The effect of financial performance, company size, and gross domestic product on abnormal returns

Ahmad Abros Mustofa, Yulis Maulida Berniz*, Adi Susanto

Department of Management, Faculty of Economics and Business, Universitas Peradaban
Jl. Raya Pagojengan Km.3 Paguyangan, Brebes, 52276, Indonesia

*Corresponding Author: E-mail: esha816@yahoo.com

Abstract

This study focuses on the effect of financial performance, firm size, and gross domestic product on abnormal returns. Financial performance is measured by proxies for liquidity, profitability, earnings per share, leverage, and market value. The object of this study were manufacturing companies listed on the Indonesia Stock Exchange in 2016-2020 and samples were taken using a purposive sampling technique so that a sample of 114 manufacturing companies was obtained. The analysis technique in this study uses multiple linear regression analysis. The results showed that liquidity (CR), earnings per share, leverage (DER), market book-value (MBR), and firm size had no effect on abnormal returns. Profitability (ROE) has a positive effect on abnormal returns, and gross domestic product has a negative effect on abnormal returns.

Keywords: Capital adequacy ratio; Covid-19; Lending; Non-performing loans

1. Introduction

Companies are business activities that produce goods and services. Each company has a future plan so that the company's goals can be achieved by maximizing profits. For this reason, the company needs funds to carry out its operational activities. In general, the desire of companies to obtain financing is quite high, but at relatively low costs, so companies can do this by trading shares in the capital market. According to Sambelay et al. (2017) the capital market is a means of interaction between parties who need funds and those who have excess funds by trading securities. The capital market is a relatively inexpensive source of funding and has good prospects for companies that want to increase their company value. Increasing company value is not only limited to maximizing profits, but companies must also pay attention to ongoing operational activities and uncertain profit risks in the future. A good company tries to increase its rate of return.

According to Rahmi (2016), funding sources from the capital market will be more prospective if the company is already running, because companies that are just starting investment will have difficulty in obtaining funding through the capital market. One of the securities that are easy to trade in the capital market is shares, shares are proof of ownership or part of the investment that has been made. The ease with which shares are traded in the capital market, so that it can cause fluctuations in stock prices, this also affects investors in making investment decisions. Investors invest in the capital market other than because it is easy and safe, of course, they have another goal, namely getting a return on the funds that have been invested.

According to Pratama (2021) in Indonesia, the number of investors has experienced very rapid growth, even in 2021 the number of stock investors increased by one million SIDs. According to Lyman (2021) in the last five years the number of stock investors in Indonesia has shown an increase, according to the data on the number of stock investors per Single Investor Identification (SID) in 2016-2020.

Table 1.

Number of stock investors per Single Investor Identification (SID)

Year	Number of Investors
2016	534,261
2017	628,491
2018	852,240
2019	1,104,610
2020	1,695,268

Source: Badan Pusat Statistik, 2021

Table 1 shows that the number of stock investors from 2016-2020 continues to increase, this means that investment for the Indonesian people always experiences a positive trend every year. The increase is due to the public knowing that there is a return on the funds that have been made because for investors the main purpose of investing is to get a return on the funds that have been invested. According to Hotimah & Astawinetu (2020) return is a reward for funds that have been invested, returns can be in the form of actual returns and expected returns. The difference between actual return and expected return is called abnormal return. According to Herlianto (2013) returns are rewards for investors' courage to spend funds and bear risks and one of the motivations for investors to invest.

Abnormal returns can be both positive and negative depending on the difference between expected return and actual return. According to Ulfah & Paramu (2017) the high and low abnormal returns depend on aspects that are directly related to financial performance, because the better the financial performance, the stock price and return will automatically increase. In the last five years, the abnormal value of returns of manufacturing companies has fluctuated, even some large manufacturing companies, the abnormal return value is negative. The following is presented data on the abnormal value of returns of manufacturing companies in 2016-2020 (Table 2).

Based on Table 2, the abnormal return values obtained from manufacturing companies, where these values show fluctuations. For abnormal returns in 2016-2018, the average value is positive, then in 2019 and 2020 the average value is negative. This condition was caused by Indonesia's economic growth not reaching the set target and in 2019-2020 the Indonesian economy experienced a decline resulting in abnormal returns,

fluctuating and several companies getting negative values. The following shows Indonesia's economic growth data for 2016-2020.

