# Effect of Fundamental Factors on Stock Return (On LQ-45 Index Companies in Indonesia Stock Exchange 2017-2020) 

Mai Simahatie ${ }^{1}$, Lakharis Inuzula ${ }^{2}$<br>Faculty of Economics and Business, Universitas Islam Kebangsaan Indonesia<br>E-mail: maisimahatie@gmail.com


#### Abstract

This research is associative research with a quantitative approach. The use of a quantitative approach in this study is intended to test the hypothesis by using statistical calculations to examine the effect of the independent variable on the dependent variable under study. This research will be conducted on the Indonesia Stock Exchange through the official IDX website, namely: http/www.idx.co.id. This research was conducted from July 2021 to December 2021.Typethe data used in this study is quantitative data, namely data measured on a numerical scale (numbers). The population used in this study are companies on the LQ-45 index listed on the Indonesia Stock Exchange from 2017-2020, where there are 45 LQ-45 index issuers which will change every 6 months or the period of February and August every year. year. The sampling technique in this study was purposive sampling which was selected based on certain criteria in accordance with the research objectives.


Keywords: Stock return, price earning ratio (PER), earnings per share (EPS), and debt to equity ratio (DER)

## Introduction

Economic growth in Indonesia is inseparable from the development of the capital market. The more developed and advanced the capital market in Indonesia, it will encourage the economy for domestic and foreign investors to invest their money. The capital market is a market for various long-term financial instruments (or securities) that can be traded. Usually in the form of debt or equity, and issued by the government, public authorities, or private companies.

Stock return is income expressed as a percentage of the initial investment capital. Investment income in this stock is the profit obtained from buying and selling shares, where if the profit is called capital gain and if it is a loss it is called capital loss (Samsul, 2006: 291). Stock returns can be divided into two, namely: 1) realized returns are returns that have occurred which are calculated based on historical data, 2) expected returns are returns that are expected to be obtained by investors in the future (Jogiyanto (2009: 199).

Some of the fundamental factors chosen by the authors in this study are financial ratios which include price earning ratio (PER), earnings per share (EPS), and debt to equity ratio (DER). There are three reasons underlying the use of these three components. First, because basically the three components can be used to estimate the intrinsic value of a stock. Second, dividends paid by companies are basically paid out of earnings. Third, there is a relationship between changes in earnings and changes in stock prices.

Price Earning Ratio (PER) is a comparison between market price per share (market price per share) and earning per share (earnings per share), then PER is the ratio used by investors to assess a company's shares. Price Earning Ratio (PER) indicates the amount of rupiah that must be paid by investors to obtain one rupiah of company earnings. Therefore, the higher the PER value of a company, the more optimistic the market will look at the future prospects of the economy. On the other hand, the lower the PER value, the more anxious and pessimistic the market will be about the future of the economy.

Earning Per Share (EPS) is the ratio of earnings per share or also called the book value ratio, is a ratio to measure the success of management in achieving profits for shareholders (Kasmir, 2013:207), Earning Per Share (EPS) informs shareholders and investors about how much profit each share makes. In a company, EPS is usually directly proportional to revenue. The point is that if the company achieves large revenues, the EPS will be high. On the other hand, it can also be concluded that if the EPS is high, it means that the company's revenue is very large.

Debt to Equity Ratio (DER) is a ratio that describes the ratio of debt and equity in the company's funding and shows the ability of the company's own capital to meet all its obligations (Munawir, 2012:57). The higher the Debt to Equity Ratio indicates the composition of the total debt is greater than the total equity, so that the greater the impact on the company's burden on outside parties (creditors) so that it will increase the level of risk and have an impact on decreasing stock prices.

## Implementation Method

This research is an associative research with a quantitative approach. Associative research based on what was proposed by Sugiyono (2014:74) associative research is research that aims to determine the relationship between two or more variables, looking for roles, and influences, causal relationships, namely between independent variables and dependent variables.

