used is multiple linear regression using program eviews 9. Based on data processing, the results show that Inflation and Profitability have an influence on stock returns, while TVA has no influence on stock returns.

Key words: *Trading volume activity, Inflation.*

Introduction

Currently, the development of investment in Indonesia is quite rapid. One investment that can be made by the community is investment in the capital market. Many investment instruments exist in the Indonesian capital market, one of which is stock investment. Each sector listing in the Indonesian capital market has different stock prices, so the rate of return is different. One sector in the capital market is the retail industry. The retail industry sector is a crucial industrial sector for the country, because the retail industry is one of the drivers of the Indonesian economy that is directly related to the wider community, to meet its consumption needs (Sri Mulyani, 2017). In addition, the retail industry contributes 13.01% of the Indonesian economy (www.bps.go.id/2017).

The Indonesian retail industry has experienced a decline in the last few years. In 2017, more than three major retail stores closed their outlets. This also has an impact on falling stock

prices and retail industry returns when viewed from the capital market. According to Bareksa's observation, of the four shares of retail companies that are widely transacted in the sector, only one company is able to move positively.

Figure 1. Stock Performance in Retail Industries



Source: www.bareksa.com (2017)

For this reason, investors who will invest in stocks need to analyse the company's financial statements first so that they can facilitate their investment decisions. In these financial statements, one can obtain information about the performance of a company and this info can be used as a basis for determining stocks that can provide the level of return as expected; because one of the objectives of investors to invest is to get an optimal return (Soedjatmiko, Abdullah and Taufik, 2018). Hartono (2010) stated that stock returns are the rate of stock returns on investments made by investors. If the value of a company's financial performance is higher, the return rate will be higher. (Tyas, Mardani and Mahono, 2018).

Broadly speaking, investors can analyse stocks using fundamental information and technical information. According to Wira (2014), the fundamental analysis has several approaches in analysing, namely analysing from the broadest scale, then to the industrial sector, then converging into the financial condition of the company itself. The broadest scale is macro-economic factors and financial conditions can be seen in financial statements. The form of financial statement information is in the form of ratios that are used to measure the financial performance of the company; published for the benefit of investors (Graham, 2018). Fundamental factors in this research focus more on inflation and profitability ratios, namely *Return on Assets*. Technical factors pay more attention to what is happening on the market than what should have happened. This technical analysis uses market data from stocks, for example the price and volume of stock transactions to determine the value of shares. The researcher focused on Trading Volume Activity (*TVA*) on technical factors (Graham, 2018).

Inflation indicators must be observed by investors and used as a basis for decisions, both about calculating the cost of production, as well as determining the selling price of production after inflation. Meanwhile, for investors, inflation will affect the amount of profits and losses obtained (Nurhakim, Yunita and Iradianty, 2016). The next fundamental indicator is profitability. The profitability ratio in this research is proxied by *Return on Assets* (ROA). ROA is used to determine company performance based on the company's ability to use the amount of assets owned. According to Tyas, Mardani and Mahono (2018), Increasing ROA reflects a company's better performance, and investors will purchase company shares. This will result in an increase in the company's stock price due to the increasing demand for shares by investors. Increasing stock prices means that the returns received by investors also increase. Technical factors use Trading Volume Activity (TVA) which is a comparison between the number of shares traded at a certain time and the number of shares outstanding during a certain period (Rumanti and Moerdiyanto, 2012). Active trading shares have large trading volumes and stocks with large trading volumes will generate high stock returns (Abdul Hadi, Zainudin, Hussain, & Rehan, 2019).

Research on inflation, profitability, trading volume activities and stock returns has also been carried out by several previous researchers, among them are Tyas, Malavia & Mahono (2018), Kurniyanti, Basri & Faisal (2016), Abidin (2016), Manurung (2016), Al Samman dan Al Jafari (2015), Har and Ghafar (2015), Daljono (2013), Tripathi (2014), Haghiri (2012), and Kabajeh et al. (2012).