Table 2.
Abnormal return in 2016-2020

Emitten Code	Abnormal return (%)				
	2016	**2017**	**2018**	**2019**	**2020**
ASII	22,6	-19,7	1,6	-17,5	-8,8
GGRM	0,9	11,1	2,3	-38,3	-18,5
HMSP	-111,2	3,5	-19,0	-45,1	-24,2
ICBP	-51,7	-16,2	20,0	5,0	-34,4
INDF	37,8	-23,8	0,2	4,7	25,0
JPFA	113,8	-30,6	67,9	-30,3	-0,4
KAEF	200,8	-21,8	-1,2	-53,6	244,2
SMGR	-34,8	-12,1	18,7	2,7	7,7
TKIM	32,2	280,0	282,7	-9,1	0,0
UNVR	-10,5	24,1	-16,2	-9,2	-78,3

Source: Indonesian Exchange (IDX), 2021.

Based on Table 3, Indonesia's economic growth in the last five years has not reached the set target and can be said to be set at 5%, while the cause of Indonesia's economic growth is set at 5%, namely in 2016-2018 there was global economic uncertainty, slowing exports, and the increase in the cost of electricity, causing people to limit the level of consumption. Then in 2019, Indonesia's economic growth experienced a decline due to simultaneous elections which created political uncertainty in Indonesia and had an impact on economic growth. In 2020, Indonesia's economic growth weakened again due to the Covid-19 virus outbreak which affected all sectors and all companies so that economic growth decreased drastically.

Table 3.
Economic Growth in Indonesia

Year	Economic Growth (%)	Target
2016	5.02	5.2
2017	5.07	5.2
2018	5.17	5.4
2019	5.02	5.3
2020	-2.07	2.3 -2.2

Source: www.kemenkeu.go.id

These conditions have an impact on financial performance because according to Ulfah & Paramu (2017) the high and low abnormal returns depend on factors that are directly related to financial performance. Financial performance in this study includes liquidity, profitability (ROE), earning per share, leverage (DER), and market book value (Market Book Ratio). Husnan & Pudjiastuti (2012) states that liquidity can be used to assess a company's ability to meet short-term financial obligations. According to Ulfah & Paramu (2017), ROE can be used to show the strength of the company in obtaining profits that will be distributed to shareholders. According to Cahyani et al. (2016), earning per share (EPS) can be a proportion used to see the profit earned by shareholders of each share. Husnan & Pudjiastuti (2012) explains that leverage is used to assess a company in using its debt. Market value gives an idea of fundamental performance with business prospects viewed through stock prices. Sari (2020) explains that this market value can be calculated from the stock price.

Abnormal return is also influenced by company size because company size will affect the risk of various situations. Gross domestic product is also known as one of the factors that can affect the rate of return because GDP output is the result of company sales of both goods and services produced by companies so that it will increase profits and returns.

This study refers to Carter et al. (2021) which discusses cumulative abnormal return and shows the results that liquidity ratio, market-to-book ratio, and size have a significant positive effect on cumulative abnormal return while the leverage ratio has a negative effect on cumulative abnormal return. The research results contradict the research of Chendrawan (2012) and Ulfah & Paramu (2017) which state that liquidity (CR) has no effect on stock abnormal returns. Other research also shows different results, according to Chendrawan (2012) and Felicia (2019) stating that company size has no effect on abnormal returns. Basically, many similar studies have been carried out, but this research has carried out several developments, namely adding the variables of profitability (ROE), Earning per Share (EPS), and Gross Domestic Product (GDP) and using a different object, namely a manufacturing company in all sectors. On the basis of these gaps, it is necessary to conduct further research regarding the effect of financial performance, firm size, and Gross Domestic Product on abnormal returns. This study aims to investigate the effect of liquidity, profitability, earnings per share, leverage, market book value, size, and gross domestic product on abnormal returns.

2. Method, Data, and Analysis

This type of research, namely quantitative research. Siyoto & Sodik (2015) explained that quantitative method is research that demands the use of numbers, from data collection to presentation. Data in this study used secondary data in the form of financial statements obtained by accessing the https://www.idx.co.id/ website.