According to Sugiyono (2014:43) "the research location is to show the notion of a place or social location of research which is characterized by the presence of elements of actors, places and activities that can be observed". This research will be conducted on the Indonesia Stock Exchange through the official IDX website, namely: http/www.idx.co.id. This research was carried out from July 2021 to December 2021. The population used in this study were companies on the LQ-45 index listed on the Indonesia Stock Exchange from 2017-2020, where there were 45 companies with the LQ-45 index. which will change every 6 months or the period of February and August every year. The sampling technique in this study was purposive sampling which was selected based on certain criteria in accordance with the research objectives.

## Normality Test

One-Sample Kolmogorov-Smirnov Test

|  |  | PER | EPS | DER | Return <br> Share |
| :--- | :--- | ---: | ---: | ---: | ---: |
| N |  | 40 | 40 | 40 | 40 |
| Normal Parameters, b | mean | 17.5650 | 791,100 | 2.1700 | 0.0593 |
|  |  | Std. Deviation | 6.57088 | 1268,106 | 2,20183 |
| Most | Extreme | Absolute | 0.163 | 0.326 | 0.306 |
| Differences | Positive | 0.163 | 0.326 | 0.306 | 0.156 |
|  | negative | -0.105 | -0.274 | -0.167 | -0.103 |
| Kolmogorov-Smirnov Z | 1.032 | 2.059 | 1,933 | 0.984 |  |
| asymp. Sig. (2-tailed) |  | 0.237 | 0.174 | 0.219 | 0.287 |

a. Test distribution is Normal.
b. Calculated from data.

Based on the results of the normality test using the Kolmogorov-Smirnov test, it showed a normal distribution. Based on the results of SPSS output, the Asymp value. Sig. (2-tailed) variable price earning ratio is 0.237 . Furthermore, the earnings per share variable is known to be the value of Kolmogorov Smirnov Asymp. Sig. (2-taled) of 0.174 . Kolmogorov Smirnov Asymp value. Sig. (2-taled) the Debt to Equity variable is 0.219 while the stock return variable is 0.287 . All variable data shows that the significance value is above 0.05 which means that the data is normally distributed.

## Multicollinearity Test

## Coefficientsa

| Model | Collinearity Statistics |  | Conclusion |
| :---: | ---: | ---: | :--- |
|  | Tolerance | VIF |  |
| (Constant) |  |  |  |
| PER | 0.945 | 1.058 | Multicollinearity does not occur |
| EPS | 0.903 | 1,108 | Multicollinearity does not occur |
| DER | 0.954 | 1.048 | Multicollinearity does not occur |

a. Dependent Variable: Return_Share

Based on the table above regarding the calculation results of the tolerance value, it shows that the independent variable has a tolerance value $>0.10$ which means there is no correlation between the independent variables. The results of the calculation of the value of the variance inflation factor (VIF) also show the same thing where the independent variable has a VIF value $<10$, so it can be concluded that the regression model in this study does not occur multicollinearity.

## Autocorrelation Test

## Model Summaryb

| Model | Std. Error of the <br> Estimate | Durbin-Watson |
| :---: | ---: | :--- |
| 1 | 0.25621 |  |

a. Predictors: (Constant), DER, PER, EPS
b. Dependent Variable: RETURNSHARM

The result of autocorrelation test for DW value is 2.087 which is between 1.7508 and 2.2492 , so there is no autocorrelation. Based on table 4.5. in the autocorrelation test, it can be seen that the DW value is 2.087 , this value will be compared with the value of the Durbin-Watson d Statistics table: Significance Point For d1 and du AT 0.05 Level of Significance using a significance value of $5 \%$, the number of observations is 40 (n) and the number of independent variables $4(k=4)$. If it is seen from the decision making including du $d(4-d u)$, it can be concluded that 1.75082 .087 (4-1.7508). This shows that there is no autocorrelation between independent variables, so the regression model is feasible to use.

## Heteroscedasticity Test



Based on the scatterplot image, that there is no clear pattern or certain shape, the image shows dots that spread randomly and the data spreads over the X axis and above the Y axis, it can be concluded that there is no heteroscedasticity in the regression model.