Literature Review and Hypothesis Development

Investing, according to Tandelilin (2017:2), is a commitment to a number of funds or other resources carried out at this time, with the aim of obtaining a number of future benefits. Investments are made by the company to facilitate the operation process in the form of investment in assets and working capital. The main reason people invest is to make a profit. One thing that is very reasonable is if an investor demands a certain level of return on the funds that have been invested (Meyer, 2018). According to Jogiyanto (2012:199), stock returns are the results obtained from investment. To get a profit (return), when we make an investment, in-depth analysis is needed. There are 2 (two) analysis that we can do to be able to increase returns at the time of investment, namely a fundamental analysis and a technical analysis. A fundamental analysis is a stock analysis technique that studies the fundamental financial and economic facts of the company as a measure of the company's stock price. A fundamental analysis takes into account several factors, such as company performance, business competition analysis, industry analysis, economic analysis and macro-micro markets (Wira, 2014). While a technical analysis is a technique to predict the direction of movement of stocks and other stock indicators based on historical market data such as price and volume information (Tandelilin, 2017). Fundamental factors analysis, in this research, use inflation

and profitability ratios, while technical factors use *Trading Volume Activity* (TVA) (Tabor, 2018).

Effect of Inflation on Stock Returns

Inflation is an event that shows an increase in the price level in general and takes place continuously (Natsir, 2014). Continuous price increases will result in higher production costs incurred by the company and reduced purchasing power. In addition to people's purchasing power, high inflation will reduce the investment power of the community. This of course will affect the demand for shares and will affect the decline in stock prices. The fall in stock prices will reduce stock returns (Nobanee, 2018). This was confirmed by the results of Manurung, Sulelo (2015), and Tripathi's (2014) research, which states that inflation has a significant negative effect on stock returns. This means that an increase in inflation will result in a decrease in stock returns. Thus, the first hypothesis for this research is:

H1: Inflation affects stock returns

Effect of Profitability on Stock Returns

According to Kasmir (2010), profitability is used to assess the effectiveness of a company in seeking profits. In this research, profitability is proxied by *Return On Assets* (ROA). ROA, according to Gitman & Zutter (2015:130) is a ratio that measures the effectiveness of overall management in generating profits by using assets owned. ROA also provides a good measure of company profitability because it assesses the effectiveness of management in using assets owned to earn income. The higher the profitability, the better the financial performance of a company (Fahmi, 2013). The better performance will encourage investors to invest in the company. This will have the impact of increasing stock prices on the Exchange. The stock price increases, stock returns will increase, and vice versa. This is in accordance with Tyas, Malavia & Mahono (2018), Har and Ghafar (2015), Haghiri (2012) and Kabajeh et al's (2012) research. Thus, the second hypothesis for this research is:

H2: Profitability affects stock returns

Effect of Trading Volume Activity on Stock Returns

Trading volume activity (TVA) is used as an independent variable because this variable reflects buying interest that occurs in the market and also to see the market conditions that occur. According to Rumanti & Moerdiyanto (2012), *Trading Volume Activity* (TVA) is a comparison between the number of shares traded at a certain time and the number of shares

circulated during a certain period. This shows the high demand of investors so that it will have an impact on increasing stock prices. If the stock price increases, then the stock return will increase, and vice versa. This statement is supported by research conducted by Kurniyanti, Basri & Faisal (2016) and dan Salman & Al-Jafari (2015). The results of his research show that TVA has a significant positive effect on stock returns. Thus, the third hypothesis for this research is:

H3: Trading Volume Activity (TVA) affects stock returns

Data Collection and Methodology

This type of research is explanatory research using a quantitative approach. The sampling technique used purposive sampling with criteria: (1) Companies in the retail sector that are listed on the Indonesia Stock Exchange in 2013-2017; and (2) Always publish financial statements in the research period. Of the population of 24 companies, 19 samples met the criteria for the research. Data collection in this research is a documentation technique by tracing historical data from the official IDX website, TICMI and BI website. Data analysis uses pooling data with panel data regression models. Regression models in this research are as follows:

$$\text{Stock Return} = a - \beta_1 \text{Inflasi} + \beta_2 \text{ROA} + \beta_1 \text{TVA} + e$$

The analysis technique in this research uses descriptive statistical analysis and inferential statistics which include: classic assumption test, t-test, F-test, and Coefficient of Determination.