The population in this study is manufacturing companies listed on the Indonesian Stock Exchange for the 2016-2020 period, with sampling techniques using purposive sampling techniques. The sampling criteria are: manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2020 period and issuing annual financial statements successively. Operational variables are explained as follows:

Abnormal return

Calculation of abnormal return, actual return, and expected return according to Rahmi (2016):

$$AR_{i,t} = R_{i,t} - Rm_t$$

Where:

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \qquad Rm = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$$

Liquidity (CR)

The calculation of the current ratio according to Husnan & Pudjiastuti (2012) is as follows.

$$Current\ Ratio = \frac{Current\ Asset}{Current\ Liabilities}$$

Profitability (ROE)

The calculation of ROE according to Husnan & Pudjiastuti (2012) is as follows.

$$Return\ On\ Equity = \frac{Earnings\ After\ Taxes}{Equity}$$

Earning per Share (EPS)

The calculation of EPS according to Rahmi (2016) is as follows.

$$EPS = \frac{Earnings\ After\ Taxes}{Total\ Shares\ Outstanding}$$

Leverage (DER)

The calculation of DER according to Husnan & Pudjiastuti (2012) is as follows.

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

Market Value (MBR)

The calculation of *MBR* according to Husnan & Pudjiastuti (2012) is as follows.

$$Market\ to\ Book = \frac{Share\ Price}{Net\ Book\ Value\ per\ Share}$$

Company Size

The calculation to determine the size of the company according to Rizqiyana & Arfianto (2019) is as follows.

$$Size = Ln\ Marketcap$$

Gross Domestic Product

GDP measurement can be seen from the data contained on the website of the Central Statistics Agency (BPS). The value of GDP can be determined by the following calculations.

$$GDP = C + GFCF + \Delta I + X - M$$

Data Analysis Techniques

The analytical tool used in this study is to use multiple regression analysis, the equations of the multiple linear regression model are as follows.

$$ARit = \alpha + \beta_1 CR + \beta_2 ROE + \beta_3 EPS + \beta_4 DER + \beta_5 MBR + \beta_6 UP + \beta_7 GDP + e$$

3. Results

This study uses panel data to investigate the effect of several company fundamentals and macroeconomic variables on the abnormal returns on stock returns of manufacturing companies in Indonesia. The results of the analysis using multiple regression are presented in Table 4.

Table 4.
Multiple Regression Analysis Results

Variables	Unstandardized Coefficients		Standardized Coefficients	Prob.	Sig.
	B	Std. Error	Beta		
(Constant)	-.050	.311		-.159	.874
CR	.003	.012	.014	.281	.779
ROE	.564	.127	.239	4.439	.000
EPS	9.482E-005	.000	.040	.754	.451
DER	.020	.014	.071	1.406	.160
MBR	-.002	.009	-.009	-.172	.864
SIZE	.002	.011	.011	.195	.846

Note: Level of significance 5%

Based on Table 4 shows that the variable CR, EPS, DER, MBR, and SIZE have a significance level >0.05, which means that CR EPS, DER, MBR, and SIZE have no effect on abnormal returns. Meanwhile, the size variable has a significance level of 0.05, which means that size affects abnormal returns. The results of data processing generate a regression equation:

AR_{it} = -0.050 + 0.00 CR + 0.564ROE + 9.482E-005EPS + 0.020DER– 0.002MBR+ 0.002SIZE– 2.436PDB + e

4. Discussion

Effect of liquidity (CR) on abnormal returns

The results of this study show that variable liquidity (CR) has no effect on abnormal reurn, because a high CR indicates that the company is able to meet its short-term obligations, investors also consider that companies listed on the IDX are companies that have good liquidity values, while in reality not all companies have good liquidity values, but even though the value.   A high CR does not necessarily mean that the company has a high revenue value that can also be shared with shareholders, so this variable cannot affect abnormal returns. This study has similarities with the research of Chendrawan (2012) and Ulfah & Paramu (2017) which states that liquidity (CR) has no effect on abnormal returns.

Effect of profitability (ROE) on abnormal returns

The results of this study indicate that the variable profitability (ROE) has an effect on abnormal returns because the size of ROE describes how much profit will be obtained by shareholders, high ROE indicates that a company can manage its capital well so that shareholders will get a proper profit and increase well-being. In addition, investors will also pay attention to ROE because ROE has a positive effect on abnormal returns so when ROE increases, abnormal returns will also increase. This study has similarities with Halima et al. (2019) and Permana (2017) which state that profitability (ROE) has a positive effect on abnormal returns.