## Hypothesis Testing

## Coefficientsa

| Model | Unstandardized <br> Coefficients |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
|  | B |  | Std. Error |  |
| Sig. |  |  |  |  |
| (Constant) | 0.021 | 0.137 | 1.151 | 0.001 |
| PER | 0.002 | 0.006 | 2,239 | 0.003 |
| EPS | 4,761 | 0.151 | 2,398 | 0.001 |
| DER | 0.013 | 0.019 | 1,760 | 0.007 |

a. Dependent Variable: Return_Share

Based on the results of the $t$-statistical test in the table above, we can analyze the t-test value and interpret it as follows:

1. Price earning ratio (PER) based on table 4.7 partial statistical test results obtained the $t$-count of the independent variable price earning ratio (PER) (X1) is 2.239. Then the t -table is $(\mathrm{df}=\mathrm{n}-2, \mathrm{df}=40-2=38)$ of 1.68595 . So that the decision making hypothesis is $t$-count $>t$-table where $2.239>1.68595$. The significance value is 0.003 where $<$ $=0.05(5 \%)$. This shows that the price earning ratio (PER) has a positive and significant effect on stock returns.
2. Earning per share (EPS) (X2) has a t-count value of 2,398. Furthermore, if we look at the t-table value is 1.68595 , then the decision is Ha is accepted because t -count $>\mathrm{t}$-table where $2.398>1.68595$ with a significance value of $0.001<=5 \%$. So the conclusion shows that earnings per share (EPS) has a positive and significant effect on stock returns.
3. Debt to equity ratio (DER) (X3) has a t-count value of 0.013 . The decision of the hypothesis is accepted because $t$-count $>\mathrm{t}$-table or in other words that the value of t -count is $1.760>\mathrm{t}$-table 1.68595 . The significance level is $0.007<=5 \%$. The results of the hypothesis test state that the debt to equity ratio (DER) has a positive and significant effect on stock returns.

That the calculated F value $>\mathrm{F}$ table $(12.807>2.87)$ with a significance level of 0.004 which means that it is smaller than $\mathrm{a}=<0.05$ or $5 \%$. Therefore, it can be concluded that the price earning ratio, earnings per share and debt to equity ratio simultaneously have a significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.

The value of the coefficient of determination is located in the Adjusted R-Square column. It is known that the coefficient of determination is 0.315 . This value means that all independent variables, namely price earning ratio, earnings per share and debt to equity ratio affect the stock return variable by $31.5 \%$, and the remaining $68.5 \%$ is influenced by other factors not examined in this study. .

## Results and Discussion

## Effect of Price Earning Ratio (PER) on Stock Return.

The value of the hypothesis testing of the Price earning ratio (PER) variable based on the results of the $t$-test partially has a t-count value of 2.239 with a significance level of 0.001 or less than $=0.05$, then the conclusion Ha1 is rejected, H 0 is accepted. The regression coefficient value of the Price earning ratio (PER) variable is 0.002 , which means that if the other variables are constant (zero) then the PER variable will increase by $0.2 \%$. The results of the study show that the price earning ratio (PER) shows a positive and significant effect on the stock returns of LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.

Price Earning Ratio has a relationship that has a positive effect on Stock Return. Price Earning Ratio information indicates the amount of rupiah that investors must pay to obtain one rupiah of company earnings (Tandelilin, 2010:375). Price Earning Ratio ratio reflects the company's profit growth and is a measure of the relative price of a company's stock. The higher the Price Earning Ratio indicates the prospect of the stock price being valued higher by investors on the earnings per share, so the higher the Price Earning Ratio also indicates the more expensive the stock is to the earnings per share.

A low Price Earning Ratio can mean that the company's stock has a lower market price than its intrinsic value (undervalued) and is attractive as an investment option. Investors tend to choose companies with a low PER value because they consider a high PER value to indicate an expensive stock price and not in accordance with its intrinsic value (overvalued).