Research Result and Discussion

Research Result

The data that will be used in the regression model must meet several classic assumption tests. The classic assumption test aims to provide certainty that the regression equation used has accuracy in estimation, is not biased, and is consistent. The classic assumption test used in this research is a normality test, multicollinearity test and a heteroscedasticity test.

Table 1: Research Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VIF
C	0.049595	0.149612	-0.271187	0.7869	NA
Inflasi	-0.219572	2.343486	-2.771264	0.0484	1.008962
ROA	0.068854	0.053973	2.932713	0.0373	1.006805
TVA	1.030131	1.271134	1.019665	0.1209	1.012742
F-statistic	7.198538		Probability	0.062846	
Prob (F-statistic)	0.001735		Prob. Chi-Square(2)	0.7099	
			Prob. Chi-Square(9)	0.0611	

Based on table 1 above, it can be concluded that this research has met the testing of classic assumptions. The magnitude of the probability value on the histogram graph is equal to $0,062846 > 0.05$; it means that data is normally distributed. In testing autocorrelation using LM-test there is a value of Prob. Chi-Square (2) is equal to $0.7099 > 0.05$; which means it is free from the symptoms of autocorrelation. For heteroscedacity testing using white test with Prob value. Chi-Square (9) is equal to $0.0611 > 0.05$; meaning that this research is free from heteroscedastic symptoms. Multicollinearity testing can be seen from the VIF value in the range of one, this shows that this research is free from the symptoms of Multicollinearity.

Based on the results of regression calculations, it is known that the formed regression model is a common effect model or in other words the difference in the characteristics of each company is considered to have an effect on stock returns. The regression equation that will be formed is as follows:

$$\text{Stock Return} = 0.049595 - 0.219572\text{Inflation} + 0.068854\text{ROA} + 1.030131\text{TVA} + e$$

In table 1 above, the *adjusted R-square* value obtained is equal to 0.434302. This shows that the three independent variables consisting of inflation, profitability, and Trading Volume Activity (TVA) contributed to stock returns in the amount of 43.43%, while the remaining 56.57% was contributed by other variables that are not examined. Prob.t value is equal to $0.001735 > 0.05$, which means that the regression model used is fit. Value prob t. Inflation variable is equal to $0.0484 < 0.05$, which means that inflation affects stock returns, prob.t ROA is equal to $0.0373 < 0.05$, which means that ROA has an effect on stock returns, prob.t variable TVA is equal to $0.1209 > 0.05$, which means TVA does not have a significant effect on stock returns.

Discussion

Effect of Inflation on Stock Returns

The results of the research show that inflation affects stock returns. This shows that higher inflation will reduce the stock return. Increasing inflation will lead to increasing of consumption expenditures caused by high prices of goods, so more money is needed to buy the same amount of goods and services. This causes a decrease in savings and investment which results in a decrease in the number of requests for shares. The decline in demand for these shares will cause a decline in stock prices and stock returns. This research result is in accordance with the research conducted by Manurung (2018), Sulelo (2015), and Tripathi (2014) which states that inflation has a significant negative effect on stock prices.

Effect of Profitability on Stock Returns

The results showed that profitability was statistically influential on stock *returns*. This condition shows that a higher profitability ratio of a company can increase stock *returns*. The higher the profitability, the better the firm's financial performance (Fahmi, 2013). The better the performance of the company will encourage investors to invest in the company. This will have an impact on increasing stock prices on the Exchange. If the stock price increases, the stock return will increase, and vice versa. This research result is in accordance with the research conducted by Tyas, Malavia & Mahono (2018), Andesta, Aryanti & Mawardi (2016), Parwati & Sudiartha (2016) and Basalama, Murni & Sumarauw (2016), Har and Ghafar (2015), Haghiri (2012), Kabajeh et al. (2012), which shows that ROA has a statistically significant positive effect on stock returns.