Effect of earnings per share (EPS) on abnormal returns

The results of this study indicate that the Earning per Share (EPS) variable has no effect on abnormal returns because investors consider EPS to be less relevant when used in decision-making because EPS is only a small part of the information in the capital market. The capital market in Indonesia based on the market efficiency hypothesis is still considered inefficient so an event is easy to predict, this makes investors who already know will pay less attention to changes in EPS values. This study is in line with Cahyani et al. (2016) who state that Earning per Share (EPS) has no effect on abnormal returns.

Effect of leverage (DER) on abnormal returns

The results of this study indicate that the leverage variable (DER) has no effect on abnormal returns, because the higher the DER value, the more risky a company is so that when a company earns profits it will prioritize covering its obligations rather than providing income to shareholders. This research has similarities with the research of Felicia (2019) and Sari (2020) which states that leverage (DER) has no effect on abnormal returns.

Effect of market value (MBR) on abnormal returns

The results of this study indicate that market value (MBR) has no effect on abnormal returns. A high MBR illustrates a high market value of the company, but there is no exact

measure or level of fairness of stock prices as measured by MBR so that investors pay less attention to the value of MBR in making investment decisions. A high MBR value also does not necessarily provide a high return because there are companies that prefer to retain their profits rather than share their returns, so this variable cannot affect abnormal returns. This research is in line with the research of Ulfah & Paramu (2017) and Octavianus (2012) which states that market value (MBR) has no effect on abnormal returns.

Effect of company size on abnormal returns

The results of this study show that the variable company size does not affect abnormal returns, because investors' assumptions that a large company size will provide a high level of abnormal returns is a wrong assumption because the company size is less informative in assessing company performance, so that not always large companies will provide abnormal levels of return which is high, it is even possible that small companies do not rule out the possibility of providing abnormal high returns. This research has similarities with the research of Chendrawan (2012) and Felicia (2019) which states that company size has no influence on abnormal returns.

Effect of gross domestic product on abnormal returns

The results of this study show that the variable gross domestic product affects abnormal returns, because when gross domestic product increases, it indicates an increase in income and an increase in people's welfare, which has an impact on increasing consumption of products and services. This increase in public consumption does not indicate an increase in trading in company stocks, so it indicates that this GDP has a negative influence on abnormal returns, so that when GDP increases, the abnormal rate of return will decrease. This research has similarities with the research of Utami & Sulistyowati (2022), Yuniati et al. (2021), and Wiradharma (2016) which states that gross domestic product has a negative influence on abnormal returns.

5. Conclusion

Based on the data that has been collected and carried out statistical tests, it can be concluded as follows. Liquidity (CR) has no effect on the abnormal return on shares of manufacturing companies. Profitability (ROE) affects the abnormal return. Earnings per Share (EPS) has no effect on the abnormal return. Leverage (DER) has no effect on the abnormal return. The market value (MBR) has no effect on the abnormal return on shares of manufacturing companies. The size of the company has no effect on the abnormal return on shares of the manufacturing company. Gross domestic product affects the abnormal return on shares of manufacturing companies.

Manufacturing companies need to improve financial performance by paying attention to the factors that are considered by investors in investing because good financial performance can increase the company's stock price. Priority is focused on profitability which can affect abnormal returns. If investors are going to invest in a company, they should pay attention to fundamental factors and technical factors, besides that investors can also see the lowest rate of return from abnormal returns. For future research, it is better to add macroeconomic variables, as well as carry out developments related to research methodology so that the research results get a fit model.

References

Cahyani, L., Simanjuntak, A. M., & Hutadjulu, L. (2016). Analisis pengaruh pengumuman laporan keuangan terhadap return saham. *Jurnal Akuntansi dan Keuangan Daerah*, *11*(1), 50-64.