Companies with an increasing Price Earning Ratio (PER) indicate that the company is able to generate large net income. Companies that have a high growth rate then the company's Price Earning Ratio (PER) is also high and vice versa companies that have a low growth rate then the company's Price Earning Ratio is also low.

This study supports and is in line with the results of previous research researched by Mayuni (2018) with the research title "The Effect of ROA, Firm Size, EPS and PER on Stock Returns in the Manufacturing Sector on the IDX". The results of his research stated that the Price Earning Ratio had a significant effect on stock returns in manufacturing companies listed on the Indonesia Stock Exchange.

## Effect of Earning Per Share (EPS) on Stock Return.

Based on the results of the study, it is known that the regression coefficient of the independent variable Earnings Per Share (X2) is equal to 4.761. The statistical test of the hypothesis states that Earnings per share (EPS) has a t-count value of 2,398 . Furthermore, if we compare it by looking at the $t$-table value, it is 1.68595 , with a significance value of 0.001 or a significance value of earnings per share (EPS) below $=5 \%$, which means it is significant. So the conclusion shows that earnings per share (EPS) has a positive and significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.

Earning per Share (EPS) in this study has a positive and significant effect on stock returns. EPS shows the company's ability to generate net profit in each share. The higher the EPS value, the better because it will increase the stock price and benefit the company. An increased EPS indicates the company has succeeded in increasing the level of investor prosperity. This encourages investors to increase the amount of capital invested in the company. An increase in the number of requests for shares pushes stock prices up with stock returns that also increase.

Earning Per Share is a ratio that shows how much profit (return) is obtained by investors or shareholders per share. The higher the EPS value, of course, the shareholders are happy because the greater the profit provided to the shareholders. Shareholders and potential investors will generally be interested in Earning Per Share (EPS), because EPS is one indicator of the success of a company. Earning Per Share EPS is the ratio between net income before tax and price per share. EPS shows how much profit is given to investors from each share they own. In simple terms, EPS describes the amount of money earned for each share.

The results of this study are in line with research conducted by Firnanda (2019) with the title "Analysis of the Effect of Fundamental Factors on Stock Prices in Banks - Banks of the Red Plate in 2008-2018". The results of this study indicate that the independent variables, fundamental factors represented by the Earning Per Share variable have a partially significant effect on stock returns at Red Plat Banks in 2008-2018.

## Effect of Debt to Equity Ratio (DER) on Stock Return

Based on the results of the study, the regression coefficient for the debt to equity ratio (DER) (X3) is 0.013 . Statistical testing of the hypothesis through the $t$-test, it is known that the debt to equity ratio (DER) is a $t$-count value of 1.760. The decision of the hypothesis is accepted because $t$-count $>\mathrm{t}$-table or in other words that the value of t count is $1.760>\mathrm{t}$-table is 1.68595 . Furthermore, the significance value is 0.007 which means it is smaller ( $<$ ) than
which is set at $=0.05$ or $5 \%$. The conclusion is that through the results of hypothesis testing, it states that the debt to equity ratio (DER) has a positive and significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.

Debt to Equity Ratio (DER) has a significant effect on stock prices. DER is a financial ratio that compares total liabilities to equity. This debt arises because not all of the company's needs can be met by the company's own capital or by obtaining additional sales of capital so the company must seek loan capital. This research is in line with the theory, namely, when the DER increases, the stock price increases and if the DER decreases, the stock price decreases. This is used by investors in buying shares in the company.

The results of this study are in line with previous research conducted by Ratna Handayati (2018) with the research title Effect of Earning Per Share, Debt To Equity Ratio and Return On Assets on Stock Returns in Manufacturing Companies Listed on the Indonesia Stock Exchange. The results of his research stated that the Debt to Equity Ratio in the $t$ test had a partial effect on stock returns. It is known that the $t$ count is 3.549 with a significant level of 0.001 . Smaller than 0.005 which means the Debt to Equity Ratio has a significant effect on stock returns.