Effect of Trading Volume Activity (TVA) on Stock Returns

Based on the results of data processing, it shows that TVA does not affect stock returns. This shows that the high and low of TVA does not affect the value of stock returns. In investing in stocks, investors tend to carry out fundamental analysis (for example looking at the company's financial performance and macro conditions), because of its long-term nature. As for the many who do technical analysis in general are traders, and even then what is seen is the pattern of stock movements using charts. Investors rarely see how much TVA decides to buy company shares. This research result is in accordance with the research conducted by Darwis (2016), which shows that TVA statistically has no effect on stock returns.

Conclusion and Suggestions

Based on the results of statistical processing, it shows that inflation and profitability have an influence on stock returns, while TVA has no influence on stock returns. This shows that only fundamental factors influence stock returns, while technical factors have no effect.

The results of this research can provide advice for the company, investors, and future researchers.

(1) For the company, this research can help companies to increase stock prices by paying attention to external and internal factors that can affect the company's stock price. When the inflation rate is high, the company must be able to manage its financial decisions and manage its profitability so that its stock performance remains good so that it can increase its stock return.

(2) For investors, if the investment objectives are long-term, focus on fundamental analysis by looking at the company's financial performance, one of which looks at the level of profitability of the company. In addition, before investing, you should look at the macro conditions of the country, especially by looking at the inflation rate that will affect the company's performance.

(3) For further researchers who are interested or will examine more deeply the stock returns of the retail sector, it is hoped that this research can become a reference material. Especially by adding factors other than those tested in this research.

REFERENCES

- Abdul Hadi, A.R., Zainudin, Z., Hussain, H.I. & Rehan, R., (2019) Interaction of Short-Term and Long-Term Interest Rates in Malaysian Debt Markets – Application of Error Correction Model and Wavelet Analysis, *Asian Academy of Management Journal*, 24 (Supp. 1), 19 – 31.
- Abidin, Suhadak, Hidayat Raden R (2016). Pengaruh Faktor-Faktor Teknikal Terhadap Harga Saham (Studi Pada Harga Saham IDX 30 Di Bursa Efek Indonesia Periode 2012-2015). *Jurnal Administrasi Bisnis (JAB)*. 37 (1)
- Al Samman, Hazem and Al Jafari Mohamad Khaled (2015). Trading Volume and Stock Returns Volatility: Evidence from Industrial Firms of Oman. *Asian Social Science Vol. 11, No. 24*
- Andesta, Aryanti, & Mawardi (2016). Pengaruh ROA, ROE, NPM, dan CR terhadap Return Saham pada Perusahaan yang Terdaftar di Jakarta Islamic Index (JII). *I - Finance, Vol 2. No 2*
- Basalama, Murni, & Sumarauw (2017). Pengaruh Current Ratio, DER, dan ROA terhadap Return Saham pada Perusahaan Automotif dan Komponen Periode 2013-2015. *Jurnal EMBA, Vol. 5 No. 2*
- Daljono, Bramantyo Nugroho (2013). Pengaruh Kinerja Keuangan Terhadap Return Saham (Studi Empiris Perusahaan Automotive And Component Yang Listing Di Bursa Efek Indonesia Periode 2005-2011). *Diponegoro Journal of Accounting*, 2 (1)
- Darwis (2016). Pengaruh Volume Perdagangan terhadap Return Saham LQ-45 selama Bulan Ramadhan di BEI. *Jurnal management STIE MDP*
- Fahmi, I (2013). *Analisis Laporan Keuangan*. Bandung: ALFABETA
- Gitman, Zutter (2015). *Principles of Managerial Finance. 13 Edition*. Global Edition: Pearson Education Limited.
- Haghiri, Amir and Soleyman Haghiri. (2012). The Investigation of Effective Factors on Stock Return With Emphasis on ROA and ROE Ratios in Tehran Stock Exchange (TSE). *Journal of Basic and Applied Scientific Research*, 2 (9).
- Har, Wong Pik and Ghafar (2015). The Impact of Accounting Earning on Stock Return: The Case of Malaysia`S Plantation Industry. *International Journal of Business And Management*, 10(4).