Carter, D., Mazumder, S., Simkins, B., & Sisneros, E. (2021). The stock price reaction of the COVID-19 pandemic on the airline, hotel, and tourism industries. *Finance Research Letters*, (March), 102047. https://doi.org/10.1016/j.frl.2021.102047

Chendrawan, T. S. (2012). Pengaruh likuiditas, earnings growth, leverage, dan ukuran perusahaan terhadap abnormal return saham Indeks LQ-45. *Manajerial: Jurnal Manajemen dan Sistem Informasi*, *11*(2), 48-67. https://doi.org/10.17509/manajerial.v11i2.2174

Felicia, S. S. (2019). Pengaruh ukuran perusahaan, informasi laba, kebijakan dividen dan leverage terhadap abnormal return. *Jurnal Paradigma Akuntansi*, *1*(2), 372-380. https://doi.org/10.24912/jpa.v1i2.5005

Halima, J., Amin, M., & Mawardi, M. C. (2019). Analisis pengaruh faktor fundamental perusahaan dan kondisi makro ekonomi terhadap abnormal return perusahaan industri pertambangan di BEI (Bursa Efek Indonesia). *e_Jurnal Ilmiah Riset Akuntansi*, *8*(10), 68–81.

Herlianto, D. (2013). *Manajemen Investasiplus Jurus Mendeteksi Investasi Bodong*. Yogyakarta: New Library.

Hotimah, H., & Astawinetu, E. D. (2020). Analisis perbedaan return dan abnormal return saham sebelum dan setelah adanya protes dari greenpeace tentang sampah plastik pada PT. Unilever. *JEM17: Jurnal Ekonomi Manajemen*, *5*(1), 47–58. https://doi.org/10.30996/jem17.v5i1.3621

Husnan, S., & Pudjiastuti, E. (2012). Dasar-dasar manajemen keuangan. (6th ed.). Yogyakarta: UPP STIM YKPN.

Lyman, C. (2021). How is the development of investment in indonesia in the last 5 years? Retrieved July 27, 2021, from Pintu Blog website: https://pintu.co.id/blog/perkembangan-investasi-di-indonesia-5-tahun-terakhir

Octavianus, D. (2012). Analisis karakteristik idiosyncratic risk pada abnormal return saham berdasarkan capital asset pricing model. *Jurnal Ilmiah Mahasiswa Manajemen*, *1*(5).

Permana, S. J. (2017). Analisis faktor-faktor yang memengaruhi abnormal return saham pada perusahaan perbankan dan asuransi yang terdaftar di Bursa Efek Indonesia. *BISMA: Jurnal Bisnis Dan Manajemen*, *11*(1), 12-27. https://doi.org/10.19184/bisma.v11i1.6205

Rahmi, R. W. (2016). Pengaruh rasio keuangan terhadap cumulative abnormal return saham perusahaan manufaktur cenderung financial distress dan nonfinancial distress. *Thesis*. University of Jember.

Rizqiyana, A., & Arfianto, E. D. (2019). Pengaruh ambiguity, market risk premium, market to book, size, dan momentum terhadap return saham pada perusahaan yang terdaftar dalam indeks LQ45 periode 2017-2018. *Diponegoro Journal of Management*, *8*(4), 70-79.

Sambelay, J. J., Van Rate, P., & Baramuli, D. N. (2017). Analisis pengaruh profitabilitas terhadap harga saham pada perusahaan yang terdaftar di LQ45 periode 2012-2016. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, *5*(2), 753–761.

Sari, M. (2020). Pengaruh nilai pasar dan faktor fundamental terhadap abnormal return (studi pada perusahaan makanan dan minuman yang terdaftar di Bursa Efek Indonesia (BEI) Tahun 2012-2016). *Journal of Economix*, *8*, 103–114.

Siyoto, S., & Sodik, M. A. (2015). *Dasar metodologi penelitian*. Yogyakarta: Literasi Media Publishing.

Ulfah, D. F., & Paramu, H. (2017). Pengaruh kinerja keuangan dan kebijakan dividen terhadap abnormal return. *Jurnal Sains Manajemen Dan Bisnis Indonesia*, *7*(1), 2541–2566.

Utami, S. R., & Sulistyowati, E. (2022). Pengaruh inflasi, PDB, dan nilai perusahaan selama pandemi Covid-19 terhadap return saham. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, *11*(2).

Wiradharma, A., Satria, M., & Sudjarni, L. K. (2016). Pengaruh tingkat suku bunga, tingkat inflasi, nilai kurs rupiah dan produk domestik bruto terhadap return saham. *E-Journal of Management*, *5*(6), 3392–3420.

Yuniati, N., Rachman, F., & Purwitasari, R. W. (2021). Analisa makro ekonomi pada perusahaan pelayaran di Indonesia. *Jurnal Ilmu Manajemen*, *9*(1), 402–413. https://doi.org/10.26740/jim.v9n1.p402-413