## Effect of Price Earning Ratio (PER), Earning Per Share (EPS) and Debt to Equity Ratio (DER) on Stock Return.

The test results show that there is a simultaneous effect between price earning ratio (PER), earnings per share (EPS) and debt to equity ratio (DER) on stock returns. Based on the results of the F-test or the ANOVA table test, the F-test value is 12.807 using a significance level of $<0.05$. F-count $>$ F-table ( $12.807>2.87$ ) with a significance level of 0.004 which means that it is smaller than $a=<0.05$ or $5 \%$. Therefore, it can be concluded that the price earning ratio, earnings per share and debt to equity ratio simultaneously have a significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.

The multiple linear regression equation by looking at the value of the regression coefficient in this study is $\mathrm{Y}=0.021+0.002 \mathrm{X} 1+4.761 \mathrm{X} 2+0.013 \mathrm{X} 3+\mathrm{e}$. The constant value of 0.021 states that if all independent variables (price earnings ratio (PER), earnings per share (EPS) and debt to equity ratio (DER)) are considered constant (0), then the stock return value is 0.021 . The regression coefficient for the price earning ratio (PER) (X1) is 0.002 . Furthermore, the regression coefficient for earnings per share (EPS) (X2) is 4.761 and the regression coefficient for debt to equity ratio (DER) (X3) is 0.013 .

The coefficient of determination in linear regression is often defined as how much the ability of all independent variables to explain the variance of the dependent variable. The coefficient of determination in this study uses the numbers in the Adjusted R-Square column. It is known that the coefficient of determination is 0.315 . This value means that all independent variables, namely price earning ratio, earnings per share and debt to equity ratio affect the stock return variable by $31.5 \%$, and the remaining $68.5 \%$ is influenced by other factors not examined in this study. .

The results of this study are in line with previous research conducted by Pandaya (2020) with the title of the research being the Effect of Fundamental Factors on Stock Returns. The results of his research stated that EPS had a significant positive effect on stock returns, PER and PBV had a significant positive effect on stock returns, ROE and DER had a positive effect on stock returns and DPR had a negative effect on stock returns. The coefficient of determination from the research results of the six variables on stock returns is $57,0424 \%$.
The results of this study also support research from Saraswati (2020) entitled The Effect of Earning Per Share, Debt To Equity Ratio, Return On Assets, Price To Book Value and Price Earning Ratio on Stock Returns of Manufacturing Companies Listed on the IDX for the 2014-2015 period. The test and analysis results show that EPS, DER, PBV and PER have an effect on stock returns, while ROA has no effect on stock returns.

## Conclusion

1. Price earning ratio (PER) which reflects the relative price measure of a company's stock based on the results of the $t$-test partially has a $t$-count value of 2.239 with a significance level of 0.001 and a regression coefficient value of 0.002 which means that the price earning ratio shows a positive and negative effect. significantly to the stock returns of LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.
2. Earning per Share (EPS) which shows the company's ability to generate net profits in each share in this study has a positive and significant effect on stock returns. Earnings Per Share regression coefficient is equal to 4.761. The statistical test states that earnings per share have a t-count value of 2.398 with a significance value of 0.001 which means that earnings per share (EPS) has a positive and significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period.
3. Debt to Equity Ratio (DER) shows financial ratios by comparing total liabilities and equity. The regression coefficient for the debt to equity ratio is 0.013 with a $t$-count value of 1.760 and the significance value is 0.007 which means that the debt to equity ratio has a positive and significant effect on stock returns in LQ-45 companies on the Indonesia Stock Exchange for the 2017-2020 period. .
4. Simultaneous test results with the F-test value of 12.807 and a significance level of 0.004 . These results prove that there is a significant effect of price earning ratio, earnings per share and debt to equity ratio simultaneously on stock returns. The coefficient of determination is $31.5 \%$, and the remaining $68.5 \%$ is influenced by other variables not examined in this study such as PBV, ROA, Current Ratio and others.