Hartono, J (2012). *Teori Portofolio dan Analisis Investasi*. Yogyakarta: BPFE-Yogyakarta.

<https://economy.okezone.com>

Jogiyanto Hartono. (2012). *Teori Portofolio dan Analisis Investasi*, Edisi Kedelapan, BPFE, Yogyakarta.

Kabajeh, Said, and nd Firas (2012) The Relationship Between The ROA, ROE, And ROI Ratios With Jordanian Insurance Public Companies Market Share Price. *International Journal Of Humanities And Social Science*, 2 (11).

Kasmir. (2012). *Analisis Laporan Keuangan*. Jakarta: Rajawali Pers.

Manurung. (2016). Pengaruh Inflasi, Suku Bunga Dan Kurs Terhadap Indeks Harga Saham Gabungan Pada Bursa Efek Indoensia . *Jurnal Ekonomi*. Vol. 19 No 4.

Meyer, D. F. (2018). Predictors of good governance and effective government management: the case of Poland. *Polish Journal of Management Studies*, 18 (1), 206-217.

Natsir, M. (2014). *Ekonomi Moneter dan Perbankan Sentral*. Jakarta: Mitra Wacana Media.

Nobanee, H. (2018). Efficiency of working capital management and profitability of UAE construction companies: size and crisis effects. *Polish Journal of Management Studies*, 18 (2), 209-215.

Nurhamin Anistia, Yunita, Iradianty. (2016). Pengaruh Profitabilitas dan Inflasi Terhadap Return Saham. *E-proceeding of management*, Vol 3, No.1

Parwati, & Sudiarta (2016). Pengaruh Profitabilitas, Leverage, Likuiditas dan Penilaian Pasar terhadap Return Saham pada Perusahaan Manufaktur. *E-Jurnal manajemen Unud*, Vol 5 No.1 .

Rumanti & Moerdiyanto (2012). Pengaruh Pemecahan Saham (Stock Split) terhadap Return dan Trading Volume Activity (TVA) Saham Perusahaan yang terdaftar di Bursa Efek Indonesia Periode 2006-2010.

Soedjatmiko, Abdullah Dan Taufik, (2018). Pengaruh Roa, Der Dan Per Terhadap Return Saham Pada Perusahaan Consumer Goods Industry Di Bursa Efek Indonesia Periode 2010-2015. *Jurnal Ekonomi Dan Bisnis Vol.11, No.1*

Suselo, D. I. (2015). Pengaruh Variabel Fundamental dan Makro Ekonomi terhadap Harga Saham (Studi pada Perusahaan yang Masuk dalam Indeks LQ45). *Jurnal Aplikasi Manajemen*.



Tabor, J. (2018). A grey-based decision-making approach to the improvement of OHS management system. *Polish Journal of Management Studies*, 18 (1), 389-402.

Tandelilin, E. (2017). *Portofolio dan Investasi: teori dan Aplikasi*. Yogyakarta: Kanisius.

Tripathi (2014). Relationship between Inflation and Stock Returns – Evidence from BRICS markets using Panel Co integration Test. *International Journal of Accounting and Financial Reporting*, Vol. 4, No. 2

Tyas, Malavia, & Wahono (2018). Analisis Pengaruh Rasio Likuiditas, Solvabilitas, Aktivitas dan Profitabilitas terhadap Return saham. *e-jurnal Riset Manajemen* .

Wira Desmond. (2014). *Analisis Fundamental Saham. Edisi Kedua*. Bandung. Exceed Book.

www.bareksa.com

www.bi.go.id

www.idx.co.id