## References

Ang, Robert. 2007. Indonesian Capital Market Smart Book (The Intelligent. Guide To Indonesian Capital Market). First Edition. Mediasoft.
Arifin, Z. 2017. Theory of Finance and Capital Markets. First Edition. Jakarta: Sinar. Graphics.
Brigham, Eugene. Joel F. Houston. 2006. Financial Management. Eighth Edition. Jakarta. Erlangga.
Creswell, John W. 2010. Research Design Qualitative, Quantitative, and Approaches. Mixed.Yogyakarta : Student Library.
Francis, J. Clark, 2010. Investment: Analysis and Management. Seventh Edition. New York: McGraw-Hill Book Company.
Fahmi, Irham. 2015. Introduction to Portfolio Theory and Investment Analysis. Bandung : Alfabeta
Husnan, Suad and Enny Pudjiastuti, (2015), Fundamentals of Financial Management,. Seventh Edition. Yogyakarta: UPP STIM YKPN.
Harmono, 2013, Financial Management Based on the Balanced Scorecard. (Theory, Cases, and Business Research Approaches), Bumi Aksara, Jakarta.
Indriantoro, Nur. 2002, Business Research Methodology, Matter. Second, Yogyakara; BFEE UGM Publisher
Jones. Charles P. 2014. Investment Principles and Concepts. Twelfth Edition. Singapore: John Wiley and Sons Singapore Pte. Ltd
Jogiyanto, 2010. Portfolio Theory and Investment Analysis. Yogyakarta : BPFEYogyakarta
Martalena \& Maya Malinda .(2011). Introduction to Capital Markets. Edition. First, Andi Publisher: yogyakarta.
Makridakis, 2013. Forecasting Methods and Applications, Erlangga Jakarta.
Nugroho, Agung, 2005. The right strategy is to choose a statistical research method using SPSS. Publisher Abdi, Yogyakarta.
Nopirin. 2012. Introduction to Micro-Macro Economics. Yogyakarta: BPFE.
Pandaya, 2020. The Effect of Fundamental Factors on Stock Returns, Journal of Accounting, vol. 9 No. 2, November (2020)

Daughter, Bahar. 2012. Analysis of the Effect of ROA, EPS, NPM, DER, and PBV. To Stock Return (Case Study In Real Estate And Property Industry)
Priyatno, Duwi. 2014. Easy and Fast Techniques for Performing Research Data Analysis with SPSS and Questions and Answers for the Pendadaran Exam. Yogyakarta: Media Style.
Santoso, Singgih. 2014. Book title : SPSS Complete Guide Version 20 Revised Edition Publisher : Gramedia. Jakarta.
Sembiring, LA, \& Fauzie, S. 2015. Analysis of the Effect of Beta and Financial Ratios on Compass 100 Stock Returns. Journal of Economics and Finance, III (3),
Suyanto, 2015. Alternative Social Research Methods Approach. Revised Edition. Jakarta. Kencana Prenada Media Group.
Sutrisno, 2008. Financial Management: Theory, Concepts and Applications Edition 1. Yogyakarta: Econisia.
Sugiyono. 2013. Business Research Methods. Bandung. ALFABETA.
Sujianto, Agus, 2009. Application of Statistics with SPSS 16.0. Jakarta : PT. Library Achievements
Taufik, SE, MBA, 2009. The Effect of Fundamental Factors on Stock Returns at PT. Jakarta Stock Exchange, Sriwijaya Journal of Management \& Business Vol. 7, No. 13 June 2009
Tandelilin, Eduardus. 2010. Portfolios and Investments: Theory and Applications. Issue 1. Canisius. Yogyakarta.
Tavinayati, Qamaiyanti. 2009. Capital Market Law in Indonesia. Jakarta: Sinar. Graphics.
Wahyu Setiyono, 2018. Analysis of the Effect of Fundamental Factors on Stock Returns, Journal of Accounting Studies, Vol 2, (2), 2018, 123-133
Widoatmojo, Sawaidji, 2006. Healthy Ways to Invest in the Capital Market Basic Knowledge, PT. Jurnalindo Aksara Graphics; Jakarta.
Www.idx.co.id/

